APPENDIX B
AVERAGE DAILY POWER LEVEL

DOCKET NO. 050-0325
UNIT BRUNSWICK UNIT 1
DATE 12/05/79
COMPLETED BY EULIS WILLIS
TELEPHONE 919-457-9521

NOVEMBER 79

DAY	AVG. DAILY POWER LEVEL (MWE-NET)	DAY	AVG. DAILY POWER LEVEL (MWE-NET)
1	776.	17	617.
2	776.	18	685.
3	776.	19	698.
4	749.	20	434.
5	237.	21	0.
6	0.	22	0.
7	0.	23	0.
8	0.	24	0.
9	0.	25	0.
10	0.	26	0.
11	0.	27	0.
12	0.	28	0.
13	0.	29	36.
14	0.	30	515.
15	0.		
16	203.		

1551 169

358

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OPERATING DATA REPORT

DOCKET NO. 050-0325
DATE 12/05/79
COMPLETED BY EULIS WILLIS
TELEPHONE 919-457-9521

OPERATING STATUS

1. UNIT NAME: BRUNSWICK UNIT 1
2. REPORTING PERIOD: NOVEMBER 79
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:

NOTES:

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	720.0	8016.0	23713.0
12.	NUMBER OF HOURS REACTOR WAS CRITICAL	276.3	4586.7	16897.3
13.	REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	1647.1
14.	HOURS GENERATOR ON LINE	238.2	4335.2	15885.0
15.	UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16.	GROSS THERMAL ENERGY GENERATED (MWH)	485146.9	8943005.2	32890196.3
17.	GROSS ELECTRICAL ENERGY GENERATED (MWH)	162303.0	2992928.0	10924205.0
18.	NET ELECTRICAL ENERGY GENERATED (MWH)	150719.0	2867842.0	10506440.0
19.	UNIT SERVICE FACTOR	33.1	54.1	67.0
20.	UNIT AVAILABILITY FACTOR	33.1	54.1	67.0
21.	UNIT CAPACITY FACTOR (USING MDC NET)	26.5	45.3	56.1
22.	UNIT CAPACITY FACTOR (USING DER NET)	25.5	43.6	54.0
23.	UNIT FORCED OUTAGE RATE	66.9	16.1	21.7

24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):
Relief Valve Modification: 79 12 12 120 Hours Refueling: 79 05 30 672 Hours
25. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: 0/ 0/ 0
26. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION): FORCAST ACHIEVED
INITIAL CRITICALITY
INITIAL CRITICALITY
COMMERCIAL OPERATION

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH November 1979

DOCKET NO. 050-0325
UNIT NAME Brunswick #1
DATE December 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
021	791105	F	262.8	B	3	N/A	CH	INSTRU	Reactor scrammed because of reactor low level apparently caused by a run-back of the master feedwater flow controller. An operator was in the process of completing a shift of the feedwater level controller from 3 element to single element control in order for calibration to be performed on a steam flow instrument. He had placed the controller in manual, shifted to single element control and placed controller back in automatic control, when the reactor level started to decrease and a scram resulted from low level. The feedwater level control loop was checked out and no problems were detected. Procedural changes were

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)

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

5
Exhibit I - Same Source

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH November 1979

DOCKET NO. 050-0325
UNIT NAME Brunswick #1
DATE December 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
									made to give more specific instructions on transferring from 3 element control to single element, and back to 3 element control. A caution was also added to minimize this operation above 75% reactor power due to the fast response of the feedwater control system. 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)

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

5
Exhibit I - Same Source

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH November 1979

DOCKET NO. 050-0325
UNIT NAME Brunswick #1
DATE December 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
022	791120	F	219	A	3	N/A	ED	ELECON	The reactor scrammed as a result of the loss of power to emergency busses E1 and E2. Offsite power was interrupted to E1 and E2 due to degraded switchyard voltage. The degraded switchyard voltage condition occurred when the generator exciter was placed in manual voltage control to clear an over-excitation annunciator in accordance with the Annunciator Procedure. Apparently an unstable system voltage condition caused a further deterioration of switchyard voltage when the exciter was taken out of automatic voltage control. The outage was extended as a result of the repairs to the uninterruptible power supply (UPS) system which failed when power was lost to buses E1 and E2.

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

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH November 1979

DOCKET NO. 050-0325
UNIT NAME Brunswick #1
DATE December 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
									(1) The Annunciator Procedure for over-excitation was rewritten to provide a method to clear the alarm under system unstable voltage conditions. (2) The UPS system was repaired. A preventative maintenance program will be initiated to assure that the system is reliable at all times. (3) A study is in progress to determine how to reduce unstable system conditions. Overtime was worked in returning the unit to service.

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)

4
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5
Exhibit I - Same Source

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APPENDIX

Docket No.: 050-0325
Unit: Brunswick No. 1
Date: November 1979
Completed By: Eulis A. Willis

OPERATIONS SUMMARY

BRUNSWICK NO. 1

Brunswick Unit No. 1 operated at a 26.5% capacity factor for the month of November. The following power changes and shutdowns occurred during the month:

November 5: The reactor scrammed because of a runback of the master feedwater flow controller.

