Progress Energy

August 16, 2005

SERIAL: BSEP 05-0109

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 Revisions

Ladies and Gentlemen:

In accordance with Technical Specification (TS) 5.5.10 for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2, Carolina Power & Light Company, now doing business as Progress Energy Carolinas, Inc., is submitting Revisions 42 and 43 to the BSEP, Unit 1 TS Bases and Revisions 40 and 41 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,

Leonard R. Beller for

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

WRM/wrm

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

Progress Energy Carolinas, Inc.
Brunswick Nuclear Plant
P.O. Box 10429
Southport, NC 28461

A001

cc (with enclosures):

U. S. Nuclear Regulatory Commission, Region II
ATTN: Dr. William D. Travers, Regional Administrator
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, GA 30303-8931

U. S. Nuclear Regulatory Commission
ATTN: Mr. Eugene M. DiPaolo, NRC Senior Resident Inspector
8470 River Road
Southport, NC 28461-8869

U. S. Nuclear Regulatory Commission **(Electronic Copy Only)**
ATTN: Ms. Brenda L. Mozafari (Mail Stop OWFN 8G9)
11555 Rockville Pike
Rockville, MD 20852-2738

Ms. Jo A. Sanford
Chair - North Carolina Utilities Commission
P.O. Box 29510
Raleigh, NC 27626-0510

Ms. Beverly O. Hall, Section Chief
Radiation Protection Section, Division of Environmental Health
North Carolina Department of Environment and Natural Resources
3825 Barrett Drive
Raleigh, NC 27609-7221

Summary of Revisions to Technical Specification Bases			
Revision[1]	**Affected Unit**	**Date Implemented**	**Title/Description**
42 40	1 2	July 28, 2005	**Title:** Technical Specification Improvement to Revise Control Rod Scram Time Testing Frequency **Description:** Revision 42 for Unit 1 and 40 for Unit 2 incorporated changes to Section 3.1.4 of the TS Bases associated with License Amendments 236 for Unit 1 and Amendment 264 for Unit 2, issued on May 31, 2005. These amendments modified the Unit 1 and Unit 2 TS requirements to adopt the provisions of TSTF-460.
43 41	1 2	August 9, 2005	**Title:** Revised Actions for Reactor Coolant System Leakage Detection Instrumentation **Description:** Revision 43 for Unit 1 and 41 for Unit 2 incorporated changes to Section 3.4.5 of the TS Bases associated with Amendment 237 for Unit 1 and Amendment 265 for Unit 2, issued on June 28, 2005. These amendments replaced the requirement of TS 3.4.5, Required Action D.1, to enter Limiting Condition for Operation 3.0.3 if required leakage detection systems are inoperable with the requirement to be in Mode 3 within 12 hours and Mode 4 within 36 hours.

[1] Revision 42 for Unit 1 and Revision 40 for Unit 2 incorporated change package TSC-2003-04.
Revision 43 for Unit 1 and Revision 41 for Unit 2 incorporated change package TSC-2005-03.

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Unit 1 Technical Specification Bases Replacement Pages

Unit 1 - Bases Book 1
Replacement Pages

BASES

TO

THE FACILITY OPERATING LICENSE DPR-71

TECHNICAL SPECIFICATIONS

FOR

BRUNSWICK STEAM ELECTRIC PLANT

UNIT 1

CAROLINA POWER & LIGHT COMPANY

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BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.1.4.2

Additional testing of a sample of control rods is required to verify the continued performance of the scram function during the cycle. A representative sample contains at least 10% of the control rods. The sample remains representative if no more than 7.5% of the control rods in the sample tested are determined to be "slow." With more than 7.5% of the sample declared to be "slow" per the criteria in Table 3.1.4-1, additional control rods are tested until this 7.5% criterion (i.e., 7.5% of the entire sample size) is satisfied, or until the total number of "slow" control rods (throughout the core, from all surveillances) exceeds the LCO limit. For planned testing, the control rods selected for the sample should be different for each test. This test is performed for each control rod in the sample from its fully withdrawn position. Data from inadvertent scrams should be used whenever possible to avoid unnecessary testing at power, even if the control rods with data may have been previously tested in a sample. The 200 day Frequency is based on operating experience that has shown control rod scram times do not significantly change over an operating cycle. This Frequency is also reasonable based on the additional Surveillances done on the CRDs at more frequent intervals in accordance with LCO 3.1.3 and LCO 3.1.5, "Control Rod Scram Accumulators."

SR 3.1.4.3

When work that could affect the scram insertion time is performed on a control rod or the CRD System, testing must be done to demonstrate that each affected control rod retains adequate scram performance over the range of applicable reactor pressures from zero to the maximum permissible pressure. The scram testing must be performed once before declaring the control rod OPERABLE. The required scram time testing must demonstrate the affected control rod is still within acceptable limits. This test is performed for each affected control rod from its fully withdrawn position. In lieu of actually initiating a scram for each affected control rod, testing that adequately demonstrates the scram times are within acceptable limits is allowed to satisfy this SR. The test may include any series of sequential, overlapping, or total steps so the entire scram

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BASES (continued)

APPLICABILITY

In MODES 1, 2, and 3, leakage detection systems are required to be OPERABLE to support LCO 3.4.4. This Applicability is consistent with that for LCO 3.4.4.

