

APPENDIX B
AVERAGE DAILY POWER LEVEL

POCR ORIGINAL

DOCKET NO. 050-0325
UNIT BRUNSWICK UNIT 1
DATE 10/01/79
COMPLETED BY EULIS WILLIS
TELEPHONE 919-457-9521

SEPTEMBER 79

DAY	AVG. DAILY POWER LEVEL (MWE-NET)	DAY	AVG. DAILY POWER LEVEL (MWE-NET)
1	656.	17	203.
2	682.	18	624.
3	654.	19	647.
4	613.	20	649.
5	549.	21	523.
6	667.	22	672.
7	690.	23	690.
8	212.	24	704.
9	0.	25	666.
10	0.	26	741.
11	0.	27	752.
12	0.	28	752.
13	0.	29	753.
14	0.	30	749.
15	0.		
16	0.		

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OPERATING DATA REPORT

POOR ORIGINAL

DOCKET NO. 050-0325
DATE 10/01/79
COMPLETED BY EULIS WILLIS
TELEPHONE 914-457-9521

OPERATING STATUS

- | | | | |
|---|---|-------|---|
| 1. UNIT NAME: BRUNSWICK UNIT 1 | I | NOTES | I |
| 2. REPORTING PERIOD: SEPTEMBER 79 | I | | I |
| 3. LICENSED THERMAL POWER (MWT): 2435 | I | | I |
| 4. NAMEPLATE RATING (GROSS MWE): 857.0 | I | | I |
| 5. DESIGN ELECTRICAL RATING (NET MWE): 821.0 | I | | I |
| 6. MAX DEPENDABLE CAPACITY (GROSS MWE): 815.0 | I | | I |
| 7. MAX DEPENDABLE 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	720.0	6551.0	22248.0
12. NUMBER OF HOURS REACTOR WAS CRITICAL	526.3	3703.4	16014.0
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	1647.1
14. HOURS GENERATOR ON LINE	505.1	3510.7	15060.5
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MMH)	1029076.4	7227429.4	31174620.5
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	342047.0	2407697.0	10338966.0
18. NET ELECTRICAL ENERGY GENERATED (MWH)	328503.0	2311145.0	9949743.0
19. UNIT SERVICE FACTOR	70.2	53.6	57.7
20. UNIT AVAILABILITY FACTOR	70.2	53.6	57.7
21. UNIT CAPACITY FACTOR (USING MDC NET)	57.8	44.7	56.6
22. UNIT CAPACITY FACTOR (USING DER NET)	55.6	43.0	54.5
23. UNIT FORCED OUTAGE RATE	0.0	5.2	19.9
24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):			

25. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF START UP: 07/07/0
26. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION): FORECAST ACHIEVED

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

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH September 1979

DOCKET NO. 050-0325
 UNIT NAME Brunswick #1
 DATE October 1979
 COMPLETED BY Ellis A. Willis
 TELEPHONE (919) 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
018	790908	s	214.9	D	2	N/A	ZZ	Suport	The unit was separated from the grid for pipe hydraulic snubber inspection in the primary containment. Also, repair of the generator hydrogen seals was necessary due to excessive hydrogen leakage (approximately 15,000 cu ft/day). The hydraulic snubbers were inspected per PT 19.6.0.1. The generator hydrogen seals were removed and remachined or replaced as required. Overtime was worked to complete this outage.

POOR ORIGINAL

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 C - Instructions
 for Preparation of Data
 Entry Sheets for Licensee
 Event Report (LER) File (NUREG-
 0161)

5

Exhibit I - Same Source

(9/77)

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APPENDIX

DOCKET NO: 050-0325
UNIT: Brunswick No. 1
DATE: October 1979
COMPLETED BY: Eulis A. Willis

OPERATIONS SUMMARY

BRUNSWICK NO. 1

Brunswick Unit No. 1 operated at a 57.8% capacity factor for the month of September with one major shutdown preventing higher numbers:

September 8 The unit was separated from the grid for 214 hours and 52 minutes for a pipe hydraulic snubber inspection in the primary containment.

For more detailed information on this outage see the unit shutdowns and power reductions log (APPENDIX D) included in this report.

Availability factor for the month was 70.2%.

There are 154 PWR spent fuel assemblies and 320 BWR spent fuel assemblies stored in the BSEP #1 spent fuel pool.

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APPENDIX B
AVERAGE DAILY POWER LEVEL

DOCKET NO. 050-0324
UNIT BRUNSWICK UNIT 2
DATE 10/01/79
COMPLETED BY EULIS WILLIS
TELEPHONE 919-457-9521

SEPTEMBER 79

DAY	AVG. DAILY POWER LEVEL (MWE-NET)	DAY	AVG. DAILY POWER LEVEL (MWE-NET)
1	0.	17	644.
2	0.	18	620.
3	0.	19	479.
4	0.	20	671.
5	0.	21	720.
6	0.	22	101.
7	9.	23	484.
8	361.	24	635.
9	522.	25	710.
10	631.	26	551.
11	650.	27	709.
12	236.	28	743.
13	110.	29	733.
14	144.	30	724.
15	434.		
16	655.		