November 20: The reactor scrammed because of the loss of power to emergency busses E1 and E2.

For more information on individual outages, see the Unit Shutdowns and Power Reductions Logs (Appendix D) for the month of November.

Availability factor for the month was 33.1%.

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

APPENDIX B
AVERAGE DAILY POWER LEVEL

DOCKET NO. 050-0324
UNIT BRUNSWICK UNIT 2
DATE 12/04/79
COMPLETED BY EULIS WILLIS
TELEPHONE 919-457-9521

NOVEMBER 79

DAY	AVG. DAILY POWER LEVEL (MWE-NET)	DAY	AVG. DAILY POWER LEVEL (MWE-NET)
1	726.	17	640.
2	723.	18	770.
3	734.	19	288.
4	736.	20	0.
5	735.	21	75.
6	735.	22	472.
7	734.	23	619.
8	735.	24	470.
9	710.	25	740.
10	421.	26	751.
11	544.	27	717.
12	696.	28	789.
13	759.	29	799.
14	750.	30	780.
15	755.		
16	751.		

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OPERATING DATA REPORT

DOCKET NO. 050-0324
DATE 12/04/79
COMPLETED BY EULIS WILLIS
TELEPHONE 919-457-9521

OPERATING STATUS

1. UNIT NAME: BRUNSWICK UNIT 2
2. REPORTING PERIOD: NOVEMBER 79
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:

NOTES:

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	720.0	8016.0	35737.0
12.	NUMBER OF HOURS REACTOR WAS CRITICAL	689.3	5435.9	24724.1
13.	REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14.	HOURS GENERATOR ON LINE	668.4	5145.3	23274.4
15.	UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16.	GROSS THERMAL ENERGY GENERATED (MWH)	1416365.2	9935082.7	42382917.0
17.	GROSS ELECTRICAL ENERGY GENERATED (MWH)	474035.0	3346490.0	14162817.0
18.	NET ELECTRICAL ENERGY GENERATED (MWH)	459354.0	3215017.0	13603229.0
19.	UNIT SERVICE FACTOR	92.8	64.2	65.1
20.	UNIT AVAILABILITY FACTOR	92.8	64.2	65.1
21.	UNIT CAPACITY FACTOR (USING MDC NET)	80.8	50.8	48.2
22.	UNIT CAPACITY FACTOR (USING DER NET)	77.7	48.9	46.4
23.	UNIT FORCED OUTAGE RATE	7.2	6.0	13.2

24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):
Relief Valve Modification: 79 12 26 120 Hours Refueling: 79 02 15 2184 Hours
25. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: 0/ 0/ 0
26. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION): FORCAST ACHIEVED
INITIAL CRITICALITY
INITIAL CRITICALITY
COMMERCIAL OPERATION

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH November 1979

DOCKET NO. 050-0324
UNIT NAME Brunswick #2
DATE December 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
023	791119	F	51.6	H	3	N/A	ZZ	ZZZZZZ	Reactor scrammed on a high pressure signal which was attributed to an instrument rack being jarred by janitorial personnel while cleaning the floor in the area of the instrument rack. Guard rails will be placed around all sensitive instrument racks to minimize the potential for bumping. Janitorial personnel have been instructed to not clean around instrument racks unless specifically requested. Overtime was worked in returning the unit 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
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5
Exhibit I - Same Source

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH November 1979

DOCKET NO. 050-0324
UNIT NAME Brunswick #2
DATE December 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
Q22	791109	1	35.0	A	1	N/A	HC	HTEXCH	Power was reduced to repair condenser waterboxes A-South, B-North. Waterboxes were inspected for leaks using the helium leak detection method. A total of 94 leaking tubes were plugged in A-South box. Repairs were made to leaking joint on B-North waterbox but were not effective in stopping leak. Plant Engineering is investigating methods of repairing joint leak in B-North waterbox at a later date. This box remains in service by controlling water level just below the top of box. 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)

4
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5
Exhibit I - Same Source

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APPENDIX

Docket No.: 050-0324
Unit: Brunswick No. 2
Date: November 1979
Completed By: Eulis A. Willis

OPERATIONS SUMMARY

BRUNSWICK NO. 2

Brunswick Unit No. 2 operated at a 80.8% capacity factor for the month of November. The following power changes and shutdowns occurred during the month:

November 9: Power was reduced to repair condenser waterboxes A-South, B-North.

November 19: Reactor scrammed because of an instrument rack being jarred by janitorial personnel.

For more information on individual outages, see the Unit Shutdowns and Power Reductions Logs (Appendix D) for the month of November.

Availability factor for the month was 92.8%.

There are 132 BWR spent fuel assemblies and 98 PWR spent fuel assemblies stored in the BSEP #2 spent fuel pool.

Due to a transcribing error, the number of PWR spent fuel assemblies stored in BSEP #2 should have read 91 instead of 84 spent fuel assemblies for the month October 1979.