

OPERATING DATA REPORT

DOCKET NO. 050-0324

DATE 02/03/81

COMPLETED BY EULIS WILLIS

TELEPHONE 919-457-9521

OPERATING STATUS

- | | | | |
|---|---|-------|---|
| 1. UNIT NAME: BRUNSWICK UNIT 2 | I | NOTES | I |
| 2. REPORTING PERIOD: JANUARY 81 | I | | I |
| 3. LICENSED THERMAL POWER (MWT): 2436 | I | | I |
| 4. NAMEPLATE RATING (GROSS MWE): 867.0 | I | | I |
| 5. DESIGN ELECTRICAL RATING (NET MWE): 821.0 | I | | I |
| 6. MAX DEFENDABLE CAPACITY (GROSS MWE): 815.0 | I | | I |
| 7. MAX DEFENDABLE CAPACITY (NET MWE): 790.0 | I | | I |
| 8. IF CHANGES OCCUR IN CAPACITY RATINGS (ITEMS 3 THRU 7) SINCE LAST REPORT, GIVE REASONS: | | | |

9. POWER LEVEL TO WHICH RESTRICTED IF ANY (NET MWE): NONE
10. REASONS FOR RESTRICTION IF ANY:

	THIS MONTH	YR TO DATE	CUMUL ATIVE
11. HOURS IN REPORTING PERIOD	744.0	744.0	46009.0
12. NUMBER OF HOURS REACTOR WAS CRITICAL	665.3	665.3	29687.6
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON LINE	646.3	646.3	27610.5
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	1098990.6	1098990.6	50710371.4
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	381180.0	381180.0	16945626.0
18. NET ELECTRICAL ENERGY GENERATED (MWH)	367820.0	367820.0	16273229.0
19. UNIT SERVICE FACTOR	86.9	86.9	60.0
20. UNIT AVAILABILITY FACTOR	86.9	86.9	60.0
21. UNIT CAPACITY FACTOR (USING MDC NET)	62.6	62.6	44.8
22. UNIT CAPACITY FACTOR (USING DER NET)	60.2	60.2	43.1
23. UNIT FORCED OUTAGE RATE	13.1	13.1	13.3
24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):			

Maintenance 810213 120 hours

25. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF START UP: 0/ 0/ 0
26. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION): FORCAST ACHEIVED

INITIAL CRITICALITY	-----	-----
INITIAL ELECTRICITY	-----	-----
COMMERCIAL OPERATION	-----	-----

APPENDIX B
AVERAGE DAILY POWER LEVEL

DOCKET NO. 050-0324
UNIT BRUNSWICK UNIT 2
DATE 02/03/81
COMPLETED BY EULIS WILLIS
TELEPHONE 919-457-9521

JANUARY 81

DAY	AVG. DAILY POWER LEVEL (MWE-NET)	DAY	AVG. DAILY POWER LEVEL (MWE-NET)
1	470.	17	708.
2	440.	18	607.
3	139.	19	704.
4	160.	20	707.
5	544.	21	645.
6	665.	22	617.
7	222.	23	622.
8	-11.	24	595.
9	-11.	25	618.
10	-11.	26	638.
11	241.	27	582.
12	588.	28	537.
13	695.	29	539.
14	718.	30	561.
15	621.	31	563.
16	613.		

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH January 1981

DOCKET NO. 050-0324
 UNIT NAME Brunswick #2
 DATE February 1981
 COMPLETED BY Frances Harrison
 TELEPHONE 457-9521

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
001	810103	F	43	B	1	N/A	WB	FILTER	Reduced power to work on debris filter. Cleaned debris filters and left in satisfactory working condition.

¹
 F: Forced
 S: Scheduled

²
 Reason:
 A-Equipment Failure (Explain)
 B-Maintenance of 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

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH January 1981

DOCKET NO. 050-0324
 UNIT NAME Brunswick #2
 DATE February 1981
 COMPLETED BY Frances Harrison
 TELEPHONE 457-9521

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
002	810107	F	97.7	A	3	N/A	CH	PUMPXX	<p>The unit separated from the grid because of a trip by reactor feed pump 2A.</p> <p>A G.E. Service Field Engineer was called in to evaluate the cause for turbine trip. The G.E. representative was unable to determine cause after extensive testing.</p>

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH January 1981

DOCKET NO. 050-0324
 UNIT NAME Brunswick #2
 DATE February 1981
 COMPLETED BY Frances Harrison
 TELEPHONE 457-9521

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
003	810128	S	9.5	B	1	N/A	HC	HTEXCH	Decreasing power for water box work. Check tube using helium, plugged tubes, returned to service.

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APPENDIX

DOCKET NO: 050-0324
UNIT: Brunswick No. 2
DATE: February 1981
COMPLETED BY: Frances Harrison

OPERATIONS SUMMARY BRUNSWICK UNIT NO. 2

Brunswick Unit No. 2 operated at an 86.9% availability factor for the month of January with a 62.6% capacity factor. There were two power reductions this month, and one "off-line" outage, both are detailed in Appendix D, the unit shutdowns and power reductions log.

There are 264 BWR and 144 PWR spent fuel bundles in the Brunswick Unit No. 2 fuel pool.

