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Duane Arnold Energy Center
3313 DAEC Road
Palo, IA 52324-9646

Operated by Nuclear Management Company, LLC

February 9, 2001

NG-01-0178

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
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Washington, DC 20555-0001

Subject: Duane Arnold Energy Center
Docket No: 50-331
Operating License: DPR-49
January 2001 Monthly Operating Report
File: A-118d

Please find enclosed the Duane Arnold Energy Center Monthly Operating Report for January 2001. The report has been prepared in accordance with the guidelines of NRC Generic Letter 97-02: Revised Contents Of The Monthly Operating Report, and distribution has been made in accordance with DAEC Technical Specifications, Section 5.6.4.

Very truly yours,

Rob Anderson
Plant Manager-Nuclear

RA/RBW

Enclosures

IE24

cc:

Mr. James E. Dyer
Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, IL 60532-4351

Ms. Barbara Lewis
McGraw-Hill, Inc.
1200 G Street NW, Suite 1100
Washington, DC 20005

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

Document Control Desk
INPO Records Center
700 Galleria Parkway
Atlanta, GA 30339-5957

Ms. Brenda Mozafari
Project Manager
1 White Flint North
Mail Stop 13D18
11555 Rockville Pike
Rockville, MD 20852

Ms. Lisa Stump
Iowa State Utilities Board
Lucas State Office Building
Des Moines, IA 50319

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

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

Mr. Al Gutterman
Morgan, Lewis, Bockius
1800 M St. NW
Washington, DC 20036-5859

DOCU

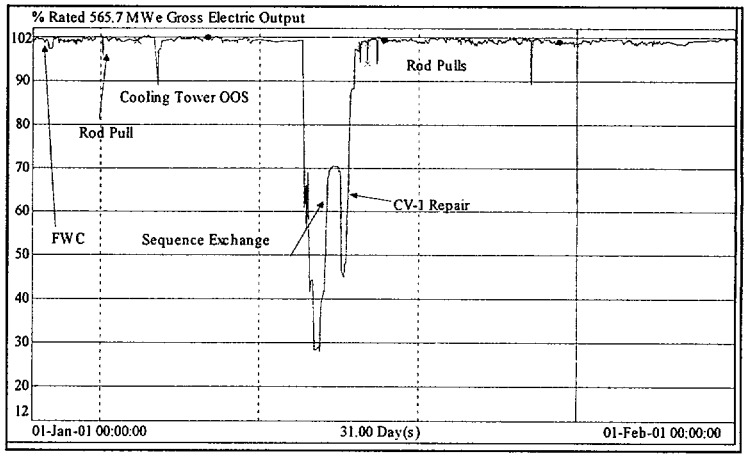
NRC Resident Inspector

CTS Project

OPERATING DATA REPORT

DOCKET NO: 50-331
DATE: 02/09/2001
Unit: Duane Arnold Energy Center
COMPLETED BY: Richard Woodward
TELEPHONE: (319) 851-7318

OPERATING STATUS



1. Unit Name: Duane Arnold Energy Center
2. Reporting Period: January 2001
3. Licensed Thermal Power (MW_{th}): 1658
4. Nameplate Rating (Gross MW_e DER): 565.7 (Turbine)
5. Design Electrical Rating (Net MW_e DER): 538
6. Maximum Dependable Capacity (Gross MW_e MDC): 550
7. Maximum Dependable Capacity (Net MW_e MDC): 520
8. If Changes Occur in Capacity Ratings (Items Number 3 through 7) since the last report, give reasons: Not Applicable
9. Power Level to Which Restricted, If Any (Net MW_e): N/A
10. Reasons for Restrictions, If Any: N/A

		Jan-01	2001	Cumulative
11.	Hours in Reporting Period	744.0	744.0	227,928.0
12.	Number of Hours Reactor Was Critical	744.0	744.0	179,125.0
13.	Reactor Reserve Shutdown Hours	0.0	0.0	0.0
14.	Hours Generator On-Line	744.0	744.0	175,194.2
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	1,196,644.7	1,196,644.7	253,625,147.4
17.	Gross Electrical Energy Generated (MWH)	404,578.0	404,578.0	85,049,025.6
18.	Net Electrical Energy Generated (MWH)	382,044.8	382,044.8	79,897,034.9
19.	Unit Service Factor	100.0%	100.0%	76.9%
20.	Unit Availability Factor	100.0%	100.0%	76.9%
21.	Unit Capacity Factor (Using MDC Net)	98.8%	98.8%	73.6%
22.	Unit Capacity Factor (Using DER Net)	95.4%	95.4%	70.5%
23.	Unit Forced Outage Rate	0.0%	0.0%	8.7%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of each): Refueling Outage 17, April 13, 2001, 40 days
25. If Shutdown at End of Report Period, Estimated Date of Startup: N/A

