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MONTHLY REPORT

TO: USNRC

FROM: TENNESSEE VALLEY AUTHORITY
DECATUR, ALABAMA
H.J. GREEN

DATE OF DOCUMENT
12-9-76

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DESCRIPTION

LETTER TRANS THE FOLLOWING:

ENCLOSURE

MONTHLY REPORT FOR NOVEMBER 1976
PLANT & COMPONENT OPERABILITY &
AVAILABILITY. THIS REPORT TO BE USED IN
PREPARING GRAY BOOK BY PLANS & OPERATIONS.

DO NOT REMOVE

ACKNOWLEDGED

PLANT NAME: BROWNS FERRY # 1 & 2 & 3

SAFETY

FOR ACTION/INFORMATION

ENVIRO

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INTERNAL DISTRIBUTION

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REVERSE SIDE OF

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TENNESSEE VALLEY AUTHORITY

Browns Ferry Nuclear Plant

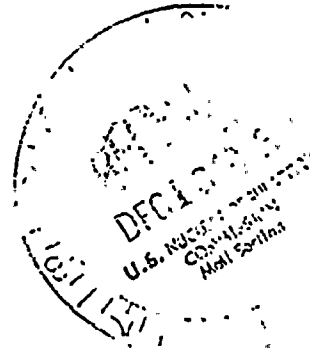
P. O. Box 2000

Decatur, Alabama 35602

December 9, 1976

REGULATORY DOCKET FILE COPY

Nuclear Regulatory Commission
Office of Management Information
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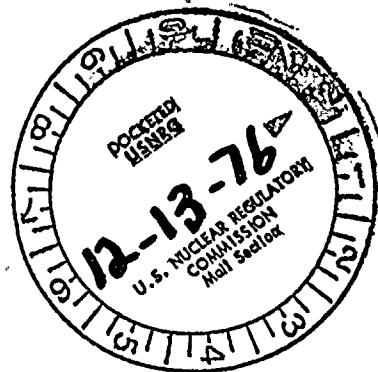
Gentlemen:

Enclosed is the November 1976 report on plant and component operability and availability for Browns Ferry Nuclear Plant Units 1, 2, and 3.

Very truly yours,

TENNESSEE VALLEY AUTHORITY


H. J. Green
Plant Superintendent



Enclosures: 2

CC: Director, Region II
Nuclear Regulatory Commission
Office of Inspection and Enforcement
230 Peachtree Street, NW
Suite 818
Atlanta, GA 30303
(1 copy)

Director, Office of Inspection & Enforcement
Nuclear Regulatory Commission
Washington, D. C. 20555
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UNIT NAME Broms Ferry I

DATE 12/6/76

COMPLETED BY: Harold Walls

TELEPHONE (205) 729-6202

OPERATING STATUS:

