



July 9, 2008

SERIAL: BSEP 08-0090
TSC-2007-03

10 CFR 50.90

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
Submission of Updated Technical Specifications Pages Regarding Control Room
Envelope Habitability in Accordance with TSTF-448, Revision 3, Using the
Consolidated Line Item Improvement Process

References: Letter from James Scarola to the U. S. Nuclear Regulatory Commission (Serial:
BSEP 07-0058), "Application to Revise Technical Specifications Regarding
Control Room Envelope Habitability In Accordance with TSTF-448; Revision 3;
Using the Consolidated Line Item Improvement Process," dated July 17, 2007
(ML072050385)

Letter from Benjamin C. Waldrep to the U. S. Nuclear Regulatory Commission
(Serial: BSEP 07-0139), "Response to Request for Additional Information
Regarding Application to Revise Technical Specifications Regarding Control
Room Envelope Habitability in Accordance with TSTF-448, Revision 3," dated
February 27, 2008 (ML080660137)

Ladies and Gentlemen:

On July 17, 2007, Carolina Power & Light Company (CP&L), now doing business as Progress Energy Carolinas, Inc., submitted a license amendment request for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2. The amendment request revised BSEP Unit Nos. 1 and 2 Technical Specifications (TS) regarding control room envelope habitability in accordance with Technical Specification Task Force (TSTF), Standard Technical Specifications (STS) change TSTF-448, Revision 3, using the consolidated line item improvement process. Revised pages were submitted on February 27, 2008, as part of a response to a request for additional information.

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

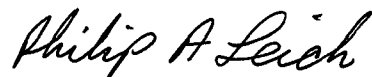
A102
NER

The purpose of this submittal is to provide updated TS pages in support of issuance of the proposed amendment. The NRC issued amendments 245 and 273 for Units 1 and 2, respectively, on February 8, 2008, and amendments 246 and 274 for Units 1 and 2, respectively, on March 27, 2008. These amendments impacted the typed TS pages originally supplied with the July 17, 2007, amendment request. To accommodate implementation of Amendment 274 for Unit 2 prior to startup from the 2009 refueling outage, the Section 5.0 pages, subsequent to those directly affected by this amendment request, are not being re-numbered. As such, they are not included in this submittal.

Enclosures 1 and 2 provide typed versions of the Unit 1 and Unit 2 revised TS pages, respectively. These typed TS pages replace the previously submitted TS 5.0, "Administrative Controls" pages and are to be used for issuance of the proposed amendments.

No regulatory commitments are contained in this submittal. Please refer any questions regarding this submittal to Mr. Gene Atkinson, Supervisor – Licensing/Regulatory Programs, at (910) 457-2056.

Sincerely,



Philip A. Leich
Manager – Support Services
Brunswick Steam Electric Plant

LJG/ljg

Enclosures:

1. Typed Technical Specification Pages - Unit 1
2. Typed Technical Specification Pages - Unit 2

cc (with enclosures):

U. S. Nuclear Regulatory Commission, Region II
ATTN: Mr. Luis A. Reyes, Regional Administrator
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, GA 30303-8931

U. S. Nuclear Regulatory Commission
ATTN: Mr. Joseph D. Austin, NRC Senior Resident Inspector
8470 River Road
Southport, NC 28461-8869

U. S. Nuclear Regulatory Commission (**Electronic Copy Only**)
ATTN: Mrs. Farideh E. Saba (Mail Stop OWFN 8G9A)
11555 Rockville Pike
Rockville, MD 20852-2738

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

Brunswick Steam Electric Plant
Unit Nos. 1 and 2

Typed Technical Specification Pages - Unit 1

5.5 Programs and Manuals

5.5.12 Primary Containment Leakage Rate Testing Program (continued)

b. Air lock testing acceptance criteria are:

- 1) Overall air lock leakage rate is $\leq 0.05 L_a$ when tested at $\geq P_a$.
- 2) For each air lock door, leakage rate is ≤ 5 scfh when the gap between the door seals is pressurized to ≥ 10 psig.

The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program frequencies.