ACTIONS

A.1

With the drywell floor drain sump flow monitoring system inoperable, no other required instrumentation can provide the equivalent information to quantify LEAKAGE. However, the primary containment atmosphere radioactivity monitor will provide indication of changes in LEAKAGE.

With the drywell floor drain sump flow monitoring system inoperable, but with RCS unidentified and total LEAKAGE being determined every 8 hours (SR 3.4.4.1), operation may continue for 30 days. The 30 day Completion Time of Required Action A.1 is acceptable, based on operating experience, considering the multiple forms of leakage detection that are still available.

B.1 and B.2

With both gaseous and particulate primary containment atmosphere radioactivity monitoring channels inoperable (i.e., the required primary containment atmosphere monitoring system), grab samples of the primary containment atmosphere must be taken and analyzed to provide periodic LEAKAGE information. Provided a sample is obtained and analyzed once every 12 hours, the plant may be operated for up to 30 days to allow restoration of at least one of the required monitors.

The 12 hour interval provides periodic information that is adequate to detect LEAKAGE. The 30 day Completion Time for restoration recognizes that at least one other form of leakage detection is available.

C.1 and C.2

If any Required Action and associated Completion Time of Condition A or B cannot be met, or with all required monitors inoperable, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to at least MODE 3 within 12 hours and MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to perform the actions in an orderly manner and without challenging plant systems.

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Unit 2 Technical Specification Bases Replacement Pages

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Replacement Pages

BASES

TO

THE FACILITY OPERATING LICENSE DPR-62

TECHNICAL SPECIFICATIONS

FOR

BRUNSWICK STEAM ELECTRIC PLANT

UNIT 2

CAROLINA POWER & LIGHT COMPANY

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B 3.1.8 Scram Discharge Volume (SDV) Vent and Drain Valves ..... B 3.1.8-1

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BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.1.4.2

Additional testing of a sample of control rods is required to verify the continued performance of the scram function during the cycle. A representative sample contains at least 10% of the control rods. The sample remains representative if no more than 7.5% of the control rods in the sample tested are determined to be "slow." With more than 7.5% of the sample declared to be "slow" per the criteria in Table 3.1.4-1, additional control rods are tested until this 7.5% criterion (i.e., 7.5% of the entire sample size) is satisfied, or until the total number of "slow" control rods (throughout the core, from all surveillances) exceeds the LCO limit. For planned testing, the control rods selected for the sample should be different for each test. This test is performed for each control rod in the sample from its fully withdrawn position. Data from inadvertent scrams should be used whenever possible to avoid unnecessary testing at power, even if the control rods with data may have been previously tested in a sample. The 200 day Frequency is based on operating experience that has shown control rod scram times do not significantly change over an operating cycle. This Frequency is also reasonable based on the additional Surveillances done on the CRDs at more frequent intervals in accordance with LCO 3.1.3 and LCO 3.1.5, "Control Rod Scram Accumulators."

SR 3.1.4.3

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B 3.4.10-1	30
B 3.4.10-2	30
B 3.5.1-1	30
B 3.5.1-2	30
B 3.5.1-3	30
B 3.5.1-4	33
B 3.5.1-5	33
B 3.5.1-6	39
B 3.5.1-7	30
B 3.5.1-8	30
B 3.5.1-9	30
B 3.5.1-10	30
B 3.5.1-11	30
B 3.5.1-12	30
B 3.5.1-13	30
B 3.5.1-14	30
B 3.5.1-15	30
B 3.5.1-16	30
B 3.5.1-17	30
B 3.5.2-1	30
B 3.5.2-2	30
B 3.5.2-3	30
B 3.5.2-4	30
B 3.5.2-5	30
B 3.5.2-6	30
B 3.5.3-1	30
B 3.5.3-2	39

(continued)

BASES (continued)

APPLICABILITY

In MODES 1, 2, and 3, leakage detection systems are required to be OPERABLE to support LCO 3.4.4. This Applicability is consistent with that for LCO 3.4.4.

ACTIONS

A.1

With the drywell floor drain sump flow monitoring system inoperable, no other required instrumentation can provide the equivalent information to quantify LEAKAGE. However, the primary containment atmosphere radioactivity monitor will provide indication of changes in LEAKAGE.

With the drywell floor drain sump flow monitoring system inoperable, but with RCS unidentified and total LEAKAGE being determined every 8 hours (SR 3.4.4.1), operation may continue for 30 days. The 30 day Completion Time of Required Action A.1 is acceptable, based on operating experience, considering the multiple forms of leakage detection that are still available.

B.1 and B.2

With both gaseous and particulate primary containment atmosphere radioactivity monitoring channels inoperable (i.e., the required primary containment atmosphere monitoring system), grab samples of the primary containment atmosphere must be taken and analyzed to provide periodic LEAKAGE information. Provided a sample is obtained and analyzed once every 12 hours, the plant may be operated for up to 30 days to allow restoration of at least one of the required monitors.

The 12 hour interval provides periodic information that is adequate to detect LEAKAGE. The 30 day Completion Time for restoration recognizes that at least one other form of leakage detection is available.

C.1 and C.2

If any Required Action and associated Completion Time of Condition A or B cannot be met, or with all required monitors inoperable, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to at least MODE 3 within 12 hours and MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to perform the actions in an orderly manner and without challenging plant systems.

(continued)