

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9201220127 DOC. DATE: ~~91/12/31~~ NOTARIZED: NO DOCKET #
 FACIL: 50-331 Duane Arnold Energy Center, Iowa Electric Light & Pow 05000331
 AUTH. NAME AUTHOR AFFILIATION
 TRAN, H. Iowa Electric Light & Power Co.
 WILSON, D.L. Iowa Electric Light & Power Co.
 RECIP. NAME RECIPIENT AFFILIATION

DAVIS, A.B. Region 3 (Post 820201)

SUBJECT: Monthly operating rept for Dec 1991 for Duane Arnold Energy
 Ctr. W/920115 ltr.

DISTRIBUTION CODE: IE24D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 9
 TITLE: Monthly Operating Report (per Tech Specs)

NOTES:

	RECIPIENT ID CODE/NAME	COPIES		RECIPIENT ID CODE/NAME	COPIES	
		LTTR	ENCL		LTTR	ENCL
	PD3-3 LA	3	3	PD3-3 PD	1	1
	SHIRAKI, C.	1	1			
INTERNAL:	ACRS	10	10	AEOD/DOA	1	1
	AEOD/DSP/TPAB	1	1	NRR/DLPO/LPEB10	1	1
	NRR/DOEA/OEAB	1	1	REG FILE	1	1
	RGN3	1	1			
EXTERNAL:	EG&G BRYCE, J.H	1	1	NRC PDR	1	1
	NSIC	1	1			

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,
 ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION
 LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 24 ENCL 24

MR

R
I
D
S
/
A
D
D
S
/
A
D
D
S

Iowa Electric Light and Power Company

January 15, 1992
DAEC-92-0012

Mr. A. Bert Davis
Regional Administrator
Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

Subject: Duane Arnold Energy Center
Docket No: 50-331
Op. License DPR-49
December 1991 Monthly Operating Report

Dear Mr. Davis:

Please find enclosed the Duane Arnold Energy Center Monthly Operating Report for December 1991. The report has been prepared in accordance with the guidelines of NUREG-0020 and distribution has been made in accordance with DAEC Technical Specifications, Section 6.11.1.c.

Very truly yours,

David L. Wilson

David L. Wilson
Plant Superintendent - Nuclear

DLW/HT/eah
Enclosures
File A-118d

cc: Dir. of Nuclear Reactor Regulation
Document Control Desk
U.S. Nuclear Regulatory Commission
Mail Station P1-137
Washington, D. C. 20555 (Orig.)

Mr. Clyde Shiraki
Project Manager
1 Whiteflint North
Mail Stop 13E21
11555 Rockville Pike
Rockville, MD 20852

INPO Records Center
1100 Circle 75 Parkway
Suite 1500
Atlanta, GA 30339-3064

Mr. Steve Brown
Iowa State Utilities Board
Lucas State Office Building
Des Moines, IA 50319

Mr. Fred Yost
Director, Research Services
Utility Data Institute
1700 K St. NW, Suite 400
Washington, DC 20006

Mr. William Loveless
U.S. NRC
1 Whiteflint North
Mail Stop 11C14
11555 Rockville Pike
Rockville, MD 20852 (2)

NRC Resident Inspector

Mr. Dennis Murdock
Central Iowa Power Cooperative
Box 2517
Cedar Rapids, IA 52406

Mr. Dale Aherns
Corn Belt Power Cooperative
1300 13th Street North
Humboldt, IA 50548

Dr. William R. Jacobs, Jr.
GDS Associates, Inc.
Suite 720
1850 Parkway Place
Marietta, GA 30068-8237

9201220127 911231
PDR ADDCK 05000331
R PDR

Duane Arnold Energy Center • 3277 DAEC Road • Palo, Iowa 52324 • 319/851-7611

220148

FE2A
11

OPERATING DATA REPORT

DOCKET NO. 050-0331
 DATE 01-15-92
 COMPLETED BY Hai Tran
 TELEPHONE (319) 851-7491

OPERATING STATUS

Notes

1. Unit Name: Duane Arnold Energy Center
2. Reporting Period: December 1991
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: N/A
9. Power Level to Which Restricted, If Any (Net MWe): Approximately 92% at the end of the month.
10. Reasons for Restrictions, If Any: Plant is in coast-down condition

	This Month	Yr-to-Date	Cumulative
11. Hours in Reporting Period	<u>744.0</u>	<u>8760.0</u>	<u>148272.0</u>
12. Number of Hours Reactor Was Critical	<u>744.0</u>	<u>8277.5</u>	<u>108788.3</u>
13. Reactor Reserve Shutdown Hours	<u>.0</u>	<u>.0</u>	<u>192.8</u>
14. Hours Generator On-Line	<u>744.0</u>	<u>8199.9</u>	<u>105908.1</u>
15. Unit Reserve Shutdown Hours	<u>.0</u>	<u>.0</u>	<u>.0</u>
16. Gross Thermal Energy Generated (MWH)	<u>1187148.0</u>	<u>13332362.4</u>	<u>143053596.4</u>
17. Gross Electrical Energy Generated (MWH)	<u>401684.0</u>	<u>4412435.0</u>	<u>47966326.0</u>
18. Net Electrical Energy Generated (MWH)	<u>377184.7</u>	<u>4146810.9</u>	<u>44964512.1</u>
19. Unit Service Factor	<u>100.0</u>	<u>93.6</u>	<u>71.4</u>
20. Unit Availability Factor	<u>100.0</u>	<u>93.6</u>	<u>71.4</u>
21. Unit Capacity Factor (Using MDC Net)	<u>98.4</u>	<u>91.9</u>	<u>58.5</u>
22. Unit Capacity Factor (Using DER Net)	<u>94.2</u>	<u>88.0</u>	<u>56.4</u>
23. Unit Forced Outage Rate	<u>0.0</u>	<u>2.7</u>	<u>13.1</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of each):	<u>Refuel Outage 11, February 27, 1992, 59 days</u>		
25. If Shutdown at End of Report Period, Est. Date of Startup:	<u>N/A</u>		

