

ENCLOSURE 3

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1
NRC DOCKET 50-325
OPERATING LICENSE DPR-71
REQUEST FOR LICENSE AMENDMENT

INSTRUCTIONS FOR INCORPORATION

The proposed changes to the Technical Specifications (Appendix A to Operating License DPR-71) would be incorporated as follows:

UNIT 1

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ENCLOSURE 4

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1
NRC DOCKET 50-325
OPERATING LICENSE DPR-71
REQUEST FOR LICENSE AMENDMENT

SUMMARY LIST OF REVISIONS

UNIT 1

<u>Pages</u>	<u>Description of Changes</u>
3/4 3-11	Deleted reference to Valve Group 1 in Item 1.a.2, revised instrument tag numbers in Item 1.a.2, and added reference to low level 3 setpoint under Item 1.a.
3/4 3-12	Reprinted to accommodate inserts.
3/4 3-13	Deleted reference to Valve Group 1 in Items 2.c and 3.e, revised instrument tag numbers in Items 2.c and 3.e.
3/4 3-17	Revised instrument tag numbers in Item 1.a.2, and added reference to low level 3 setpoint under Item 1.a.
3/4 3-18	Revised instrument tag numbers in Item 2.c.
3/4 3-19	Revised instrument tag numbers in Item 3.e.
3/4 3-22	Revised instrument tag numbers in Item 1.a.2, and added reference to low level 3 setpoint under Item 1.a.
3/4 3-23	Revised instrument tag numbers in Items 2.c and 3.e.
3/4 3-25	Revised instrument tag numbers in Item 1.a.2, and added reference to low level 3 setpoint under Item 1.a.
3/4 3-26	Reprinted to accommodate insertions.
3/4 3-27	Revised instrument tag numbers in Items 2.c and 3.e.

ENCLOSURE 5

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1
NRC DOCKET 50-325
OPERATING LICENSE DPR-71
REQUEST FOR LICENSE AMENDMENT

TECHNICAL SPECIFICATION PAGES

TABLE 3.3.2-1

ISOLATION ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>VALVE GROUPS OPERATED BY SIGNAL(a)</u>	<u>MINIMUM NUMBER OPERABLE CHANNELS PER TRIP SYSTEM(b)(c)</u>	<u>APPLICABLE OPERATIONAL CONDITION</u>	<u>ACTION</u>
1. <u>PRIMARY CONTAINMENT ISOLATION</u>				
a. Reactor Vessel Water Level -				
1. Low, Level 1 (B21-LT-N017A-1,B-1,C-1,D-1) (B21-LTM-N017A-1,B-1,C-1,D-1)	2, 6, 7, 8	2	1, 2, 3	20
2. Low, Level 2 (B21-LT-N024A-1,B-1, and B21-LT-N025A-1,B-1) (B21-LTM-N024A-1-1,B-1-1 and B21-LTM-N025A-1-1,B-1-1)	3	2	1, 2, 3	20
3. Low, Level 3 (B21-LT-N024A-1,B-1; B21-LT-N025A-1,B-1); (B21-LTS-N024A-1-2,B-1-2; B21-LTS-N025A-1-2,B-1-2)	1	2	1, 2, 3	20
b. Drywell Pressure - High (C71-PT-N002A,B,C,D) (C71-PTM-N002A-1,B-1,C-1,D-1)	2, 6, 7	2	1, 2, 3	20
c. Main Steam Line				
1. Radiation - High (D12-RM-K603A,B,C,D)	1	2	1, 2, 3	21
2. Pressure - Low (B21-PT-N015A,B,C,D) (B21-PTM-N015A-1,B-1,C-1,D-1)	1	2	1	22

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Amendment No.