POOR ORIGINAL

OPERATING DATA REPORT

DOCKET NO. 050-0324
DATE 10/01/79
COMPLETED BY EULIS WILLIS
TELEPHONE 919-457-9521

OPERATING STATUS

1. UNIT NAME: BRUNSWICK UNIT 2	I	NOTES	I
2. REPORTING PERIOD: SEPTEMBER 79	I		I
3. LICENSED THERMAL POWER (MWT): 2436	I		I
4. NAMEPLATE RATING (GROSS MWE): 367.0	I		I
5. DESIGN ELECTRICAL RATING (NET MWE): 821.0	I		I
6. MAX DEPENDABLE CAPACITY (GROSS MWE): 315.0	I		I
7. MAX DEPENDABLE 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	720.0	6551.0	34272.0
12. NUMBER OF HOURS REACTOR WAS CRITICAL	558.9	4001.6	23289.8
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON LINE	502.3	3731.9	21861.0
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	911926.7	6957651.5	39405485.8
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	306504.0	2340685.0	13157012.0
18. NET ELECTRICAL ENERGY GENERATED (MWH)	293515.0	2239968.0	12623180.0
19. UNIT SERVICE FACTOR	69.8	57.0	63.8
20. UNIT AVAILABILITY FACTOR	69.8	57.0	63.8
21. UNIT CAPACITY FACTOR (USING MDC NET)	51.6	43.3	46.6
22. UNIT CAPACITY FACTOR (USING DER NET)	49.7	41.6	44.9
23. UNIT FORCED OUTAGE RATE	13.1	6.9	13.8
24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):			

REFUELING 80 02 09 1680 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	-----	-----

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POOR ORIGINAL

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH September 1979

DOCKET NO. 050-0324
 UNIT NAME Brunswick #2
 DATE October 1979
 COMPLETED BY Eulis A. Willis
 TELEPHONE (919) 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
015	790901	S	141.8	D	2	N/A	ZZ	Suport	Separated from grid for pipe suport inspections and modifications. Snubber inspection was per Technical Specification 3/4.7.5. All defective snubbers found were repaired and returned to service.

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 September 1979

DOCKET NO. 050-0324
 UNIT NAME Brunswick #2
 DATE October 1979
 COMPLETED BY Ellis A. Willis
 TELEPHONE (919) 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
016	790907	F	21.5	B	1	N/A	CC	VALVOP	The unit was separated from the grid to repair a steam leak in a main steam line drain valve in the Reactor Building. Apparently, a valve travel limit switch fails to operate at the proper setpoint causing the operator mounting bolts to break when the motor continued to run. This caused a bent valve stem and a steam leak past the valve stem packing. The stem was straightened enough to repack the valve. The operator will be installed at a later date after a new stem is installed. All main steam drain valves were checked for proper operation on both units. Overtime was worked.

¹
 F: Forced
 S: Scheduled

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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)

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 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 September 1979

DOCKET NO. 050-0324
 UNIT NAME Brunswick #2
 DATE October 1979
 COMPLETED BY Ellis A. Willis
 TELEPHONE (919) 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
017	790912	F	24.95	B	1	N/A	WA	Pipexx	The unit separated from the grid due to a nuclear service water leak. The leak was caused by defective cement lining on the inside of a pipe reducing elbow exposing the carbon steel pipe to salt water corrosion. The defective cement lining was caused by erosion. The area surrounding hole was ultrasonically tested to assure that the problem was localized. The elbow was repaired in accordance with Approved Plant Modification 79-200. The defective elbow will be replaced during the next refueling outage. A study is in progress to determine long-term suitability of all cement-lined piping. Overtime was worked.

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)

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: September 1979

DOCKET NO. 050-0324
 UNIT NAME Brunswick #2
 DATE October 1979
 COMPLETED BY Ellis A. Willis
 TELEPHONE (919) 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
018	790914	F	17.1	A	3	N/A	HA	Instru	The Reactor scrammed from an apparent load reject. The EHC System was checked and the output from an electronic speed converter card was found to be unstable. The card was replaced from stock and the unit returned to service. Overtime was worked.

¹
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 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)

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⁵
 Exhibit I - Same Source

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH September 1979DOCKET NO. 050-0324UNIT NAME Brunswick #2DATE October 1979COMPLETED BY Ellis A. WillisTELEPHONE (919) 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
019	790922	S	12.4	B	1	N/A	RB	Instru	The unit was separated from the grid to remove a stuck detector from Channel 7 of Transversing in-core Probe "D". A slight dent in the tubing caused the detector to stick. The stuck detector was removed and the section of tubing containing the slight dent was removed and replaced. The system was checked for satisfactory operation. Overtime was worked.

¹
F: Forced
S: Scheduled

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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

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⁵

Exhibit I - Same Source

APPENDIX

DOCKET NO: 050-0324
UNIT: Brunswick No. 2
DATE: October 1979
COMPLETED BY: Eulis A. Willis

OPERATIONS SUMMARY

BRUNSWICK NO. 2

Brunswick Unit No. 2 operated at a 51.6% capacity factor for the month of September. The following changes and shutdowns occurred during the month:

- September 1 Separated from grid 141.8 hours at the beginning of the month for pipe support inspections and modifications.
- September 7 The unit was separated from the grid for 21.5 hours to repair a steam leak in a main steam line drain valve.
- September 12 The unit was separated from the grid for ~ 25 hours for a nuclear service water leak.
- September 14 Reactor scram from an apparent load reject. Off line time 17.1 hours
- September 22 The unit was separated from the grid for 12.4 hours to repair a "TIP" machine.

Monthly availability factor was 69.8%.

There are 132 BWR spent fuel assemblies and 70 PWR spent fuel assemblies stored in the BSEP #2 spent fuel pool.