1. Reporting Period: 0000761101 to 2400761130

Gross Hours in Reporting Period: 720

2. Currently Authorized Power Level MWe 3293 MWe-net 1065

Max. Depend. capacity (MWe-net) 1065

3. Power Level to which restricted (if any): N/A

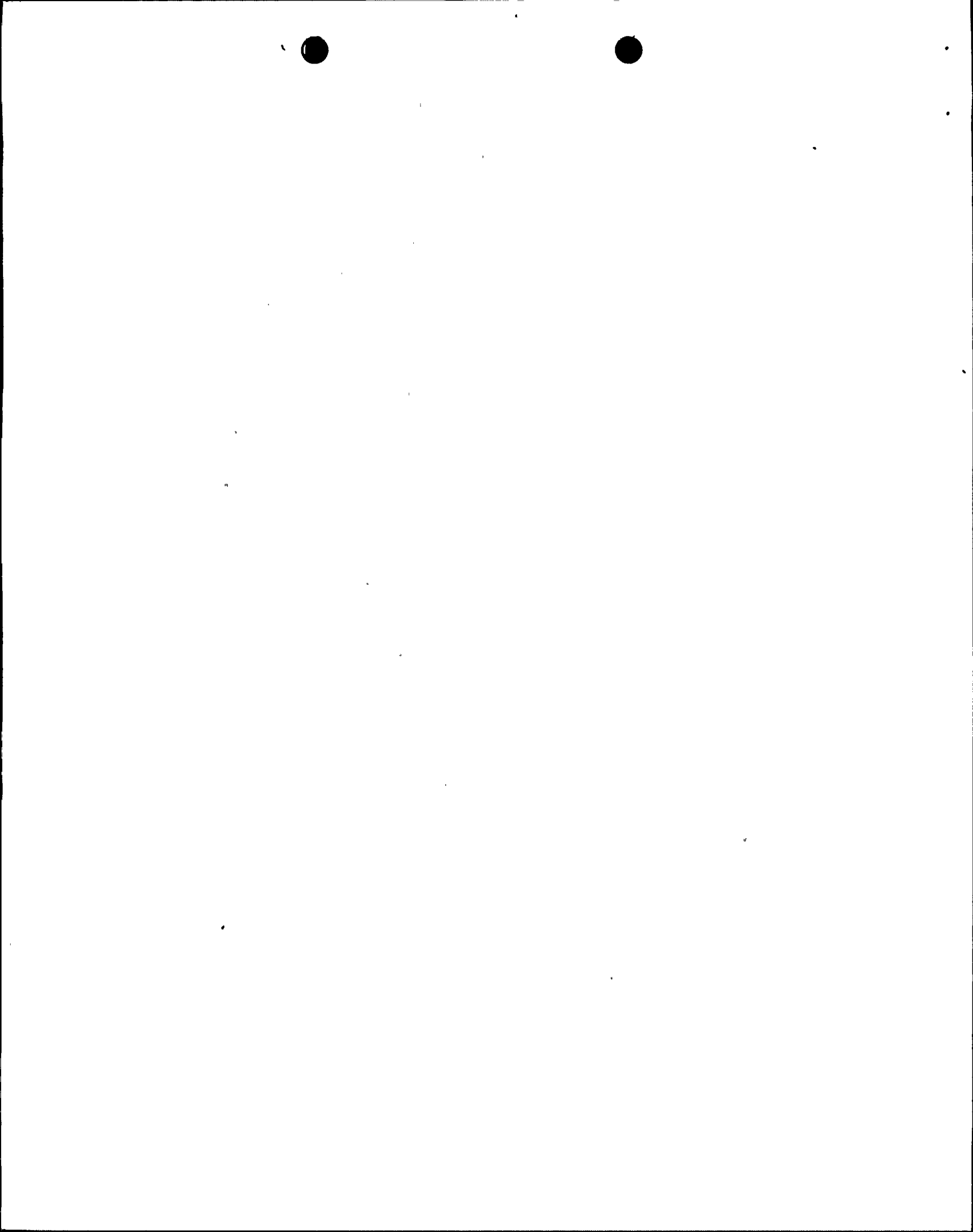
4. Reasons for restrictions (if any):	This Month	Yr-To-Date	Cumulative To Date
5. Hours Reactor Was Critical	665.75	1,591.19	6,350.51
6. Reactor Reserve Shutdown Hours	54.25	3,185.81	3,791.34
7. Hours Generator On-Line	652.65	1,431.23	6,081.79
8. Unit Reserve Shutdown Hours	0	0	0
9. Gross Thermal Power Generated (MWH)	1,137,048	2,063,158	14,808,238
10. Gross Electrical Power Generated (MWH)	369,850	680,220	4,942,620
11. Net Electrical Power Generated (MWH)	359,137	651,085	4,794,987
12. Reactor Service Factor	92.5	19.8	31.0
13. Reactor Available Factor	100	59.4	49.5
14. Unit Service Factor	90.6	17.8	29.7
15. Unit Availability Factor	90.6	17.8	29.7
16. Unit Capacity Factor (using MDC)	46.8	7.6	22.0
17. Unit Capacity Factor (using Design MWe)	46.8	7.6	22.0
18. Forced Outage Rate	9.4	79.0	67.3

19. Shutdowns scheduled to begin in next 6 months (state type, date and duration of each): _____

20. If shutdown at end of report period, estimated date of startup: _____

21. Plants in Test Status (prior to commercial operation) Report the Following:

	Forecast	Achieved
Initial Criticality	_____	_____
Initial Electrical Power Generation	_____	_____
Commercial Operation	_____	_____



REMARKS:

Fuel preconditioning to test condition 4E-continued.

UNIT NAME BROWN PERRY 1

DATE 12/6/76

COMPLETED BY Harold Walls

REPORT MONTH November

PLANT SHUTDOWNS

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	COMMENTS
9	761117	F	52.83	B	C	
10	761124	F	14.52	A	C	Loss of control air

(1) REASON:
 A-EQUIPMENT FAILURE (EXPLAIN)
 B-MAINT, OR TEST
 C-REFUELING
 D-REGULATORY RESTRICTION
 E-OPERATOR TRAINING AND LICENSING EXAMINATION
 F-ADMINISTRATIVE
 G-OPERATIONAL ERROR (EXPLAIN)