1344 hrs

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH February 1981DOCKET NO. 050-0325UNIT NAME Brunswick No. 1DATE March 1981COMPLETED BY Frances HarrisonTELEPHONE 457-9521

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
005	810202	F	126.8	B	1	NA	HC	HTEXCH	<p>Tube leaking and a hole in condenser waterbox A-north.</p> <p>Plugged tube that was leaking and permanently patched the hole in condenser waterbox A-north.</p>

¹
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C-Refueling
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E-Operator Training & License Examination
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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH February 1981

DOCKET NO. 050-0325
UNIT NAME Brunswick No. 1
DATE March 1981
COMPLETED BY Frances Harrison
TELEPHONE 457-9521

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
006	810208	F	50.6	B	1	NA	HC	HTEXCH	Tube leaks in A-north, A-south and B-north condenser waterboxes. Plugged tubes.

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Reason:
A-Equipment Failure (Explain)
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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH February 1981DOCKET NO. 050-0325UNIT NAME Brunswick No. 1DATE March 1981COMPLETED BY Frances HarrisonTELEPHONE 457-9521

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
007	810212	F	23.7	A	3	NA	HF	XXXXXX	<p>Fish clogged the intake traveling screen causing a loss of circ. water flow which affected the condenser heat sink resulting in a low condenser vacuum, turbine trip and a reactor scram.</p> <p>Cleared the fish from traveling screen and performed maintenance on the necessary components.</p>

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH February 1981DOCKET NO. 050-0325UNIT NAME Brunswick No. 1DATE March 1981COMPLETED BY Frances HarrisonTELEPHONE 457-9521

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
008	810224	F	13.3	A	1	NA	SE	PIPEXX	<p>The unit was separated from the grid because of high O₂ concentration in the drywell. The N₂ piping leading to the drywell was found ruptured.</p> <p>Ruptured N₂ piping was uncovered, wrapped with a temporary shield, and placed back in service on a temporary basis to lower Unit No. 1 & 2 drywell O₂ level to less than 1%. Permanent weld repair was then commenced and completed 2-27-81.</p>

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C-Refueling
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APPENDIX

DOCKET NO: 050-325
UNIT: Brunswick No. 1
DATE: March 1981
COMPLETED BY: Frances Harrison

OPERATIONS SUMMARY BRUNSWICK UNIT NO. 1

Brunswick Unit No. 1 operated at a 94.5% availability factor for the month of February with a 68.5% capacity factor. There were two power reductions this month, and two "off-line" outages, both are detailed in Appendix D, the unit shutdowns and power reductions log.

There are 476 BWR and 160 PWR spent fuel bundles in the Brunswick Unit No. 1 fuel pool.

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH February 1981

DOCKET NO. 050-0324
 UNIT NAME Brunswick No. 2
 DATE March 1981
 COMPLETED BY Frances Harrison
 TELEPHONE 457-9521

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
005	810201	F	320.7	A	1	NA	CD	VALVOP	<p>Outboard MSIV (F028C) valved seat separated from the stem operator.</p> <p>Place main steam line C inboard isolation valve (F022C) in the closed position until the plant can be placed in the cold shutdown condition to affect repairs.</p>

¹
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 C-Refueling
 D-Regulatory Restriction
 E-Operator Training & License Examination
 F-Administrative
 G-Operational Error (Explain)
 H-Other (Explain)

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH February 1981

DOCKET NO. 050-0324
 UNIT NAME Brunswick No. 2
 DATE March 1981
 COMPLETED BY Frances Harrison
 TELEPHONE 457-9521

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
006	810214	S	189.8	B	2	NA	CD	VALVOP	Valve disk was found separated from the stem. The pin connecting the disk and stem was found missing . Double pinned the stem to the disk, reinstalled the valve and returned the unit to service.

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 C-Refueling
 D-Regulatory Restriction
 E-Operator Training & License Examination
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 G-Operational Error (Explain)
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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH February 1981DOCKET NO. 050-0324UNIT NAME Brunswick No. 2DATE March 1981COMPLETED BY Frances HarrisonTELEPHONE 457-9521

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
007	810224	F	31.7	A	2	NA	SE	PIPEXX	<p>The drywell is normally inerted with nitrogen. The N₂ piping leading to the drywell was found ruptured.</p> <p>The ruptured N₂ was uncovered, wrapped with a temporary shield, used to inert both drywells to < 1%, and then permanently repaired by replacing damaged section of line using MP 30, MI 25-1, and MI 25-5.</p>

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B-Maintenance of Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & License Examination
F-Administrative
G-Operational Error (Explain)
H-Other (Explain)

³
Method:
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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH February 1981

DOCKET NO. 050-0326
 UNIT NAME Brunswick No. 2
 DATE March 1981
 COMPLETED BY F. Harrison
 TELEPHONE 919-452-9521

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
008	810226	F	22.1	A	3	N/A	HA	ZZZZZZ	<p>Large megawatt swings, caused by intermittent intermediate valve operation, resulted in the reactor protection system actuation and a reactor scram. The large megawatt swings were caused by a faulty connector for CIV No. 1.</p> <p>The connector was replaced. No further evidence of erratic valve operation has occurred.</p>

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 S: Scheduled

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 B-Maintenance of Test
 C-Refueling
 D-Regulatory Restriction
 E-Operator Training & License Examination
 F-Administrative
 G-Operational Error (Explain)
 H-Other (Explain)

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 Method:
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APPENDIX

DOCKET NO: 050-0324
UNIT: Brunswick No. 2
DATE: March 1981
COMPLETED BY: Frances Harrison

OPERATIONS SUMMARY
BRUNSWICK UNIT NO. 2

Brunswick Unit No. 2 operated at a 63.8% availability factor for the month of February with a 39.7% capacity factor. There was one power reduction this month, and three "off-line" outages, both are detailed in Appendix D, the unit shutdowns and power reductions log.

There are 264 BWR and 144 PWR spent fuel bundles in the Brunswick Unit No. 2 fuel pool.