TABLE 3.3.2-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>VALVE GROUPS OPERATED BY SIGNAL(a)</u>	<u>MINIMUM NUMBER OPERABLE CHANNELS PER TRIP SYSTEM(b)(c)</u>	<u>APPLICABLE OPERATIONAL CONDITION</u>	<u>ACTION</u>
<u>PRIMARY CONTAINMENT ISOLATION (Continued)</u>				
3. Flow - High (B21-PDT-N006A,B,C,D; B21-PDT-N007A,B,C,D; B21-PDT-N008A,B,C,D; B21-PDT-N009A,B,C,D) (B21-PDTM-N006A-1,B-1,C-1,D-1; B21-PDTM-N007A-1,B-1,C-1,D-1; B21-PDTM-N008A-1,B-1,C-1,D-1; B21-PDTM-N009A-1,B-1,C-1,D-1)	1	2/line	1	22
d. Main Steam Line Tunnel Temperature - High (B21-TS-N010A,B,C,D; B21-TS-N011A,B,C,D; B21-TS-N012A,B,C,D; B21-TS-N013A,B,C,D)	1	2 ^(d)	1, 2, 3	21
e. Condenser Vacuum - Low (B21-PT-N056A,B,C,D) (B21-PTM-N056A-1,B-1,C-1,D-1)	1	2	1, 2 ^(e)	21
f. Turbine Building Area Temperature - High (B21-TS-3225A,B,C,D; B21-TS-3226A,B,C,D; B21-TS-3227A,B,C,D; B21-TS-3228A,B,C,D; B21-TS-3229A,B,C,D; B21-TS-3230A,B,C,D; B21-TS-3231A,B,C,D; B21-TS-3232A,B,C,D)	1	4 ^(d)	1, 2, 3	21

TABLE 3.3.2-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>VALVE GROUPS OPERATED BY SIGNAL(a)</u>	<u>MINIMUM NUMBER OPERABLE CHANNELS PER TRIP SYSTEM(b)(c)</u>	<u>APPLICABLE OPERATIONAL CONDITION</u>	<u>ACTION</u>
2. <u>SECONDARY CONTAINMENT ISOLATION</u>				
a. Reactor Building Exhaust Radiation - High (D12-RM-N010A,B)	6	1	1, 2, 3, 5, and*	23
b. Drywell Pressure - High (C71-PT-N002A,B,C,D) (C71-PTM-N002A-1,B-1,C-1,D-1)	2, 6, 7	2	1, 2, 3	23
c. Reactor Vessel Water Level - Low, Level 2 (B21-LT-N024A-1,B-1 and B21-LT-N025A-1,B-1) (B21-LTM-N024A-1-1,B-1-1 and B21-LTM-N025A-1-1,B-1-1)	3	2	1, 2, 3	23
3. <u>REACTOR WATER CLEANUP SYSTEM ISOLATION</u>				
a. Δ Flow - High (G31-dFS-N603-1A,1B)	3	1	1, 2, 3	24
b. Area Temperature - High (G31-TS-N600A,B,C,D,E,F)	3	2	1, 2, 3	24
c. Area Ventilation Δ Temp. - High (G31-TS-N602A,B,C,D,E,F)	3	2	1, 2, 3	24
d. SLCS Initiation (C41A-S1)	3 (f)	NA	1, 2, 3	24
e. Reactor Vessel Water Level - Low, Level 2 (B21-LT-N024 A-1,B-1 and B21-LT-N025 A-1,B-1) (B21-LTM-N024A-1-1,B-1-1 and B21-LTM-N025A-1-1,B-1-1)	3	2	1, 2, 3	24

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Amendment No.

TABLE 3.3.2-2 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

<u>TRIP FUNCTION AND INSTRUMENT NUMBFR</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
<u>PRIMARY CONTAINMENT ISOLATION</u>		
1. <u>PRIMARY CONTAINMENT ISOLATION</u>		
a. Reactor Vessel Water Level -		
1. Low, Level 1 (B21-LTM-N017A-1,B-1,C-1,D-1)	$\geq + 162.5$ inches*	$\geq + 162.5$ inches*
2. Low, Level 2 (B21-LTM-N024A-1-1,B-1-1 and B21-LTM-N025A-1-1,B-1-1)	$\geq + 112$ inches*	$\geq + 112$ inches*
3. Low, Level 3 (B21-LTS-N024A-1-2,B-1-2; B21-LTS-N025A-1-2,B-1-2)	$\geq +2.5$ inches*	$\geq +2.5$ inches*
b. Drywell Pressure - High (C71-PTM-N002A-1,B-1,C-1,D-1)		
	≤ 2 psig	≤ 2 psig
c. Main Steam Line		
1. Radiation - High (D12-RM-K603A,B,C,D)	≤ 3 x full power background	≤ 3.5 x full power background
2. Pressure - Low (B21-PTM-N015A-1,B-1,C-1,D-1)	≥ 825 psig	≥ 825 psig
3. Flow - High (B21-PDTM-N006A-1,B-1,C-1,D-1; B21-PDTM-N007A-1,B-1,C-1,D-1; B21-PDTM-N008A-1,B-1,C-1,D-1; B21-PDTM-N009A-1,B-1,C-1,D-1)	$\leq 140\%$ of rated flow	$\leq 140\%$ of rated flow

