

OPERATING DATA REPORT

DOCKET NO. 050-0331
 DATE August 14, 1981
 COMPLETED BY J. Van Sickle
 TELEPHONE 319-851-5611

OPERATING STATUS

1. Unit Name: Duane Arnold Energy Center
2. Reporting Period: July, 1981
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 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	744	5,087	56,951
12. Number Of Hours Reactor Was Critical	710.4	3,224	40,392.7
13. Reactor Reserve Shutdown Hours	0	0	0
14. Hours Generator On-Line	698	3,078.9	39,355.9
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	895,709	4,135,155	50,133,793
17. Gross Electrical Energy Generated (MWH)	299,744	1,398,443	16,801,130
18. Net Electrical Energy Generated (MWH)	280,860	1,314,014	15,726,052
19. Unit Service Factor	93.8%	60.5%	69.1%
20. Unit Availability Factor	93.8%	60.5%	69.1%
21. Unit Capacity Factor (Using MDC Net)	73.3%	50.2%	53.6%
22. Unit Capacity Factor (Using DER Net)	70.2%	48.0%	51.3%
23. Unit Forced Outage Rate	6.2%	6.8%	18.2%
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

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

* Turbine Rating: 565.7 MWe
 Generator Rating: 663.5 (MVA) x .90 (Power Factor) = 597 MWe

810819-752 810814
 PDR ALK 05000331
 R PDR

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 050-0331

UNIT Duane Arnold Energy
Ctr

DATE August 14, 1981

COMPLETED BY J. Van Sickle

TELEPHONE 319-851-5611

MONTH July, 1981

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1	<u>317</u>
2	<u>325</u>
3	<u>0</u>
4	<u>288</u>
5	<u>345</u>
6	<u>416</u>
7	<u>472</u>
8	<u>482</u>
9	<u>496</u>
10	<u>497</u>
11	<u>437</u>
12	<u>484</u>
13	<u>482</u>
14	<u>472</u>
15	<u>406</u>
16	<u>21</u>

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

17	<u>294</u>
18	<u>402</u>
19	<u>467</u>
20	<u>480</u>
21	<u>494</u>
22	<u>492</u>
23	<u>477</u>
24	<u>291</u>
25	<u>318</u>
26	<u>327</u>
27	<u>382</u>
28	<u>383</u>
29	<u>304</u>
30	<u>308</u>
31	<u>329</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

REPORT MONTH July, 1981DOCKET NO. 050-0331UNIT NAME Duane Arnold Energy CtrDATE August 14, 1981COMPLETED BY J. Van SickleTELEPHONE 319-851-5611

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
14.	810703	F	23.8	H	3				Reactor scrammed during turbine control valve testing apparently due to a pressure spike causing an APRM upscale trip.
15.	810715	F	22.2	H	3				Reactor scrammed from a turbine trip after testing and maintenance on the turbine overspeed trip.
16.	810723	S	0	F	4				Power was reduced due to lack of system demand and to conserve fuel.
17.	810728	S	0	F	4				Power was reduced due to lack of system demand.

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 I - Same Source

REFUELING INFORMATION

Docket No. 050-0331
Unit Duane Arnold Energy Co
Date August 14, 1981
Completed by J. Van Sickle
Telephone 319-851-5611

1. Name of facility.
A. Duane Arnold Energy Center
2. Scheduled date for next refueling shutdown.
A. Fall, 1982
3. Scheduled date for restart following refueling.
A. Unknown
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?
A. Yes. New MAPLHGR tables will have to be included in Technical Specifications.
5. Scheduled date(s) for submitting proposed licensing action and supporting information.
A. Unknown at this time.
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.
A. New fuel assemblies to be placed in the reactor will be more highly enriched than those currently in use.
7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool.
A. a) 368 b) 448
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 August 14, 1981
Completed by J. Van Sickle
Telephone 319-851-5611

DATE	SYSTEM	COMPONENT	DESCRIPTION
7-8-81	Containment Atmospheric Control	AN-8181A	Installed new chemicals
7-10-81	Primary Containment	SV-8108A	Disassembled and cleaned valve
7-15-81	Containment Atmospheric Control	AN-8181A	Installed new chemicals
7-21-81	Drywell Sumps	1P-37B	Replaced relay coil
7-21-81	HPCI	HV-2200	Replaced limit switch
7-24-81	Neutron Monitoring	LPRM 24-09A, 16-25D, 16-25B, 08-17C	Replaced detector
7-27-81	Containment Atmospheric Control	AN-8181A	Installed new chemicals
7-31-81	RCIC	CV-2409	Replaced limit switch

NARRATIVE SUMMARY OF OPERATING EXPERIENCE

- 7-1 At the beginning of the report period the plant was operating at 308 MWe. The power level was reduced due to lack of system demand and to conserve fuel for an extended operating cycle.

During surveillance testing Containment Atmospheric Monitoring System (CAMS) A was found to be operating without a sample point selected. CAMS B was inoperative at the time for surveillance testing.

RO Report 81-029

During surveillance testing, torus atmosphere sampling line isolation valve SV-8108A would not close.

RO Report 81-30

- 7-3 The reactor scrammed at 0040 hours during turbine control valve testing. The scram occurred due to an APRM upscale trip apparently caused by a pressure spike which occurred during the control valve testing.

During a control room panel check HPCI pump discharge flow indicating controller FIC-2309 was found indicating 500 GPM with the HPCI system not operating.

RO Report 81-028

Reactor startup was begun at 1310 hours. The reactor was critical at 1710 hours. The main generator was placed on the line at 1938 hours. Due to problems with the #3 turbine stop valve, the generator was removed from the line at 1952 hours.

- 7-4 The main generator was placed on the line at 0039 hours and a power increase was begun.

- 7-8 The plant was operating at 516 MWe.

- 7-10 The plant was operating at 537 MWe at 0638 hours.

- 7-15 During testing of the main turbine overspeed trip, the mechanical overspeed trip did not reset. A reactor scram occurred at 2017 hours due to a turbine trip caused by problems with the mechanical overspeed trip assembly when the trip was reset. Following the scram the main feed pumps tripped due to reactor vessel high water level and three main steam relief valves opened momentarily. The "B" feedpump was restarted at 2029 hours. Because of the turbine trip the RPT breakers had opened. Problems were experienced in resetting the "A" breaker. Because the recirculation pumps were not restarted soon after the reactor scram, temperature stratification problems were encountered which necessitated a reactor cooldown be initiated to bring steam dome, bottom head drain and recirculation loop temperatures back within the limits for recirculation pump start.

.NARRATIVE SUMMARY OF OPERATING EXPERIENCE

- 7-16 The "A" Recirc. pump was started at 0856 hours and the "B" recirc. pump was started at 0917 hours. Reactor startup was begun at 0951 hours. The reactor was critical at 1324 hours. The main generator was placed on the line at 1830 hours and a power increase begun.
- 7-19 The reactor was at rated thermal power at 1940 hours.
- 7-20 The plant was operating at 531 MWe at 2236 hours.
- 7-23 Plant load was reduced due to lack of system demand and to conserve fuel for an extended operating cycle.
- 7-24 The plant was operating at 305 MWe at 0640 hours.
- 7-27 A load increase was begun. The plant was operating at 411 MWe at 0630 hours.
- 7-28 A load decrease was begun at 2355 hours.
- 7-30 The plant was operating at 334 MWe at 0632 hours.
- 7-31 Plant load was increased and the plant was operating at 408 MWe at 1440 hours. A load reduction was begun at 1915 hours and the plant was operating at 325 MWe at 2230 hours.