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 050-0331
DATE 01-15-92
COMPLETED BY Hai Tran
TELEPHONE (319) 851-7491

MONTH December 1991

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>521</u>
2	<u>530</u>
3	<u>532</u>
4	<u>528</u>
5	<u>530</u>
6	<u>529</u>
7	<u>524</u>
8	<u>510</u>
9	<u>523</u>
10	<u>519</u>
11	<u>518</u>
12	<u>513</u>
13	<u>515</u>
14	<u>514</u>
15	<u>505</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
16	<u>510</u>
17	<u>509</u>
18	<u>505</u>
19	<u>502</u>
20	<u>501</u>
21	<u>502</u>
22	<u>492</u>
23	<u>498</u>
24	<u>486</u>
25	<u>484</u>
26	<u>492</u>
27	<u>488</u>
28	<u>487</u>
29	<u>485</u>
30	<u>484</u>
31	<u>481</u>

REFUELING INFORMATION

DOCKET NO. 50-0331
DATE 01-15-92
COMPLETED BY Hai Tran
TELEPHONE (319) 851-7491

1. Name of facility.
 - a. Duane Arnold Energy Center

2. Scheduled date for next refueling shutdown.
 - a. February 27, 1992

3. Scheduled date for restart following refueling.
 - a. April 26, 1992

4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?

Yes, RTS-218 and RTS-242 have been submitted.

5. Scheduled date(s) for submitting proposed licensing action and supporting information.

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.

N/A

7. The number of fuel assemblies (a) in the core, (b) in the spent fuel storage pool, and (c) refuel floor - new fuel assemblies.
 - a. 368
 - b. 1048
 - c. 104

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 - Licensed Capacity or
 - b. 1898 under the presently installed storage rack capacity.

9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity.
 - a. 2000 - Licensed Capacity or
 - b. 1997 under the presently installed storage rack capacity.

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: December 1991

Docket No.: 050-0331.
 Unit: Duane Arnold Energy Center
 Date: 01-15-92
 Completed By: Hai Tran
 Telephone: (319) 851-7491

No.	Date	Type(1)	Duration (Hours)	Reason(2)	Method of Shutting Down Reactor (3)	Licensee Event Report #	System Code (4)	Comp. Code (5)	Cause
None									

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)

5 - Exhibit 1-
 Same Source

MAJOR/SAFETY RELATED MAINTENANCE

Docket No.: 050-0331
 Unit: Duane Arnold Energy Center
 Date: 01-15-92
 Completed By: Hai Tran
 Telephone: (319) 851-7491

DATE	SYSTEM	COMPONENT	DESCRIPTION
12-16-91	'B' Core Spray (CS) System	'B' CS Motor, minimum flow bypass valve, and outboard suction valve.	The limiter operators of the 'B' core spray minimum flow bypass valve and outboard suction valve were overhauled. Also, the motor oil was changed.
12-19-91	'A' Standby Diesel Generator (SBDG)	Ammeter and Voltmeter	Various planned maintenance was performed on the 'A' SBDG, including calibration of the ammeter and voltmeter.
12-20-91	'B' Standby Diesel Generator (SBDG)	Ammeter and Voltmeter	Various planned maintenance was performed on the 'B' SBDG, including calibration of the ammeter and voltmeter.

NARRATIVE SUMMARY OF OPERATING EXPERIENCE

DOCKET NO. 050-0331
DATE 01-15-92
COMPLETED BY Hai Tran
TELEPHONE (319) 851-7491

12-01-91 The plant was operating at 98% of rated thermal power delivering 521 MWe to the grid. There was one 10 CFR 50.73 reportable event during the month. There were no unplanned Limiting Conditions for Operation (LCO) for the Emergency Core Cooling Systems (ECCS) or unplanned significant reduction in power level events.

12-06-91 The plant began the end of cycle fuel coast down.

12-07-91 At 100% reactor power, a primary containment isolation system (reactor water cleanup system) isolation occurred. While taking logs, a control room operator noticed the systems flow summer module not fully flush with the front of the panel. When the operator attempted to fully insert the module, a reactor water cleanup differential flow alarm was received. Approximately 45 seconds later a reactor water cleanup system isolation was received. All automatic actions associated with the isolation occurred as designed and were verified. The cause of the isolation was deformed contacts on the connector at the rear of the summer module. The cause of the deformed contacts is not known although a bent alignment plate causing misalignment of the connectors is suspected. The contacts were returned to their normal shape and continuity was verified during movement of the module.

LER 91-012

12-31-91 The plant was operating at 92% of rated thermal power delivering 481 MWe to the grid.