

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8801200350 DOC.DATE: 87/12/31 NOTARIZED: NO DOCKET #
 FACIL:50-331 Duane Arnold Energy Center, Iowa Electric Light & Pow 05000331
 AUTH.NAME AUTHOR AFFILIATION
 MILLER,L. Iowa Electric Light & Power Co.
 HANNEN,R.L. Iowa Electric Light & Power Co.
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: Monthly operating rept for Dec 1987.W/880115 ltr.

DISTRIBUTION CODE: IE24D COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 8
 TITLE: Monthly Operating Report (per Tech Specs)

NOTES:

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	CAPPUCCI,A	1 0		
INTERNAL:	AEOD/DOA	1 1	AEOD/DSP/TPAB	1 1
	ARM TECH ADV	2 2	NRR/DLPQ/PEB	1 1
	NRR/DOEA/EAB	1 1	NRR/DREP/RPB	1 1
	NRR/PMAS/ILRB	1 1	<u>REG FILE</u> 01	1 1
	RGN3	1 1		
EXTERNAL:	EG&G GROH,M	1 1	LPDR	1 1
	NRC PDR	1 1	NSIC	1 1

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TOTAL NUMBER OF COPIES REQUIRED: LTTR 21 ENCL 19

OPERATING DATA REPORT

DOCKET NO. 050-0331

DATE 1-15-88

COMPLETED BY Lonnie Miller

TELEPHONE 319-851-7204

OPERATING STATUS

1. Unit Name Duane Arnold Energy Center
2. Reporting Period December, 1987
3. Licensed Thermal Power (MWt): 1658
4. Nameplate Rating (Gross MWe): 565 (Turbine)
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	744	8760	113208
12. Number of Hours Reactor Was Critical	744	5668.3	80338.6
13. Reactor Reserve Shutdown Hours	0	0	192.8
14. Hours Generator On-Line	744	5514.8	78255.4
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1145032.8	7955121.6	100037315
17. Gross Electrical Energy Generated (MWH)	392852	2701743	33559828
18. Net Electrical Energy Generated (MWH)	371829.8	2540841.1	31445641.5
19. Unit Service Factor	100	63	69.1
20. Unit Availability Factor	100	63	69.1
21. Unit Capacity Factor (Using MDC Net)	97	56.3	53.9
22. Unit Capacity Factor (Using DER Net)	92.9	53.9	51.6
23. Unit Forced Outage Rate	0	19.4	15.2
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

None

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

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(9/77)

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AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 050-0331

UNIT Duane Arnold Energy Center

DATE 1-15-88

COMPLETED BY Lonnie Miller

TELEPHONE 319-851-7204

MONTH December, 1987

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
-----	--

1	543
2	510
3	172
4	246
5	458
6	520
7	541
8	534
9	537
10	541
11	536
12	538
13	523
14	545
15	540
16	542

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
-----	--

17	542
18	542
19	542
20	525
21	547
22	536
23	543
24	534
25	538
26	540
27	524
28	542
29	487
30	244
31	481

INSTRUCTIONS

On this format, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute the nearest whole megawatt.

(9/77)

UNIT SHUTDOWNS AND POWER REDUCTIONS

Docket No. 050-0331

Unit Name Duane Arnold Energy CenterDate 1/15/88REPORT MONTH December, 1987Completed by Lonnie MillerTelephone 319-851-7204

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause
1	12-3-87	F	0.0	B	5	N/A			MSIV leakage control system valve lineup change to prevent leakage control system from pressurizing.
2	12-30-87	F	0.0	A	5	N/A			Went down in power to do repairs on the Standby Gas Treatment System.

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-Continued
5-Reduced Load
9-Other (Explain)

4

Exhibit G-Instructions
for Preparation of Data
Entry Sheets for Licensee
Event Report (LER) File (NUREG-
0161)

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Exhibit 1-Same Source

(9/77)

MAJOR/SAFETY RELATED MAINTENANCE

Docket No. 050-0331
Unit Duane Arnold Energy Center
Date 1-15-88
Completed By Lonnie Miller
Telephone 319-851-7204

DATE	SYSTEM	COMPONENT	DESCRIPTION
12-30-87	Standby Gas Treatment System	Duct	A hole was found in the Standby Gas Treatment System Exhaust. The hole was repaired.
12-31-87	Reactor Building Exhaust Radiation Monitoring System	Radiation Monitor and Indicator	Radiation monitor and indicator gave erratic output causing inaccurate readings. Bad switches were discovered and replaced.

