

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL  
(TEMPORARY FORM)

CONTROL NO: 350

FILE: MONTHLY REPORT FILE

|                                                              |                   |                       |                       |                   |                         |     |                          |
|--------------------------------------------------------------|-------------------|-----------------------|-----------------------|-------------------|-------------------------|-----|--------------------------|
| FROM: Iowa Elec Light & Pwr.<br>Cedar Rapids, Ia<br>C C Hunt |                   | DATE OF DOC<br>1-8-76 | DATE REC'D<br>1-14-76 | LTR<br>XXXX       | TWX                     | RPT | OTHER                    |
| TO: I&E                                                      |                   | ORIG<br>one signed    | CC                    | OTHER             | SENT AEC PDR <u>XX-</u> |     | SENT LOCAL PDR <u>XX</u> |
| CLASS                                                        | UNCLASS<br>XXXXXX | PROP INFO             | INPUT                 | NO CYS REC'D<br>1 | DOCKET NO:<br>50-331    |     |                          |

DESCRIPTION:  
Ltr trans the following:

**ACKNOWLEDGED  
DO NOT REMOVE**

PLANT NAME: Duane Arnold

ENCLOSURES:  
Monthly Report for December 1976  
Plant & Component Operability & Availability  
This Report to be used in preparing Gray Book  
by Plans & Operations.

NUMBER OF COPIES REC'D: 1

FOR ACTION/INFORMATION 1-14-76 ehf

|                         |                            |                             |                        |
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INTERNAL DISTRIBUTION

|                                                                                                                                                                                                                                |                                                                                                                                                                                      |                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>REG FILE</u><br>NRC PDR<br>OGC, ROOM P-506A<br>GOSSICK/STAFF<br>CASE<br>GIAMBUSSO<br>BOYD<br>MOORE (L)<br>DEYOUNG (L)<br>SKOVHOLT (L)<br>GOLLER (L) (Ltr)<br>P. COLLINS<br>DENISE<br>REG OPR<br>FILE & REGION (2)<br>STEELE | <u>TECH REVIEW</u><br>SCHROEDER<br>MACCARY<br>KNIGHT<br>PAWLICKI<br>SHAO<br>STELLO<br>HOUSTON<br>NOVAK<br>ROSS<br>IPPOLITO<br>TEDESCO<br>J. COLLINS<br>LAINAS<br>BENAROYA<br>VOLLMER | <u>DENTON</u><br>GRIMES<br>GAMMILL<br>KASTNER<br>BALLARD<br>SPANGLER<br><br><u>ENVIRO</u><br>MULLER<br>DICKER<br>KNIGHTON<br>YOUNGBLOOD<br>REGAN<br>PROJECT LDR<br><br><u>HARLESS</u> | <u>LIC ASST</u><br>R. DIGGS (L)<br>H. GEARIN (L)<br>E. GOULBOURNE (L)<br>P. KREUTZER (E)<br>J. LEE (L)<br>M. <del>RUSHBROCK</del> (L)<br>S. REED (E)<br>M. SERVICE (L)<br>S. SHEPPARD (L)<br>M. SLATER (E)<br>H. SMITH (L)<br>S. TEETS (L)<br>G. WILLIAMS (E)<br>V. WILSON (L)<br>R. INGRAM (L)<br>M. DUNCAN (E) | <u>A/T IND</u><br>BRAITMAN<br>SALTZMAN<br>MELTZ<br><br><u>PLANS</u><br>MCDONALD<br>CHAPMAN<br>DUBE (Ltr)<br>E. COUPE<br>PETERSON<br>HARTFIELD (2)<br>KLECKER<br>EISENHUT<br>WIGGINTON |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

EXTERNAL DISTRIBUTION

|                                       |                                |                                         |
|---------------------------------------|--------------------------------|-----------------------------------------|
| 1 - LOCAL PDR <u>Cedar Rapids, Ia</u> | 1 - NATIONAL LABS              | 1 - PDR-SAN/LA/NY                       |
| 1 - TIC (ABERNATHY) (1)(2)(10)        | 1 - W. PENNINGTON, Rm E-201 GT | 1 - BROOKHAVEN NAT LAB                  |
| 1 - NSIC (BUCHANAN)                   | 1 - CONSULTANTS                | 1 - G. ULRIKSON, ORNL                   |
| 1 - ASLB                              | NEWMARK/BLUME/AGBABIAN         | 1 - AGMED (RUTH GUSSMAN)<br>Rm B-127 GT |
| 1 - Newton Anderson                   |                                | 1 - J. D. RUNKLES, Rm E-201<br>GT       |
| - ACRS HOLDING/SENT                   |                                |                                         |

