



Progress Energy

JAN 12 2004

SERIAL: BSEP 04-0008

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

SUBJECT: Brunswick Steam Electric Plant, Unit Nos. 1 and 2
Docket Nos. 50-325 and 50-324/License Nos. DPR-71 and DPR-62
Submittal of Technical Specification Bases Changes

Ladies and Gentlemen:

In accordance with Technical Specification (TS) 5.5.10 for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2, Progress Energy Carolinas, Inc. is submitting Revision 32 to the BSEP, Unit 1 TS Bases and Revision 31 to the BSEP, Unit 2 TS Bases.

Please refer any questions regarding this submittal to Mr. Leonard R. Beller, Supervisor - Licensing/Regulatory Programs, at (910) 457-2073.

Sincerely,

Edward T. O'Neil
Manager - Support Services
Brunswick Steam Electric Plant

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Enclosures:

1. Summary of Revisions to Technical Specification Bases
2. Page Replacement Instructions
3. Unit 1 Technical Specification Bases Replacement Pages
4. Unit 2 Technical Specification Bases Replacement Pages

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cc (with enclosures):

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Summary of Revisions to Technical Specification Bases			
Revision	Affected Unit	Date Implemented	Title/Description
32 31	1 2	December 17, 2003	Title: Correction to Rated Thermal Power (RTP) in Bases 3.3.6.1 Description: This change revises B 3.3.6.1, "Primary Containment Isolation Instrumentation," to update the quoted peak RTP value from < 25% to < 23% RTP. The new value was established with extended power uprate.

Page Replacement Instructions	
Remove	Insert
Unit 1 - Bases Book 1	
Cover Page, Revision 31	Cover Page, Revision 32
LOEP-1, Revision 31	LOEP-1, Revision 32
LOEP-3, Revision 31	LOEP-3, Revision 32
B 3.3.6.1-8, Revision 31	B 3.3.6.1-8, Revision 32
Unit 2 - Bases Book 1	
Cover Page, Revision 30	Cover Page, Revision 31
LOEP-1, Revision 30	LOEP-1, Revision 31
LOEP-3, Revision 30	LOEP-3, Revision 31
B 3.3.6.1-8, Revision 30	B 3.3.6.1-8, Revision 31

BSEP 04-0008
Enclosure 3

Unit 1 Technical Specification Bases Replacement Pages

BASES

TO

THE FACILITY OPERATING LICENSE DPR-71

TECHNICAL SPECIFICATIONS

FOR

BRUNSWICK STEAM ELECTRIC PLANT

UNIT 1

CAROLINA POWER & LIGHT COMPANY

REVISION 32

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B 3.3.5.1-6	31	B 3.3.6.1-4	31
B 3.3.5.1-7	31	B 3.3.6.1-5	31
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BASES

APPLICABLE
SAFETY ANALYSES
LCO, and
APPLICABILITY

1.b. Main Steam Line Pressure—Low (continued)

failure (Ref. 2). For this event, the closure of the MSIVs ensures that no significant thermal stresses are imposed on the RPV. In addition, this Function supports actions to ensure that Safety Limit 2.1.1.1 is not exceeded. (This Function closes the MSIVs prior to pressure decreasing below 785 psig, which results in a scram due to MSIV closure, thus reducing reactor power to < 23% RTP.)

The MSL low pressure signals are initiated from four transmitters that are connected to the MSL header. The transmitters are arranged such that each transmitter is able to detect low MSL pressure. Four channels of Main Steam Line Pressure—Low Function are available and are required to be OPERABLE to ensure that no single instrument failure can preclude the isolation function.

The Allowable Value was selected to be far enough below normal turbine inlet pressures to avoid spurious isolations, yet high enough to provide timely detection of a pressure regulator malfunction.

The Main Steam Line Pressure—Low Function is only required to be OPERABLE in MODE 1 since this is when the assumed transient can occur (Ref. 2).

This Function isolates the Group 1 valves except for sample line isolation valves B32-F019 and B32-F020.

1.c. Main Steam Line Flow—High

Main Steam Line Flow—High is provided to detect a break of the MSL and to initiate closure of the MSIVs. If the steam were allowed to continue flowing out of the break, the reactor would depressurize and the core could uncover. If the RPV water level decreases too far, fuel damage could occur. Therefore, the isolation is initiated on high flow to prevent or minimize core damage. The Main Steam Line Flow—High Function is directly assumed in the analysis of the main steam line break (MSLB) (Ref. 5). The isolation action, along with the scram function of the Reactor Protection System (RPS), ensures that the fuel peak cladding temperature remains below the limits of 10 CFR 50.46 and offsite doses do not exceed the 10 CFR 50.67 limits.

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BSEP 04-0008
Enclosure 4

**Unit 2 Technical Specification Bases
Replacement Pages**

BASES

TO

THE FACILITY OPERATING LICENSE DPR-62

TECHNICAL SPECIFICATIONS

FOR

BRUNSWICK STEAM ELECTRIC PLANT

UNIT 2

CAROLINA POWER & LIGHT COMPANY

REVISION 31

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B 3.0-1	30	B 3.1.4-3	30
B 3.0-2	30	B 3.1.4-4	30
B 3.0-3	30	B 3.1.4-5	30
B 3.0-4	30	B 3.1.4-6	30
B 3.0-5	30	B 3.1.4-7	30
B 3.0-6	30	B 3.1.5-1	30
B 3.0-7	30	B 3.1.5-2	30
B 3.0-8	30	B 3.1.5-3	30
B 3.0-9	30	B 3.1.5-4	30
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B 3.0-11	30	B 3.1.6-1	30
B 3.0-12	30	B 3.1.6-2	30
B 3.0-13	30	B 3.1.6-3	30
B 3.0-14	30	B 3.1.6-4	30
B 3.0-15	30	B 3.1.6-5	30
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B 3.1.1-2	30	B 3.1.7-3	30
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B 3.1.1-4	30	B 3.1.7-5	30
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B 3.1.1-6	30	B 3.1.8-1	30
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B 3.3.3.1-3	30	B 3.3.5.1-18	30
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B 3.3.3.1-6	30	B 3.3.5.1-21	30
B 3.3.3.1-7	30	B 3.3.5.1-22	30
B 3.3.3.1-8	30	B 3.3.5.1-23	30
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B 3.3.3.1-10	30	B 3.3.5.1-25	30
B 3.3.3.1-11	30	B 3.3.5.1-26	30
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B 3.3.3.2-2	30	B 3.3.5.1-29	30
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B 3.3.3.2-4	30	B 3.3.5.1-31	30
B 3.3.3.2-5	30	B 3.3.5.2-1	30
B 3.3.3.2-6	30	B 3.3.5.2-2	30
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B 3.3.4.1-8	30	B 3.3.5.2-10	30
B 3.3.4.1-9	30	B 3.3.5.2-11	30
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B 3.3.5.1-2	30	B 3.3.6.1-2	30
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B 3.3.5.1-8	30	B 3.3.6.1-8	31
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B 3.3.5.1-10	30	B 3.3.6.1-10	30
B 3.3.5.1-11	30	B 3.3.6.1-11	30

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BASES

APPLICABLE
SAFETY ANALYSES
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1.b. Main Steam Line Pressure—Low (continued)

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