

DOCKET NO.: 050-0325  
UNIT: Brunswick 1  
DATE: April 1986  
COMPLETED BY: Frances Harrison

OPERATIONS SUMMARY  
BRUNSWICK UNIT 1

Brunswick Unit 1 operated at 77.12 percent availability factor for the month of April with a 68.71 percent capacity factor. There were two power reductions and two scrams; the unit was returned to service on April 2, 1986, after the March 26, 1986, scram. Details are in the Unit Shutdowns and Power Reductions sheet.

There are 840 BWR and 160 PWR spent fuel bundles in the Brunswick Unit 1 fuel pool.

8605140002 260430  
PDR ADOCK 05000324  
R PDR

IE24  
1/1

CP&L CO  
RUN DATE 05/05/86  
RUN TIME 14:29:51

PLANT PERFORMANCE DATA SYSTEM  
APPENDIX B - AVERAGE DAILY POWER LEVEL  
BRUNSWICK UNIT 1

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DOCKET NO. 050-0325  
COMPLETED BY FRANCES HARRISON  
TELEPHONE (919)457-9521

APRIL 1986

DAY	AVG. DAILY POWER LEVEL (MWE-NET)	DAY	AVG. DAILY POWER LEVEL (MWE-NET)
1	-15	17	785
2	88	18	785
3	-8	19	636
4	-10	20	636
5	-12	21	643
6	-13	22	676
7	-12	23	764
8	112	24	766
9	623	25	766
10	675	26	719
11	742	27	781
12	743	28	783
13	771	29	780
14	771	30	777
15	766		
16	777		

CP&E CO  
RUN DATE 05/05/86  
RUN TIME 14:29:52

PLANT PERFORMANCE DATA SYSTEM  
OPERATING DATA REPORT  
BRUNSWICK UNIT 1

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DOCKET NO. 050-0325  
COMPLETED BY FRANCES HARRISON  
TELEPHONE (919)457-9521

OPERATING STATUS

1. UNIT NAME: BRUNSWICK UNIT 1	NOTES
2. REPORTING PERIOD: APRIL 86	
3. LICENSED THERMAL POWER (MWT): 2436	
4. NAMEPLATE RATING (GROSS MWE): 867.0	
5. DESIGN ELECTRICAL RATING (NET MWF): 821.0	
6. MAX DEPENDABLE CAPACITY (GROSS MWE): 815.0	
7. MAX DEPENDABLE CAPACITY (NET MWE): 790.0	
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):  
10. REASONS FOR RESTRICTION IF ANY:

	THIS MONTH	YR TO DATE	CUMULATIVE
11. HOURS IN REPORTING PERIOD	719.00	2879.00	79944.00
12. NUMBER OF HOURS REACTOR CRITICAL	658.42	2692.62	49524.10
13. REACTOR RESERVE SHUTDOWN HRS	.00	.00	1647.10
14. HOURS GENERATOR ON LINE	554.48	2578.80	46716.18
15. UNIT RESERVE SHUTDOWN HOURS	.00	.00	.00
16. GROSS THERMAL ENERGY GEN. (MWH)	1230649.66	6035612.89	96142276.54
17. GROSS ELEC. ENERGY GEN. (MWH)	404505.00	1988204.00	31739477.00
18. NET ELEC. ENERGY GENERATED (MWH)	390272.00	1929545.00	30488242.00
19. UNIT SERVICE FACTOR	77.12	89.57	58.44
20. UNIT AVAILABILITY FACTOR	77.12	89.57	58.44
21. UNIT CAP. FACTOR (USING MDC NET)	68.71	84.84	48.27
22. UNIT CAP. FACTOR (USING DER NET)	66.11	81.63	46.45
23. UNIT FORCED OUTAGE RATE	22.88	10.43	19.52
24. SHUTDOWNS SCHED. OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):			

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

INITIAL CRITICALITY

INITIAL ELECTRICITY

COMMERCIAL OPERATION

# UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH April 1986

DOCKET NO. 050-0325

UNIT NAME Brunswick 1

DATE May 1986

COMPLETED BY Frances Harrison

TELEPHONE 919-457-9521

No	Date	Type <sup>1</sup>	Duration (hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
86-016	860326	F	161.43	A	3	1-86-009			Reactor scram-main turbine and reactor feed pump trip on high reactor water level instrument malfunction.