(2) METHOD:
 A-MANUAL
 B-MANUAL SCRAM
 C-AUTOMATIC SCRAM

UNIT

1

DATE

12/4/76

COMPLETED BY

Jim Steele

DAILY UNIT POWER OUTPUTMONTH November 1976

<u>DAY</u>	<u>AVERAGE DAILY MWe-net</u>	<u>DAY</u>	<u>AVERAGE DAILY MWe-net</u>
1	<u>557</u>	25	<u>229</u>
2	<u>452</u>	26	<u>339</u>
3	<u>328</u>	27	<u>441</u>
4	<u>369</u>	28	<u>432</u>
5	<u>453</u>	29	<u>553</u>
6	<u>203</u>	30	<u>635</u>
7	<u>887</u>	31	<u> </u>
8	<u>586</u>		
9	<u>794</u>		
10	<u>711E</u>		
11	<u>804</u>		
12	<u>836</u>		
13	<u>834</u>		
14	<u>822</u>		
15	<u>819</u>		
16	<u>814</u>		
17	<u>74</u>		
18	<u>-8</u>		
19	<u>175</u>		
20	<u>349</u>		
21	<u>462</u>		
22	<u>429</u>		
23	<u>458</u>		
24	<u>262</u>		

Note: Negative values indicate station use when unit is off line.

E - Estimate

UNIT NAME Browns Ferry II

DATE 12/6/76

COMPLETED BY: Harold Walls

TELEPHONE (205) 729-6202

OPERATING STATUS:

1. Reporting Period: 0000761101 to 2400761130

Gross Hours in Reporting Period: 720

2. Currently Authorized Power Level Mwt 3293 MWe-net 1065

Max. Depend. capacity (MWe-net) 1065

3. Power Level to which restricted (if any): N/A

4. Reasons for restrictions (if any):

	This Month	Yr-To-Date	Cumulative To Date
5. Hours Reactor Was Critical	705.93	2,152.19	2,669.19
6. Reactor Reserve Shutdown Hours	14.07	5,887.81	10,314.81
7. Hours Generator On-Line	696.93	1,881.28	2,398.28
8. Unit Reserve Shutdown Hours	0	0	0
9. Gross Thermal Power Generated (MWH)	1,608,264	3,456,417	5,146,809
10. Gross Electrical Power Generated (MWH)	529,430	1,112,170	1,678,310
11. Net Electrical Power Generated (MWH)	516,285	1,080,398	1,631,014
12. Reactor Service Factor	98.0	26.8	17.3
13. Reactor Available Factor	100	100	84.4
14. Unit Service Factor	96.8	23.4	15.6
15. Unit Availability Factor	96.8	23.4	15.6
16. Unit Capacity Factor (using MDC)	67.3	12.6	10.0
17. Unit Capacity Factor (using Design MWe)	67.3	12.6	10.0
18. Forced Outage Rate	3.2	70.1	82.4
19. Shutdowns scheduled to begin in next 6 months (state type, date and duration of each):			

20. If shutdown at end of report period, estimated date of startup: _____

21. Plants in Test Status (prior to commercial operation) Report the Following:

	Forecast	Achieved
Initial Criticality	_____	_____
Initial Electrical Power Generation	_____	_____
Commercial Operation	_____	_____

Fuel preconditioning to test condition 4E continued.

UNIT NAME Brown Ferry II

DATE 12/6/76

COMPLETED BY Harold Walls

REPORT MONTH November

PLANT SHUTDOWNS

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	.. COMMENTS
	761117	F	23.07	A	C	SFAE pressure regulator failure

(1) REASON:
A-EQUIPMENT FAILURE (EXPLAIN)
B-MAINT, OR TEST
C-REFUELING
D-REGULATORY RESTRICTION
E-OPERATOR TRAINING AND LICENSING EXAMINATION
F-ADMINISTRATIVE
G-OPERATIONAL ERROR.
(EXPLAIN)

(2) METHOD:
A-MANUAL
B-MANUAL SCRAM
C-AUTOMATIC SCRAM



UNIT

2

DATE

12/4/76

COMPLETED BY

Jim Steele

DAILY UNIT POWER OUTPUTMONTH November

<u>DAY</u>	<u>AVERAGE DAILY MWe-net</u>	<u>DAY</u>	<u>AVERAGE DAILY MWe-net</u>
1	<u>521</u>	25	<u>890</u>
2	<u>571</u>	26	<u>965</u>
3	<u>511</u>	27	<u>695</u>
4	<u>628</u>	28	<u>76</u>
5	<u>675</u>	29	<u>336</u>
6	<u>1061</u>	30	<u>402</u>
7	<u>452</u>	31	<u> </u>
8	<u>820</u>		
9	<u>850</u>		
10	<u>846</u>		
11	<u>824</u>		
12	<u>806</u>		
13	<u>806E</u>		
14	<u>570</u>		
15	<u>619</u>		
16	<u>570</u>		
17	<u>753</u>		
18	<u>782</u>		
19	<u>850</u>		
20	<u>940</u>		
21	<u>960E</u>		
22	<u>851</u>		
23	<u>902</u>		
24	<u>845</u>		

Note: Negative values indicate station use when unit is off line.