TABLE 3.3.2-2 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
<u>PRIMARY CONTAINMENT ISOLATION (Continued)</u>		
d. Main Steam Line Tunnel Temperature - High (B21-TS-N010A, B, C, D; B21-TS-N011A, B, C, D; B21-TS N012A, B, C, D; B21-TS-N013A, B, C, D)	$\leq 200^{\circ}\text{F}$	$\leq 200^{\circ}\text{F}$
e. Condenser Vacuum - Low (B21-PTM-N056A-1, B-1, C-1, D-1)	≥ 7 inches Hg vacuum	≥ 7 inches Hg vacuum
f. Turbine Building Area Temp - High (B21-TS-3225A, B, C, D; B21-TS-3226A, B, C, D; B21-TS-3227A, B, C, D; B21-TS-3228A, B, C, D; B21-TS-3229A, B, C, D; B21-TS-3230A, B, C, D; B21-TS-3231A, B, C, D; B21-TS-3232A, B, C, D)	$\leq 200^{\circ}\text{F}$	$\leq 200^{\circ}\text{F}$
<u>2. SECONDARY CONTAINMENT ISOLATION</u>		
a. Reactor Building Exhaust Radiation - High (D12-RM-N010A, B)	≤ 11 mr/hr	≤ 11 mr/hr
b. Drywell Pressure - High (C71-PTM-N002A-1, B-1, C-1, D-1)	≤ 2 psig	≤ 2 psig
c. Reactor Vessel Water Level - Low, Level 2 (B21-LTM-N024A-1-1, B-1-1 and B21-LTM-N025A-1-1, B-1-1)	$\geq + 112$ inches*	$\geq + 112$ inches*

TABLE 3.3.2-2 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
<u>3. REACTOR WATER CLEANUP SYSTEM ISOLATION</u>		
a. Δ Flow - High (G31-dFS-N603-1A,1B)	\leq 53 gal/min.	\leq 53 gal/min
b. Area Temperature - High (G31-TS-N600A,B,C,D,E,F)	\leq 150°F	\leq 150°F
c. Area Ventilation Temperature Δ Temp - High (G31-TS-N602A,B,C,D,E,F)	\leq 50°F	\leq 50°F
d. SLCS Initiation (C41A-S1)	NA	NA
e. Reactor Vessel Water Level - Low, Level 2 (B21-LTM-N024A-1-1,B-1-1 and B21-LTM-N025A-1-1,B-1-1)	\geq + 112 inches*	\geq + 112 inches*
<u>4. CORE STANDBY COOLING SYSTEMS ISOLATION</u>		
a. High Pressure Coolant Injection System Isolation		
1. HPCI Steam Line Flow - High (E41-PDTS-N004-2; E41-PDTS-N005-2)	\leq 300% of rated flow	\leq 300% of rated flow
2. HPCI Steam Line High Flow Time Delay Relay (E41-TDR-K33; E41-TDR-K43)	$3 \leq t \leq 7$ seconds	$3 \leq t \leq 12$ seconds
3. HPCI Steam Supply Pressure - Low (E41-PSL-N001A,B,C,D)	\geq 100 psig	\geq 100 psig