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-Continuations  
5-Load Reductions  
6-Other

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 April 1986

DOCKET NO. 050-0325

UNIT NAME Brunswick I

DATE May 1986

COMPLETED BY Frances Harrison

TELEPHONE 919-457-9521

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
86-024	860402	F	2.22	A	3				Main Turbine Trip

<sup>1</sup>  
F- Forced  
S- Scheduled

<sup>2</sup>  
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)

<sup>3</sup>  
Method:  
1-Manual  
2-Manual Scram.  
3-Automatic Scram.  
4-Continuations  
5-Load Reductions  
6-Other

<sup>4</sup>  
Exhibit G - Instructions  
for Preparation of Data  
Entry Sheets for Licensee  
Event Report (LER) File (NUREG-  
0161)

<sup>5</sup>  
Exhibit I - Same Source

# UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 050-0325

UNIT NAME Brunswick I

DATE May 1986

COMPLETED BY Frances Harrison

TELEPHONE 919-457-9521

REPORT MONTH April 1986

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
86-025	860402	F	136.7	A	3				Reactor Scram - Low Reactor Water Level due to loss of Bus 1D

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-Continuations  
5-Load Reductions  
6-Other

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 April 1986

DOCKET NO. 050-0325  
 UNIT NAME Brunswick I  
 DATE May 1986  
 COMPLETED BY Frances Harrison  
 TELEPHONE 919-457-9521

No	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
86-020	860419	F	.00	A	5				Heater drain pump problems

<sup>1</sup>  
 F: Forced  
 S: Scheduled

<sup>2</sup>  
 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)

<sup>3</sup>  
 Method:  
 1-Manual  
 2-Manual Scram.  
 3-Automatic Scram.  
 4-Continuations  
 5-Load Reductions  
 6-Other

<sup>4</sup>  
 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

<sup>5</sup>  
 Exhibit I - Same Source

# UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH April 1986

DOCKET NO. 050-0325  
 UNIT NAME Brunswick I  
 DATE May 1986  
 COMPLETED BY Frances Harrison  
 TELEPHONE 919-457-9521

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
86-022	860426	S	.00	B	5				Rod improvement

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-Continuations  
 5-Load Reductions  
 6-Other

4  
 Exhibit G - Instructions  
 for Preparation of Data  
 Entry Sheets for Licensee  
 Event Report (LER) File (NUREG-  
 0161)

5  
 Exhibit I - Same Source



CP&L CO  
RUN DATE 05/05/86  
RUN TIME 14:29:51

PLANT PERFORMANCE DATA SYSTEM  
APPENDIX B - AVERAGE DAILY POWER LEVEL  
ICK UNIT 2

PAGE 2  
RPD39

DOCKET NO. 050-0324  
COMPLETED BY FRANCES HARRISON  
TELEPHONE (919)457-9521

APRIL 1986

DAY	AVG. DAILY POWER LEVEL (MWE-NET)	DAY	AVG. DAILY POWER LEVEL (MWE-NET)
1	-6	17	-8
2	-4	18	-8
3	-6	19	-8
4	-7	20	-8
5	-6	21	-9
6	-6	22	-10
7	-7	23	-10
8	-8	24	-10
9	-7	25	-10
10	-9	26	-11
11	-9	27	-10
12	-8	28	-11
13	-7	29	-10
14	-7	30	-10
15	-8		
16	-8		

CP&L CO  
RUN DATE 05/05/86  
RUN TIME 14:29:52

PLANT PERFORMANCE DATA SYSTEM  
OPERATING DATA REPORT  
ICK UNIT 2

PAGE 2  
RPD36

DOCKET NO. 050-0324  
(COMPLETED BY FRANCES HARRISON  
TELEPHONE (919)457-9521

OPERATING STATUS

1. UNIT NAME:	ICK UNIT 2	NOTES
2. REPORTING PERIOD:	APRIL 86	
3. LICENSED THERMAL POWER (MWT):	2436	
4. NAMEPLATE RATING (GROSS MWE):	867.0	
5. DESIGN ELECTRICAL RATING (NET MWE):	821.0	
6. MAX DEPENDABLE CAPACITY (GROSS MWE):	815.0	
7. MAX DEPENDABLE CAPACITY (NET MWE):	790.0	
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):  
10. REASONS FOR RESTRICTION IF ANY:

	THIS MONTH	YR TO DATE	CUMUL ATIVE
11. HOURS IN REPORTING PERIOD	719.00	2879.00	91968.00
12. NUMBER OF HOURS REACTOR CRITICAL	.00	.00	54512.36
13. REACTOR RESERVE SHUTDOWN HRS	.00	.00	.00
14. HOURS GENERATOR ON LINE	.00	.00	51011.09
15. UNIT RESERVE SHUTDOWN HOURS	.00	.00	.00
16. GROSS THERMAL ENERGY GEN. (MWH)	.00	.00	98829872.53
17. GROSS ELEC. ENERGY GEN. (MWH)	.00	.00	32795484.00
18. NET ELEC. ENERGY GENERATED (MWH)	-5826.00	-15495.00	31422504.00
19. UNIT SERVICE FACTOR	.00	.00	55.47
20. UNIT AVAILABILITY FACTOR	.00	.00	55.47
21. UNIT CAP. FACTOR (USING MDC NET)	-1.03	-.68	43.25
22. UNIT CAP. FACTOR (USING DER NET)	-.99	-.66	41.62
23. UNIT FORCED OUTAGE RATE	.00	.00	15.48
24. SHUTDOWNS SCHED. OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):			

25. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF START UP: 06/13/86  
26. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION): FORECAST ACHIEVED

INITIAL CRITICALITY

INITIAL ELECTRICITY

COMMERCIAL OPERATION

DOCKET NO.: 050-0324  
UNIT: Brunswick 2  
DATE: May 1986  
COMPLETED BY: Frances Harrison

OPERATIONS SUMMARY  
BRUNSWICK UNIT 2

The unit was removed from service on November 30, 1985, for the refueling/maintenance outage.

There are 756 BWR and 144 PWR spent fuel bundles in the Brunswick Unit 2 fuel pool.

## UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH April 1986

DOCKET NO. 050-0324  
 UNIT NAME Brunswick II  
 DATE May 1986  
 COMPLETED BY Frances Harrison  
 TELEPHONE 919-457-9521

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
85-078	851130	S	In Progress	C	4	NA	RC	FUELXX	Refueling/Maintenance Outage

<sup>1</sup>  
 F: Forced  
 S: Scheduled

<sup>2</sup>  
 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)

<sup>3</sup>  
 Method:  
 1-Manual  
 2-Manual Scram.  
 3-Automatic Scram.  
 4-Continuations  
 5-Load Reductions  
 6-Other

<sup>4</sup>  
 Exhibit G - Instructions  
 for Preparation of Data  
 Entry Sheets for Licensee  
 Event Report (LER) File (NUREG-  
 0161)

<sup>5</sup>  
 Exhibit I - Same Source



Carolina Power & Light Company

Brunswick Steam Electric Plant  
P. O. Box 10429  
Southport, NC 28461-0429

May 2, 1986

FILE: B09-13510C  
SERIAL: BSEP/86-0664

Mr. J. M. Taylor, Director  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT UNITS 1 AND 2  
DOCKET NOS. 50-325 AND 50-324  
LICENSE NOS. DPR-71 AND DPR-62  
MONTHLY OPERATING REPORT

Dear Mr. Taylor:

In accordance with Technical Specification 6.9.1.6 for the Brunswick Steam Electric Plant, Units 1 and 2, Carolina Power & Light Company herewith submits the report of operating statistics and shutdown experience for the month of April 1986.

Very truly yours,

C. R. Dietz, General Manager  
Brunswick Steam Electric Plant

FH/cab  
MSC/85-0014

Enclosures

cc: Mr. M. R. Beebe  
Dr. J. N. Grace  
Mr. M. D. Hill  
Mr. P. W. Howe  
Mr. C. F. Lassiter  
Mr. R. G. Oehl  
Ms. D. J. Vicks  
INPO

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