

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)
DISTRIBUTION FOR INCOMING MATERIAL 50-331

REC: NRC ORG: HAMMOND E L DOCDATE: 08/08/78
IA ELEC LIGHT & PWR DATE RCVD: 08/11/78

DOCTYPE: LETTER NOTARIZED: NO COPIES RECEIVED
SUBJECT: LTR 1 ENCL 1
FORWARDING SUBJECT FACILITY'S MONTHLY OPERATING REPT FOR THE MONTH OF JULY,
1978

PLANT NAME: DUANE ARNOLD
REVIEWER INITIAL: XJM
DISTRIBUTOR INITIAL:

***** DISTRIBUTION OF THIS MATERIAL IS AS FOLLOWS *****

ANNUAL, SEMI-ANNUAL & MONTHLY OPERATING RPTS (OL STAGE)
(DISTRIBUTION CODE A008)

FOR ACTION: BR CHIEF ORB#3 BC**W/6 ENCL

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INTERNAL:  REG FILE**W/ENCL      NRC PDR**W/ENCL
           I & E**W/2 ENCL      MIPC**W/2 ENCL
           MANUALR**W/ENCL      DIRECTOR DQR**W/ENCL
           AD FOR SYS & PROJ**W/ENCL  ENGINEERING BR**W/ENCL
           REACTOR SAFETY BR**W/ENCL  PLANT SYSTEMS BR**W/ENCL
           EEB**W/ENCL            CORE PERFORMANCE BR**W/ENCL
           EFFLUENT TREAT SYS**W/ENCL
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EXTERNAL:          LPDR'S
                   CEDAR RAPIDS, IA**W/ENCL
                   NATL LAB ANL**W/ENCL
                   TERA**W/ENCL
                   NSIC**W/ENCL
                   ACRS CAT B**W/15 ENCL
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DISTRIBUTION: LTR 41 ENCL 41 CONTROL NBR: 782190041
SIZE: 1P+6P-

***** THE END *****

IOWA ELECTRIC LIGHT AND POWER COMPANY

DUANE ARNOLD ENERGY CENTER
P. O. Box 351
Cedar Rapids, Iowa 52406
August 8, 1978
DAEC - 78 - 367

Director, Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Subject: Monthly Operating Report

File: A-118d

Dear Sirs:

Please find enclosed 10 copies of the Duane Arnold Energy Center Monthly Operating Report for July, 1978. The report has been prepared in accordance with the requirements of Regulatory Guide 1.16 and distribution has been made in accordance with Regulatory Guide 10.1.

Very truly yours,

Ellery L. Hammond
Ellery L. Hammond
Chief Engineer
Duane Arnold Energy Center

ELH/JVS/nf

Encl.

cc: D. Arnold
S. Tuthill
J. Wallace
J. Rehnstrom
L. Root
W. Bryant
D. Mineck
D. Wilson
B. York
R. Hannen
Dennis Murdock
George Toyne

Directorate of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137 (1)

Director, Office of Management Information
and Program Control
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555 (2)

Aug 5/11

OPERATING DATA REPORT

DOCKET NO. 050-0331
 DATE 8-8-78
 COMPLETED BY J. Van Sickle
 TELEPHONE 319-851-5611

OPERATING STATUS

1. Unit Name: Duane Arnold Energy Center
2. Reporting Period: July, 1978
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	5087	30,647
12. Number Of Hours Reactor Was Critical	0	3,058.8	23,612.8
13. Reactor Reserve Shutdown Hours	0	0	0
14. Hours Generator On-Line	0	2,904.3	22,987
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	0	3,716,424	27,821,640
17. Gross Electrical Energy Generated (MWH)	0	1,307,325	9,337,429
18. Net Electrical Energy Generated (MWH)	0	1,227,561	8,716,300
19. Unit Service Factor	0%	57.1%	75.0%
20. Unit Availability Factor	0%	57.1%	75.0%
21. Unit Capacity Factor (Using MDC Net)	0%	46.9%	55.2%
22. Unit Capacity Factor (Using DER Net)	0%	44.9%	52.9%
23. Unit Forced Outage Rate	100%	29.0%	9.1%

