

OPERATING DATA REPORT

DOCKET NO. 050-331
 DATE 8-15-80
 COMPLETED BY J. VanSickel
 TELEPHONE 319-851-5611

OPERATING STATUS

1. Unit Name: Duane Arnold Energy Center
2. Reporting Period: July, 1980
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	5111	48,191
12. Number Of Hours Reactor Was Critical	625.1	3,193.9	33,757.9
13. Reactor Reserve Shutdown Hours	0	0	0
14. Hours Generator On-Line	609.1	3,095.4	32,914.6
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	787,608	3,885,120	41,014,680
17. Gross Electrical Energy Generated (MWH)	257,224	1,305,499	13,729,865
18. Net Electrical Energy Generated (MWH)	240,619	1,221,262	12,836,325
19. Unit Service Factor	81.9%	60.6%	68.3%
20. Unit Availability Factor	81.9%	60.6%	68.3%
21. Unit Capacity Factor (Using MDC Net)	62.8%	46.4%	51.7%
22. Unit Capacity Factor (Using DER Net)	60.1%	44.4%	49.5%
23. Unit Forced Outage Rate	18.1%	8.9%	20.0%
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

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 050-0331

UNIT Duane Arnold Energy

DATE August 15, 1980

COMPLETED BY J. Van Sickle

TELEPHONE 319-851-5611

MONTH July, 1980

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>485</u>
2	<u>494</u>
3	<u>479</u>
4	<u>368</u>
5	<u>473</u>
6	<u>360</u>
7	<u>214</u>
8	<u>224</u>
9	<u>225</u>
10	<u>225</u>
11	<u>221</u>
12	<u>69</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>233</u>
19	<u>362</u>
20	<u>379</u>
21	<u>460</u>
22	<u>479</u>
23	<u>484</u>
24	<u>491</u>
25	<u>488</u>
26	<u>479</u>
27	<u>478</u>
28	<u>481</u>
29	<u>481</u>
30	<u>450</u>
31	<u>433</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, 1980DOCKET NO. 050-0331UNIT NAME Duane Arnold Energy CtrDATE August 15, 1980COMPLETED 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
11.	800703	S	0	H	4				Power was reduced to perform a control rod sequence exchange.
12.	800706	F	0	A	4				Power was reduced on the "B" recirc system isolated due to an indication of the loss of the inner seal on the "B" recirc pump.
13.	800712	F	134.9	D	2				Reactor was manually scrammed to perform special testing required as a result of NRC Bulletin 80-17.

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 Center
Date August 15, 1980
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. March 1, 1981
3. Scheduled date for restart following refueling.
A. May 3, 1981
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?
A. No
5. Scheduled date(s) for submitting proposed licensing action and supporting information.
A. N/A
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. No licensing action is anticipated.
7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool.
A. a) 368 b) 364
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. 050-0331
 Unit Duane Arnold Energy Center
 Date August 15, 1980
 Completed by J. Van Sickle
 Telephone 319-851-5611

MAJOR SAFETY RELATED MAINTENANCE

DATE	SYSTEM	COMPONENT	DESCRIPTION
7-3-80	Control Rod Drive	Rod select switch 18-31	Replaced switch
7-3-80	Neutron Monitoring	"B" RBM	Replaced sequence logic board and rod select switch 14-23
7-15-80	Reactor Building Exhaust Rad Monitoring	RR 7606A	Repaired signal converter
7-15-80	Standby Gas Treatment	SV 8104B	Replaced coil
7-16-80	Drywell radiation monitors	RE 8102A	Replaced detector tube
7-16-80	CRD Hydraulic	CV-1867	Ground out welds, reversed valve to proper orientation and rewelded.
7-17-80	RHR	CV-2037	Replaced air supply fitting
7-18-80	CRD hydraulic	CV-1867	Placed air supply tubing
7-19-80	Core spray	PDIS 2139	Recalibrated switch
7-23-80	Drywell Radiation Monitors	RE 8102A	Replaced detector