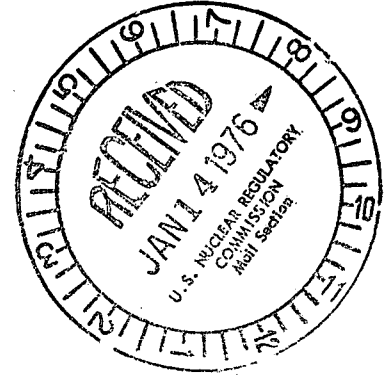
8

# IOWA ELECTRIC LIGHT AND POWER COMPANY

DUANE ARNOLD ENERGY CENTER  
P. O. Box 351  
Cedar Rapids, Iowa 52406

January 8, 1976  
DAEC - 75 - 481

50 - 331



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

Subject: Monthly Operating Report

File: A-118d

REGULATORY DOCKET FILE COPY

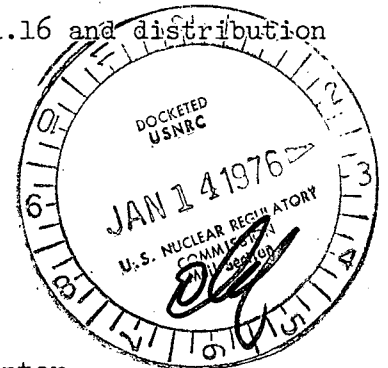
Dear Sirs:

Please find enclosed 10 copies of the Duane Arnold Energy Center Monthly Operating Report for December 1975. 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,

A handwritten signature in black ink, appearing to read "G. G. Hunt".

G. G. Hunt  
Chief Engineer  
Duane Arnold Energy Center



DLW/GGH/mg  
Encl.

cc: D. Arnold  
J. Wallace  
S. Smith  
L. Root  
W. Bryant  
E. Hammond  
D. Wilson  
K. Haas  
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)

- (1) REASON  
 A-Equipment Failure (Explain)  
 B-Maint. or Test  
 C-Refueling  
 D-Regulatory Restriction  
 E-Operator Training and License Examination  
 F-Administrative  
 G-Operational Error (Explain)  
 H-Other (Explain)

- (2) METHOD  
 1-Manual  
 2-Manual Scram  
 3-Automatic Scram

UNIT SHUTDOWNS

DOCKET NO. 50-331

UNIT NAME Duane Arnold Energy Center

DATE January 7, 1976

COMPLETED BY D. Wilson 319/851/5611

REPORT MONTH December 1975

| NO. | DATE   | TYPE     |             | DURATION (HOURS) | REASON (1) | METHOD OF SHUTTING DOWN THE REACTOR (2) | CORRECTIVE ACTIONS/COMMENTS                                                                      |
|-----|--------|----------|-------------|------------------|------------|-----------------------------------------|--------------------------------------------------------------------------------------------------|
|     |        | F-FORCED | S-SCHEDULED |                  |            |                                         |                                                                                                  |
| 19  | 751211 | F        |             | 49.25            | B          | 1                                       | MSIV packing leak in drywell repaired in addition to other small valve packing leaks in drywell. |

SUMMARY: Reactor operation continued in the load following mode.

DATE January 7, 1976

COMPLETED BY D. Wilson 319/851-5611

DOCKET NO. 50-331

OPERATING STATUS

1. REPORTING PERIOD: 0001, 751201 THROUGH 2400, 751231  
HOURS IN REPORTING PERIOD: 744
2. CURRENTLY AUTHORIZED POWER LEVEL (MWth) 1593 MAX. DEPENDABLE CAPACITY (MWe-NET) 515
3. LOWEST POWER LEVEL TO WHICH SPECIFICALLY RESTRICTED (IF ANY) (MWe-NET): 430 (approximately)
4. REASONS FOR RESTRICTION (IF ANY): NRC directive as the result of potential inecore instrument tube vibration.