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
Center

DATE 8-8-78

COMPLETED BY J. Van Sickle

TELEPHONE 319 851-5611

MONTH July, 1978

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>0</u>
2	<u>0</u>
3	<u>0</u>
4	<u>0</u>
5	<u>0</u>
6	<u>0</u>
7	<u>0</u>
8	<u>0</u>
9	<u>0</u>
10	<u>0</u>
11	<u>0</u>
12	<u>0</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>0</u>
19	<u>0</u>
20	<u>0</u>
21	<u>0</u>
22	<u>0</u>
23	<u>0</u>
24	<u>0</u>
25	<u>0</u>
26	<u>0</u>
27	<u>0</u>
28	<u>0</u>
29	<u>0</u>
30	<u>0</u>
31	<u>0</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

DOCKET NO. 050-0331
 UNIT NAME Duane Arnold Energy Cent
 DATE 8-8-78
 COMPLETED BY J. Van Sickle
 TELEPHONE 319-851-5611

REPORT MONTH July

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
12	780617	F	744	A	3	78-030	CB	PIPEXX	Continuation of previous shutdown to replace recirculation system inlet nozzle safe ends.

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

NARRATIVE SUMMARY OF OPERATING EXPERIENCE

- 7-1 At the beginning of the report period the plant was in the cold shutdown condition to facilitate replacement of the recirculation riser nozzle safe ends.
- 7-1 An off-gas stack sample high/low flow alarm was received. A check revealed the sample pump was running but producing little flow due to worn and broken vanes.

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- 7-2 The reactor cavity was flooded and the spent fuel pool gates were removed.
- 7-3 Preparations were begun for installing jet pump plugs and for unloading the reactor core.
- 7-5 RHR shutdown cooling was secured to facilitate installation of jet pump plugs.
- 7-6 An initial attempt to drain the "B" recirculation loop with the jet pump plugs in place was unsuccessful due to one or more plugs leaking.
- 7-7 The jet pump plugging effort was discontinued and core unloading was begun.
- 7-7 "A" RHR shutdown cooling was placed in service.
- 7-13 Two temporary high density spent fuel racks were installed in the spent fuel pool in order to have sufficient capacity to complete unloading the core.
- 7-15 Core unloading was secured in order to install dunking chambers.
- 7-17 The dunking chamber installation was completed.
- 7-18 Core unloading resumed.
- 7-19 Core unloading was completed.
- 7-19 All jet pump plugs were removed and the fuel pool gates were installed.
- 7-19 RHR shutdown cooling was secured.
- 7-19 Reactor cavity draining was begun.
- 7-20 Reactor cavity draining was completed and the main steam line plugs were removed.
- 7-20 The reactor vessel head was set on the reactor vessel.
- 7-20 A special test was performed which involved draining the reactor vessel and taking radiation level readings at the recirculation system inlet nozzles at various water levels.
- 7-22 Reactor vessel water level was restored to the normal level.

MAJOR SAFETY RELATED MAINTENANCE

Docket No. 050-0331
Unit Duane Arnold Energy Center
Date 8-8-78
Completed by J. Van Sickle
Telephone 319-851-5611

DATE	SYSTEM	COMPONENT	DESCRIPTION
6-29-78	Primary Containment	LR 4385	Replaced amplifier board
7-9-78	RHR Cooling Water	1E-201-A	Cleaned and inspected the tube side of the "A" RHR heat exchanger

REFUELING INFORMATION

Docket No. 050-0331

Unit Duane Arnold Energy
Center

Date 8-8-78

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. Unknown. Under review due to present extended outage.
3. Scheduled date for restart following refueling.
A. Unknown. Under review due to present extended outage.
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?
A. Yes. MCPR and MAPLHGR operating limits as derived from transient and accident analyses.
5. Scheduled date(s) for submitting proposed licensing action and supporting information.
A. Unknown.
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. The reload will consist of up to 100 8 x 8 2 water rod bundles.
7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool.
A. a) 0 b) 644
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