NARRATIVE SUMMARY OF OPERATING EXPERIENCE

- 7-1 At the beginning of the report period the plant was operating at 520 MWe.
- 7-3 At power decrease was begun at 2138 hours in order to perform a rod sequence exchange.
- 7-4 The rod sequence exchange was completed and a power increase begun.
- 7-6 Due to an indication of the loss of the inner seal on the "B" recirculation pump, power was reduced, the "B" recirc system removed from service and the "B" recirc pump isolated.
- 7-8 The plant was operating on one recirc loop with power at 246 MWe.
- 7-8 During surveillance testing, standby diesel generator 1G-21 was found unresponsive to local or remote governor control.

R0 Report 80-032

- 7-9 During surveillance testing, LPCI loop selection logic PDIS 4641 would not reset after being tripped during the test.

R0 Report 80-031

- 7-11 During surveillance testing, the RCIC turbine trip throttle valve, MO-2405 would not open electrically.

R0 Report 80-033

- 7-12 A power decrease was begun at 0330 hours. The reactor was manually scrammed from 677 MWH at 0923 hours in order to do special scram system testing required by NRC Bulletin 80-17. A reactor startup was begun in order to perform a second required scram test. With the reactor at 50% rod density and subcritical, the reactor was scrammed at 1620 hours. Plant startup was delayed in order to replace the seal assembly on the "B" recirc pump.

- 7-12 During NRC Bulletin 80-17 scram testing it was determined that scram discharge volume drain valve CV-1867 would not seal against reactor pressure.

R0 Report 80-028

- 7-12 Following a plant shutdown, the suppression chamber water level was reduced below minimum volume required by Technical Specifications.

R0 Report 80-029

NARRATIVE SUMMARY OF OPERATING EXPERIENCES

- 7-12 While shutdown it was determined that the monthly surveillance testing of the recirculation pump trip system was not completed as required by Technical Specifications.

RO Report 80-034

- 7-13 The reactor was in cold shutdown at 0115 hours.
- 7-15 While attempting to start the "A" recirc M-G set, essential BUS 1A3 tripped on undervoltage due to low system voltage because of load demands. Standby diesel generator 1G-31 started and restored power to 1A3.
- 7-17 Repairs to the "B" recirc pump seal were completed and a reactor startup begun. The reactor was critical at 0818 hours.
- 7-18 The generator was placed on the line at 0019 hours. The plant was at 380 MWe at 1400 hours. A fuel preconditioning ramp was begun.
- 7-18 During a power increase the "B" rod block monitor was found inoperable and causing a rod withdrawal block.

RO Report 80-036

- 7-19 At 2300 hours a power reduction was begun in preparation for control rod withdrawals.
- 7-19 During surveillance testing the "B" core spray system header to top of core plate high differential pressure switch, PDIS 2139 had an out of specification setpoint.

RO Report 80-035

- 7-20 Control rod withdrawals were completed and a power increase begun.
- 7-21 The scram discharge volume vent line was cut downstream of the vent valve to comply with instructions received from the NRC. The line is now open to the reactor building atmosphere.
- 7-22 The plant was operating at 516 MWe.
- 7-22 During surveillance testing, river water supply system traveling screen 1F-36B was found inoperable.

RO Report 80-030

- 7-22 During surveillance testing control building air intake radiation monitor would not respond to a sensor check.

RO Report Pending

Packet No. 050-0331
Site Duane Arnold Energy Center
Date August 15, 1980
Completed by J. Van Sickle
Telephone 319-851-5611

NARRATIVE SUMMARY OF OPERATING EXPERIENCES

7-31 While preparing the Semiannual Operating Report it was found that the monthly alpha analysis of particulate filters from the reactor building ventilation stacks and the off gas stack was not completed for April 1980.

ETSV Report 80-4