TABLE 3.3.2-3

ISOLATION SYSTEM INSTRUMENTATION RESPONSE TIME

<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>RESPONSE TIME (Seconds)#</u>
1. PRIMARY CONTAINMENT ISOLATION	
a. Reactor Vessel Water Level -	
1. Low, Level 1	≤13
(S21-LT-NO17A-1,B-1,C-1,D-1)	
(B21-LTM-NO17A-1,B-1,C-1,D-1)	
2. Low, Level 2	≤1.0*
(B21-LT-NO24A-1,B-1 and	
B21-LT-NO25A-1,B-1)	
(B21-LTM-NO24A-1-1,B-1-1 and	
B21-LTM-NO25A-1-1,B-1-1)	
3. Low, Level 3	≤ 1.0*
(B21-LT-NO24A-1,B-1;	
B21-LT-NO25A-1,B-1)	
(B21-LTS-NO24A-1-2,B-1-2;	
B21-LTS-NO25A-1-2,B-1-2)	
h. Drywell Pressure - High	≤13
(C71-PT-NO02A,B,C,D)	
(C71-PTM-NO02A-1,B-1,C-1,D-1)	
c. Main Steam Line	≤1.0*
1. Radiation - High ^(b)	
(D12-RM-K603A,B,C,D)	
2. Pressure - Low	≤13
(B21-PT-NO15A,B,C,D)	
(B21-PTM-NO15A-1,B-1,C-1,D-1)	
3. Flow - High	≤0.5*
(B21-PDT-NO06A,B,C,D;	
B21-PDT-NO07A,B,C,D;	
B21-PDT-NO08A,B,C,D;	
B21-PDT-NO09A,B,C,D)	
(B21-PDTM-NO06A-1,B-1,C-1,D-1;	
B21-PDTM-NO07A-1,B-1,C-1,D-1;	
B21-PDTM-NO08A-1,B-1,C-1,D-1;	
B21-PDTM-NO09A-1,B-1,C-1,D-1)	
d. Main Steam Line Tunnel Temperature - High	≤13
(B21-TS-NO10A,B,C,D;	
B21-TS-NO11A,B,C,D;	
B21-TS-NO12A,B,C,D;	
B21-TS-NO13A,B,C,D)	
e. Condenser Vacuum - Low	≤13
(B21-PT-NO56A,B,C,D)	
(B21-PTM-NO56A-1,B-1,C-1,D-1)	

TABLE 3.3.2-3 (Continued)

ISOLATION SYSTEM INSTRUMENTATION RESPONSE TIME

<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>RESPONSE TIME (Seconds)#</u>
<u>PRIMARY CONTAINMENT ISOLATION (Continued)</u>	
f. Turbine Building Area Temperature - High (B21-TS-3225A,B,C,D; B21-TS-3226A,B,C,D; B21-TS-3227A,B,C,D; B21-TS-3228A,B,C,D; B21-TS-3229A,B,C,D; B21-TS-3230A,B,C,D; B21-TS-3231A,B,C,D; B21-TS-3232A,B,C,D)	NA
2. <u>SECONDARY CONTAINMENT ISOLATION</u>	
a. Reactor Building Exhaust Radiation - High ^(b) (D21-EM-N010A,B)	≤13
b. Drywell Pressure - High (C71-PT-N002A,B,C,D) (C71-PTM-N002A-1,B-1,C-1,D-1)	≤13
c. Reactor Vessel Water Level - Low, Level 2 (B21-LT-N024A-1,B-1 and B21-LT-N025A-1,B-1) (B21-LTM-N024A-1-1,B-1-1 and B21-LTM-N025A-1-1,B-1-1)	≤1.0*
3. <u>REACTOR WATER CLEANUP SYSTEM ISOLATION</u>	
a. Δ Flow - High (G31-dFS-N603-1A,1B)	≤13
b. Area Temperature - High (G31-TS-N600A,B,C,D,E,F)	≤13
c. Area Ventilation Temperature ΔT - High (G31-TS-N602A,B,C,D,E,F)	≤13
d. SLCS Initiation (C41A-S1)	NA
e. Reactor Vessel Water Level - Low, Level 2 (B21-LT-N024 A-1,B-1 and B21-LT-N025 A-1,B-1) (B21-LTM-N024A-1-1,B-1-1 and B21-LTM-N025A-1-1,B-1-1)	≤1.0*

