

OPERATING DATA REPORT

DOCKET NO. 050-0331
 DATE 2-13-81
 COMPLETED BY J. Van Sickle
 TELEPHONE 319-851-5611

OPERATING STATUS

1. Unit Name: Duane Arnold Energy Center
2. Reporting Period: January, 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	744	52,608
12. Number Of Hours Reactor Was Critical	744	744	37,912.7
13. Reactor Reserve Shutdown Hours	0	0	0
14. Hours Generator On-Line	744	744	37,021
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1,151,242	1,151,242	47,149,880
17. Gross Electrical Energy Generated (MWH)	395,187	395,187	15,797,874
18. Net Electrical Energy Generated (MWH)	373,436	373,436	14,785,473
19. Unit Service Factor	100%	100%	70.4%
20. Unit Availability Factor	100%	100%	70.4%
21. Unit Capacity Factor (Using MDC Net)	97.5%	97.5%	54.6%
22. Unit Capacity Factor (Using DER Net)	93.3%	93.3%	52.2%
23. Unit Forced Outage Rate	0%	0%	18.7%

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

Refueling, March 20, 1981, 8 weeks

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

8102190530

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 050-0331

UNIT Duane Arnold Energy Center

DATE February 13, 1981

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MONTH January, 1981

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	511
2	516
3	514
4	507
5	502
6	518
7	513
8	513
9	484
10	354
11	504
12	511
13	511
14	511
15	512
16	505

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	432
18	512
19	515
20	518
21	511
22	511
23	514
24	511
25	495
26	510
27	510
28	509
29	510
30	508
31	508

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 January, 1981

DOCKET NO. 050-0331

UNIT NAME Duane Arnold Energy Center

DATE February 13, 1981

COMPLETED BY J. Van Sickle

TELEPHONE 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
1.	810109	F	0	A	4		CB	MOTORX	Power was reduced to allow repairs to be made to the "B" recirculation system MG set drive motor slip rings.

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 February 13, 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. March 20, 1981
3. Scheduled date for restart following refueling.
A. May 15, 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

NARRATIVE SUMMARY OF OPERATING EXPERIENCE

- 1-1 At the beginning of the report period the plant was operating at 542 MWe. During normal power operation, the "B" Drywell Particulate Radiation Element, RE 8101B, would not respond to a source check. Investigation revealed that the failure of the particulate filter resulted in particulate and moisture being deposited on the detector surface.

RO Report 81-001

- 1-6 During surveillance testing, turbine building high temperature switch TIS 4477, tripped at greater than 204 degrees fahrenheit. Instrument drift was determined to be the cause.

RO Report 81-002

- 1-8 During normal power operation, the "B" Drywell Particulate Radiation Element, RE 8101B, was unresponsive to a source check. Condensate which had collected on RE 8101B and its particulate detector had caused the sensor failure. Design review was initiated.

RO Report 81-003

- 1-9 A power reduction was begun at 2037 hours in preparation for removing the "B" recirculation system from service for maintenance on the MG set drive motor slip rings. The "B" Recirc. pump was tripped and isolated at 2320 hours.
- 1-10 Repairs were completed, the "B" Recirc. pump placed back in service and a power increase begun at 0610 hours.
- 1-11 The plant was operating at 545 MWe at 2232 hours. During normal power operation, the "B" Drywell Particulate Radiation Monitor failed downscale. Cause was determined to be condensate on RE 8101B. HP personnel are examining the particulate and iodine filters once per day to preclude recurrence.

RO Report 81-004

- 1-13 During surveillance testing, the Condensate Storage Tank Low Level Switch, LS 5219, was found inoperable. Moisture on the probe's leads within the terminal box caused the trip signal to be grounded. Design review currently underway to alleviate moisture problem in the terminal box.

RO Report 81-005

- 1-16 A load reduction was begun at 2253 hours in preparation for control rod withdrawals.
- 1-17 Rod withdrawal was completed at 0108 hours. Plant at 477 MWe at 1429 hours.
- 1-19 Truckload of new fuel arrived on site at 0800 hours.

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NARRATIVE SUMMARY OF OPERATING EXPERIENCE

- 1-23 Truckload of fuel arrived on site approximately 0800 hours.
 - 1-24 Plant at 543 MWe at 0630 hours.
 - 1-25 Power reduced to 76% for tests at 0025 hours. Power increased to 535 MWe at 0630 hours.
 - 1-27 During normal operation Containment Pressure Recorder, PR 4384, failed upscale. Connector pins on amplifier card to Pen 1 were bent such that a good connection could not be maintained.
- RO Report Pending
- 1-29 Half Group I isolation received on Turbine Building high temperature on "A" side. Alarm was reset at 0440 hours and didn't recur.
 - 1-31 At the end of the report period the plant was operating at 537 MWe.

MAJOR SAFETY RELATED MAINTENANCE

Docket No. 050-0331
Unit Duane Arnold Energy Center
Date February 13, 1981
Completed by J. Van Sicke
Telephone 319-851-5611

DATE	SYSTEM	COMPONENT	DESCRIPTION
1-2-81	Containment Atmospheric Control	AN-8181A	Installed new chemicals.
1-9-81	Containment Atmospheric Control	RE-8101B	Installed new detector tube, Mylar Window and Beta Phosphor
1-7-81	Neutron Monitoring	"D" APRM	Installed new averaging card.
1-12-81	Main Steam Isolations and ADS	Relief Valve Pilot Assembly Serial #141	Pilot assembly rebuilt and tested.
1-16-81	Containment Atmospheric Control	RE-8101A	Replaced detector.
1-20-81	Containment Atmospheric Control	AN-8181B	Installed new chemicals.
1-27-81	Containment Atmospheric Control	AN-8181A	Installed new chemicals.