AVERAGE DAILY UNIT POWER LEVEL

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MONTH January 2001

Day	Average Daily Power Level (MWe-Net)
1	530.3
2	530.7
3	531.9
4	531.9
5	541.4
6	515.5
7	533.8
8	533.3
9	530.5
10	531.3
11	533.2
12	512.3
13	226.6
14	337.1
15	518.1
16	530.5
17	530.5
18	530.4
19	532.0
20	529.4
21	529.9
22	530.1
23	529.9
24	528.2
25	529.6
26	530.8
27	529.4
28	529.3
29	527.1
30	531.7
31	531.7

REFUELING INFORMATION

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1. **Name of facility.** Duane Arnold Energy Center

2. **Scheduled date for next refueling shutdown.** Spring, 2001

3. **Scheduled date for restart following refueling.** Summer, 2001

4. **Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?**
   a. Standby Liquid Control - Sodium Pentaborate Concentration change

5. **Scheduled date(s) for submitting proposed licensing action and supporting information.**
   b. September 2000

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.** GE 14 fuel design, Maximum Extended Load Line Limit Analysis (MELLLA).

7. **Current fuel assemblies inventory**

	Number of Fuel Assemblies	Projected date of last refueling that can be discharged (after allowing margin for maintenance of continuous full-core discharge capability)
In receiving for Reload 17	136	
Installed into reactor core	368	
Discharged from core to Spent Fuel Storage Pool	1776	
Installed capacity of Spent Fuel Storage Pool	2411	2001
Licensed capacity of Spent Fuel Storage Pool (with reracking)	2829	2007
Licensed capacity of Spent Fuel Storage Pool and Cask Pool (with reracking)	3152	2011

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UNIT SHUTDOWNS AND POWER REDUCTIONS
REPORT MONTH: January 2001

No.	Date	Type (1)	Duration (Hours)	Reason (2)	Method of Shutting Down Reactor (3)	Licensee Event Report #	Cause
1	01/12/2001	S	0 (13.0 full-power-hours equivalent)	B	5	N/A	Sequence Exchange, 'B' Recirculation Pump Motor Generator Set planned maintenance
2	01/14/2001	F	0 (8.3 full-power-hours equivalent)	B	5	N/A	Repair Control Valve #1 limit switch / rocker arm

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)

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Monthly Operational Overview for January 2001

The DAEC operated at an average (gross electric) capacity factor of 96% during January. The reductions from full licensed rated thermal power were for the following:

- to 98% on January 1st, to remove the feedwater flow correction factor while the plant process computer was out-of-service
- to 95% on January 5th, to maintain cooling water outlet temperature < 95°F, while deenergizing the power supply to cooling tower fans in order to repair a breaker
- to 58% on January 12th and 13th, to perform a control rod sequence exchange
- to 34% on January 13th, to perform planned maintenance on the 'B' recirculation pump motor generator set
- from 74 % to 50% on January 14th, to perform an unplanned control valve limit switch repair
- to 95% on January 4th, 15th, 16th, and 22nd, to adjust control rods

Circulating water flow limitations and cooling tower fans/cells out-of-service during the month caused additional thermal efficiency losses (see table below). At the end of the month, the DAEC had operated 217 days since its most recent plant shutdown.

Allocation of Production & Losses: January 2001	Electrical Output MWe	Capacity Factor % of 571 MWe (Target Output)	Full Power Equivalent Hours (FPH_{eq})
Capacity Losses:			
Lost Feedwater Flow Correction: 01/01 16:27 - 22:00	0.23	0.04%	0.30
Sequence Exchange: 01/12 21:12 - 01/14 00:37; 01/15 04:06 - 08:15	9.98	1.75%	13.00
Trouble-shoot and Fix CV-1 01/14 00:37 - 01/15 04:06	6.40	1.12%	8.34
Rod Adjustments: 01/04 02:37 - 03:15, 01/15 09:30 - 11:30 & 16:00 - 18:00, 01/16 03:00 - 04:46, 01/22 23:00 - 01/23 01:00	0.18	0.03%	0.23
Maintain Margin to 1658 MWth Limit	0.29	0.05%	0.38
Efficiency Losses:			
Circ Water System Flow Limitation	2.38	0.42%	3.12
Cooling Tower Low Flow condition	8.44	1.48%	11.01
Steam Cycle Isolation Valve Losses: BV-1	2.30	0.40%	2.98
Other steam cycle isolation losses	0.60	0.11%	0.82
Unidentified Losses	0.82	0.14%	1.03
Average (Cold) Weather (GAINS):	(4.38)	(0.77%)	(5.73)
Total On-line Losses:	**27.24**	**4.77%**	**35.48**
Off-Line Losses:	**0.00**	**0.00%**	**0.00**
Electric Generation:			
Plant House Loads (while on-line)	30.26	5.30%	39.44
Net Electric Output	**+513.50**	**+89.93%**	**+669.08**
Gross Electric Generation	**543.76**	**95.23%**	**708.52**
Target Electric Output, Total %, Total # of clock-hours	**571.00**	**100.00%**	**744.00**

(There were no licensee event reports.)

Licensing Action Summary:

Plant Availability:	100.0%		Unplanned Auto Scrams (while critical) this month:	0
Number of reportable events:	0		Unplanned Auto Scrams (while critical) last 12 months:	1
			Main Steam Safety and Relief Valve Challenges this month:	0