TABLE 4.3.2-1

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS IN WHICH SURVEILLANCE REQUIRED</u>
1. <u>PRIMARY CONTAINMENT ISOLATION</u>				
a. Reactor Vessel Water Level -				
1. Low, Level 1 (B21-LT-NO17A-1,B-1,C-1,D-1)	NA ^(a)	NA	R ^(b)	1, 2, 3
(B21-LTM-NO17A-1,B-1,C-1,D-1)	D	M	M	1, 2, 3
2. Low, Level 2 (B21-LT-NO24A-1,B-1 and B21-LT-NO25A-1,B-1)	NA ^(a)	NA	R ^(b)	1, 2, 3
(B21-LTM-NO24A-1-1,B-1-1 and B21-LTM-NO25A-1-1,B-1-1)	D	M	M	1, 2, 3
3. Low, Level 3 (B21-LT-NO24A-1,B-1; B21-LT-NO25A-1,B-1)	NA ^(a)	NA	R ^(b)	1, 2, 3
(B21-LTS-NO24A-1-2,B-1-2; B21-LTS-NO25A-1-2,B-1-2)	D	M	M	1, 2, 3
b. Drywell Pressure - High (C71-PT-NO02A,B,C,D)	NA ^(a)	NA	R ^(b)	1, 2, 3
(C71-PTM-NO02A-1,B-1,C-1,D-1)	D	M	M	1, 2, 3
c. Main Steam Line				
1. Radiation - High (D12-RM-K603A,B,C,D)	D	W	R ^(d)	1, 2, 3
2. Pressure - Low (B21-PT-NO15A,B,C,D)	NA ^(a)	NA	R ^(b)	1
(B21-PTM-NO15A-1,B-1,C-1,D-1)	D	M	M	1

TABLE 4.3.2-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS IN WHICH SURVEILLANCE REQUIRED</u>
<u>PRIMARY CONTAINMENT ISOLATION (Continued)</u>				
3. Flow - High (B21-PDT-N006A,B,C,D; B21-PDT-N007A,B,C,D; B21-PDT-N008A,B,C,D; B21-PDT-N009A,B,C,D)	NA ^(a)	NA	R ^(b)	1
(B21-PDTM-N006A-1,B-1,C-1,D-1; B21-PDTM-N007A-1,B-1,C-1,D-1; B21-PDTM-N008A-1,B-1,C-1,D-1; B21-PDTM-N009A-1,B-1,C-1,D-1)	D	M	M	1
d. Main Steam Line Tunnel Temperature - High (B21-TS-N010A,B,C,D; B21-TS-N011A,B,C,D; B21-TS-N012A,B,C,D; B21-TS-N013A,B,C,D)	NA	M	R	1, 2, 3
e. Condenser Vacuum - Low (B21-PT-N056A,B,C,D) (B21-PTM-N056A-1,B-1,C-1,D-1)	NA ^(a)	NA	R ^(b)	1, 2#
f. Turbine Building Area Temp-High (B21-TS-3225A,B,C,D; B21-TS-3226A,B,C,D; B21-TS-3227A,B,C,D; B21-TS-3228A,B,C,D; B21-TS-3229A,B,C,D; B21-TS-3230A,B,C,D; B21-TS-3231A,B,C,D; B21-TS-3232A,B,C,D)	NA	M	R	1, 2, 3

TABLE 4.3.2-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS IN WHICH SURVEILLANCE REQUIRED</u>
<u>2. SECONDARY CONTAINMENT ISOLATION</u>				
a. Reactor Building Exhaust Radiation - High (D12-RM-N010A,B)	D	M	R	1,2,3,5, and *
b. Drywell Pressure - High (C71-PT-N002A,B,C,D)	NA ^(a)	NA	R ^(b)	1, 2, 3
(C71-PTM-N002A-1,B-1,C-1,D-1)	D	M	M	1, 2, 3
c. Reactor Vessel Water Level - Low, Level 2 (B21-LT-N024A-1,B-1 and B21-LT-N025A-1,B-1)	NA ^(a)	NA	R ^(b)	1, 2, 3
(B21-LTM-N024A-1-1,B-1-1 and B21-LTM-N025A-1-1,B-1-1)	D	M	M	1, 2, 3
<u>3. REACTOR WATER CLEANUP SYSTEM ISOLATION</u>				
a. Δ Flow - High (G31-dFS-N603-1A,1B)	D	M	R	1, 2, 3
b. Area Temperature - High (G31-TS-N600A,B,C,D,E,F)	NA	M	R	1, 2, 3
c. Area Ventilation Δ Temp - High (G31-TS-N602A,B,C,D,E,F)	NA	M	R	1, 2, 3
d. SLCS Initiation (C41A-S1)	NA	R	NA	1, 2, 3
e. Reactor Vessel Water Level - Low, Level 2 (B21-LT-N024A-1,B-1 and B21-LT-N025A-1,B-1)	NA ^(a)	NA	R ^(b)	1, 2, 3
(B21-LTM-N024A-1-1,B-1-1 and B21-LTM-N025A-1-1,B-1-1)	D	M	M	1, 2, 3

BRUNSWICK - UNIT 1

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Amendment No.