|                                                                                             | THIS REPORTING PERIOD                              | YR TO DATE         | CUMULATIVE TO DATE |
|---------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------|--------------------|
| 5. HOURS REACTOR WAS CRITICAL.....                                                          | <u>700</u>                                         | <u>7275.95</u>     | <u>12030.75</u>    |
| 6. REACTOR RESERVE SHUTDOWN HOURS..                                                         | <u>0</u>                                           | <u>0</u>           | <u>0</u>           |
| 7. HOURS GENERATOR ON LINE.....                                                             | <u>694.75</u>                                      | <u>6964.2</u>      | <u>10856.5</u>     |
| 8. UNIT RESERVE SHUTDOWN HOURS.....                                                         | <u>0</u>                                           | <u>0</u>           | <u>0</u>           |
| 9. GROSS THERMAL ENERGY GENERATED (MWH).....                                                | <u>825,192</u>                                     | <u>7,420,728</u>   | <u>11,963,448</u>  |
| 10. GROSS ELECTRICAL ENERGY GENERATED (MWH).....                                            | <u>279,504</u>                                     | <u>2,471,479</u>   | <u>3,976,229</u>   |
| 11. NET ELECTRICAL ENERGY GENERATED (MWH).....                                              | <u>260,870.9</u>                                   | <u>2,298,183.1</u> | <u>3,700,240.1</u> |
| 12. REACTOR AVAILABILITY FACTOR (1).....                                                    | <u>94%</u>                                         | <u>82%</u>         | <u>82%</u>         |
| 13. UNIT AVAILABILITY FACTOR (2).....                                                       | <u>93%</u>                                         | <u>79%</u>         | <u>79%</u>         |
| 14. UNIT CAPACITY FACTOR (3).....                                                           | <u>68%</u>                                         | <u>51%</u>         | <u>51%</u>         |
| 15. UNIT FORCED OUTAGE RATE (4).....                                                        | <u>7%</u>                                          | <u>10%</u>         | <u>10%</u>         |
| 16. SHUTDOWNS SCHEDULED TO BEGIN IN NEXT 6 MONTHS (STATE TYPE, DATE, AND DURATION OF EACH): | <u>Refuel shutdown, February 16, 1976, 7 weeks</u> |                    |                    |
| 17. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:                        | <u></u>                                            |                    |                    |
| 18. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION) REPORT THE FOLLOWING:              | <u></u>                                            |                    |                    |

|                                     | DATE LAST FORECAST          | DATE ACHIEVED               |
|-------------------------------------|-----------------------------|-----------------------------|
| INITIAL CRITICALITY                 | <u>                    </u> | <u>                    </u> |
| INITIAL ELECTRICAL POWER GENERATION | <u>                    </u> | <u>                    </u> |
| COMMERCIAL OPERATION                | <u>                    </u> | <u>February 1975</u>        |

- (1) REACTOR AVAILABILITY FACTOR =  $\frac{\text{HOURS REACTOR WAS CRITICAL}}{\text{HOURS IN REPORTING PERIOD}} \times 100$
- (2) UNIT AVAILABILITY FACTOR =  $\frac{\text{HOURS GENERATOR ON LINE}}{\text{HOURS IN REPORTING PERIOD}} \times 100$
- (3) UNIT CAPACITY FACTOR =  $\frac{\text{NET ELECTRICAL POWER GENERATED}}{\text{MAX. DEPENDABLE CAPACITY (MWe-NET)} \times \text{HOURS IN REPORTING PERIOD}}$
- (4) UNIT FORCED OUTAGE RATE =  $\frac{\text{FORCED OUTAGE HOURS}}{\text{HOURS GENERATOR ON LINE} + \text{FORCED OUTAGE HOURS}} \times 100$

DOCKET NO. 50-331

UNIT Duane Arnold Energy Center

DATE January 7, 1976

COMPLETED BY D. Wilson 319/851-5611

AVERAGE DAILY UNIT POWER LEVEL

MONTH December 1975

| AVERAGE DAILY POWER LEVEL |           | AVERAGE DAILY POWER LEVEL |           |
|---------------------------|-----------|---------------------------|-----------|
| DAY                       | (MWe-net) | DAY                       | (MWe-net) |
| 1                         | 416       | 17                        | 382       |
| 2                         | 419       | 18                        | 426       |
| 3                         | 415       | 19                        | 370       |
| 4                         | 418       | 20                        | 402       |
| 5                         | 409       | 21                        | 388       |
| 6                         | 419       | 22                        | 401       |
| 7                         | 394       | 23                        | 392       |
| 8                         | 422       | 24                        | 379       |
| 9                         | 425       | 25                        | 313       |
| 10                        | 371       | 26                        | 353       |
| 11                        | 0         | 27                        | 368       |
| 12                        | 0         | 28                        | 345       |
| 13                        | 90        | 29                        | 364       |
| 14                        | 262       | 30                        | 430       |
| 15                        | 323       | 31                        | 399       |
| 16                        | 378       |                           |           |