DOCKET NO. 050 31
UNIT Duane Arnold Energy Center
DATE 1-15-88
COMPLETED BY Lonnie Miller
TELEPHONE 319-851-7204

REFUELING INFORMATION

1. Name of facility.
A. Duane Arnold Energy Center
2. Scheduled date for next refueling shutdown.
A. Fall, 1988
3. Scheduled date for restart following refueling.
A. Fall, 1988
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment? N/A
5. Scheduled date(s) for submitting proposed licensing action and supporting information. 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.

None
7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool.

A. a) 368 b) 824
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 31
UNIT Duane Arnold Energy Center
DATE 1-15-88
COMPLETED BY Lonnie Miller
TELEPHONE 319-851-7204

NARRATIVE SUMMARY OF OPERATING EXPERIENCE

- 12-1-87 At the beginning of the month the Duane Arnold Energy Center (DAEC) was operating at 100% rated thermal power with 543 MWe being supplied to the grid. There was one reportable event during the month.
- 12-2-87 At 1920 hours a 24 hour Limiting Condition for Operation (LCO) was entered when the Main Steam Isolation Valve (MSIV) Leakage Control System (LCS) was declared inoperable due to water in the low pressure manifold. A valve lineup change was performed to prevent the LCS from pressurizing.
- 12-3-87 At 1103 hours the MSIV-LCS was declared operable and the 24 hour LCO was exited.
- 12-15-87 On December 15, 1987 at 0013 hours the plant was operating at 100% power, when the control building ventilation isolated and the "A" control building Standby Filter Unit (SFU) initiated unexpectedly. Investigation of the trip revealed that it had occurred due to a downscale signal on the "A" control building air intake radiation monitor. The cause of the downscale signal is suspected to be a temporary malfunction in the artificial background source.
- (LER 87-030)
- 12-21-87 At 1043 hours a 24 hour LCO was entered when the Recirc pump D/P Surveillance Test was missed. At 1409 hours the Recirc pump D/P surveillance completed satisfactorily, ending the 24 hour LCO.
- 12-22-87 At 0934 hours two 7 day LCOs were entered when the 'A' Standby Gas Treatment (SBGT) system and the 'A' SFU were taken out-of-service for a minor alarm modification. At 1932 hours the 'A' SBGT was declared operable and at 2027 hours the 'A' SFU was declared operable, ending the 7 day LCOs.
- 12-23-87 At 0915 hours a 7 day LCO was entered when the 'B' SFU was taken out-of-service to work on the alarm system. At 1339 hours the 'B' SFU was declared operable, ending the 7 day LCO.
- 12-28-87 At 0808 hours a 7 day LCO was entered when the 'A' SBGT was taken out-of-service to perform maintenance on alarms. At 2202 hours the 'A' SBGT was declared operable, ending the 7 day LCO.
- 12-30-87 On December 30, 1987 the plant reduced power to 30% rated thermal power to do repairs on a hole discovered in the SBGT Exhaust Duct. Repair work was finished and the Unusual Event A-10 was cancelled. This Unusual Event was conservatively declared and was later determined that the hole did not render the SBGT inoperable.
- 12-31-87 At the end of the month the plant was operating at 89% rated thermal power with 481 MWe-net being supplied to the grid.

UNIT SHUTDOWNS AND POWER REDUCTIONS

Docket No. 050-0331

Unit Name Duane Arnold Energy Center

Date 1/15/88

Completed by Lonnie Miller

Telephone 319-851-7204

REPORT MONTH November, 1987

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause
1	11-3-87	F	50.4	B	4	N/A			Continuation of outage to repair EHC System.
2	11-10-87	F	0.0	B	5	N/A			Decreased in power to do repair work on a Motor Operator RCIC Steam Supply Line Isolation Valve.

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
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Exhibit G-Instructions
for Preparation of Data
Entry Sheets for Licensee
Event Report (LER) File (NUREG-
0161)

5
Exhibit 1-Same Source

Iowa Electric Light and Power Company

January 15, 1988

DAEC-88-0091

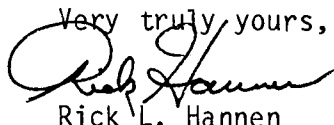
U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

Subject: Duane Arnold Energy Center
Docket No. 50-331
Op. License DPR-49
December, 1987 Monthly Operating Report

Dear Sirs:

Please find enclosed the Duane Arnold Energy Center Monthly Operating Report for December, 1987. 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, Section 6.11.1.c. Also enclosed is a copy of page three of the November, 1987 Operating Report. This page was revised to correct the duration of outages listed.

Very truly yours,



Rick L. Hannen
Plant Superintendent - Nuclear
Duane Arnold Energy Center

RLH/LM/go*
Enclosures
File A-118d

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