E - Estimate

UNIT NAME Browns Ferry III

DATE 12/6/76

COMPLETED BY: Harold Walls

TELEPHONE (205) 729-6202

OPERATING STATUS:

1. Reporting Period: 0000761101 to 2400761130

Gross Hours in Reporting Period: 720

2. Currently Authorized Power Level MWh 3293 MWe-net 1065

Max. Depend. capacity (MWe-net) 1065

3. Power Level to which restricted (if any): N/A

4. Reasons for restrictions (if any):

	<u>This</u> <u>Month</u>	<u>Yr-To-Date</u>	<u>Cumulative</u> <u>To Date</u>
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5. Hours Reactor Was Critical	<u>630.58</u>	<u>1,645.91</u>	<u>1,645.91</u>
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6. Reactor Reserve Shutdown Hours	<u>36.80</u>	<u>214.87</u>	<u>214.87</u>
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7. Hours Generator On-Line	<u>603.50</u>	<u>1,441.30</u>	<u>1,441.30</u>
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8. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
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9. Gross Thermal Power Generated (MWH)	<u>1,593,768</u>	<u>2,753,206</u>	<u>2,753,206</u>
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10. Gross Electrical Power Generated (MWH)	<u>526,170</u>	<u>806,170</u>	<u>806,170</u>
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11. Net Electrical Power Generated (MWH)	<u>512,830</u>	<u>817,100</u>	<u>817,100</u>
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12. Reactor Service Factor	<u>87.6</u>	<u>86.0</u>	<u>86.0</u>
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13. Reactor Available Factor	<u>92.7</u>	<u>97.2</u>	<u>97.2</u>
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14. Unit Service Factor	<u>83.8</u>	<u>75.3</u>	<u>75.3</u>
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15. Unit Availability Factor	<u>83.8</u>	<u>75.3</u>	<u>75.3</u>
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16. Unit Capacity Factor (using MDC)	<u>66.9</u>	<u>40.1</u>	<u>40.1</u>
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17. Unit Capacity Factor (using Design MWe)	<u>66.9</u>	<u>40.1</u>	<u>40.1</u>
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18. Forced Outage Rate	<u>6.2</u>	<u>10.8</u>	<u>10.8</u>
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19. Shutdowns scheduled to begin in next 6 months (state type, date and duration of each): _____

20. If shutdown at end of report period, estimated date of startup: _____

21. Plants in Test Status (prior to commercial operation) Report the Following:

	<u>Forecast</u>	<u>Achieved</u>
Initial Criticality	_____	_____
Initial Electrical Power Generation	_____	_____
Commercial Operation	_____	_____



Startup test continued

DATE 12/6/76

COMPLETED BY Harold Walls

REPORT MONTH November

PLANT SHUTDOWNS

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	COMMENTS
11	761101	F	7.70	A	C	Recirc M-G set failure
12	761109	S	62.63	B	C	
13	761116	F	20.20	A	C	MSIV control failure during SI 4.1.A-10
14	761125	S	13.88	B	C	
15	761127	F	12.00	B	C	

(1) REASON:
A-EQUIPMENT FAILURE (EXPLAIN)
B-MAINT, OR TEST
C-REFUELING
D-REGULATORY RESTRICTION
E-OPERATOR TRAINING AND LICENSING EXAMINATION
F-ADMINISTRATIVE
G-OPERATIONAL ERROR (EXPLAIN)

(2) METHOD:
A-MANUAL
B-MANUAL SCRAM
C-AUTOMATIC SCRAM

UNIT

3

DATE

12/4/76

COMPLETED BY

Jim Steele

DAILY UNIT POWER OUTPUTMONTH November

<u>DAY</u>	<u>AVERAGE DAILY MWe-net</u>	<u>DAY</u>	<u>AVERAGE DAILY MWe-net</u>
1	<u>284</u>	25	<u>539</u>
2	<u>742</u>	26	<u>335</u>
3	<u>814</u>	27	<u>294</u>
4	<u>805</u>	28	<u>637</u>
5	<u>814</u>	29	<u>925</u>
6	<u>831</u>	30	<u>1061</u>
7	<u>782</u>	31	<u> </u>
8	<u>893</u>		
9	<u>865</u>		
10	<u>-11</u>		
11	<u>-11</u>		
12	<u>337</u>		
13	<u>786</u>		
14	<u>931</u>		
15	<u>1005</u>		
16	<u>568</u>		
17	<u>251</u>		
18	<u>864E</u>		
19	<u>990</u>		
20	<u>1026E</u>		
21	<u>1080E</u>		
22	<u>871</u>		
23	<u>1080E</u>		
24	<u>1080E</u>		

Note: Negative values indicate station use when unit is off line.

E - Estimate