5.5.13 Control Room Envelope Habitability Program

A Control Room Envelope (CRE) Habitability Program shall be established and implemented to ensure that CRE habitability is maintained such that, with an OPERABLE Control Room Emergency Ventilation (CREV) System, CRE occupants can control the reactor safely under normal conditions and maintain it in a safe condition following a radiological event, hazardous chemical release, or a smoke challenge. The program shall ensure that adequate radiation protection is provided to permit occupancy of the CRE under design basis accident (DBA) conditions without personnel receiving radiation exposures in excess of 5 rem TEDE for the duration of the accident. The program shall include the following elements:

- a. The definition of the CRE and the CRE boundary.
- b. Requirements for maintaining the CRE boundary in its design condition including configuration control and preventive maintenance.
- c. Requirements for (i) determining the unfiltered air inleakage past the CRE boundary into the CRE in accordance with the testing methods and at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, "Demonstrating Control Room Envelope Integrity at Nuclear Power Reactors," Revision 0, May 2003, and (ii) assessing CRE habitability at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, Revision 0.
- d. Measurement, at designated locations, of the CRE pressure relative to external areas adjacent to the CRE boundary during the pressurization mode of operation by one subsystem of the CREV System, operating at the flow rate required by the VFTP, at a Frequency of 18 months on a STAGGERED TEST BASIS. The results shall be trended and used as part of the assessment of the CRE boundary.

(continued)

5.5 Programs and Manuals

Control Room Envelope Habitability Program (continued)

- e. The quantitative limits on unfiltered air leakage into the CRE. These limits shall be stated in a manner to allow direct comparison to the unfiltered air leakage measured by the testing described in paragraph c. The unfiltered air leakage limit for radiological challenges is the leakage flow rate assumed in the licensing basis analyses of DBA consequences. Unfiltered air leakage limits for hazardous chemicals must ensure that exposure of CRE occupants to these hazards will be within the assumptions in the licensing basis.

 - f. The provisions of SR 3.0.2 are applicable to the Frequencies for assessing CRE habitability, determining CRE unfiltered leakage, and measuring CRE pressure and assessing the CRE boundary as required by paragraphs c and d, respectively.
-

BSEP 08-0090
Enclosure 2

Brunswick Steam Electric Plant
Unit Nos. 1 and 2

Typed Technical Specification Pages - Unit 2

5.5 Programs and Manuals

5.5.12 Primary Containment Leakage Rate Testing Program (continued)

- b. Air lock testing acceptance criteria are:
- 1) Overall air lock leakage rate is $\leq 0.05 L_a$ when tested at $\geq P_a$.
 - 2) For each air lock door, leakage rate is ≤ 5 scfh when the gap between the door seals is pressurized to ≥ 10 psig.

The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program frequencies.

5.5.13 Control Room Envelope Habitability Program

A Control Room Envelope (CRE) Habitability Program shall be established and implemented to ensure that CRE habitability is maintained such that, with an OPERABLE Control Room Emergency Ventilation (CREV) System, CRE occupants can control the reactor safely under normal conditions and maintain it in a safe condition following a radiological event, hazardous chemical release, or a smoke challenge. The program shall ensure that adequate radiation protection is provided to permit occupancy of the CRE under design basis accident (DBA) conditions without personnel receiving radiation exposures in excess of 5 rem TEDE for the duration of the accident. The program shall include the following elements:

- a. The definition of the CRE and the CRE boundary.
- b. Requirements for maintaining the CRE boundary in its design condition including configuration control and preventive maintenance.
- c. Requirements for (i) determining the unfiltered air inleakage past the CRE boundary into the CRE in accordance with the testing methods and at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, "Demonstrating Control Room Envelope Integrity at Nuclear Power Reactors," Revision 0, May 2003, and (ii) assessing CRE habitability at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, Revision 0.
- d. Measurement, at designated locations, of the CRE pressure relative to external areas adjacent to the CRE boundary during the pressurization mode of operation by one subsystem of the CREV System, operating at the flow rate required by the VFTP, at a Frequency of 18 months on a STAGGERED TEST BASIS. The results shall be trended and used as part of the assessment of the CRE boundary.

(continued)

Control Room Envelope Habitability Program (continued)

- e. The quantitative limits on unfiltered air leakage into the CRE. These limits shall be stated in a manner to allow direct comparison to the unfiltered air leakage measured by the testing described in paragraph c. The unfiltered air leakage limit for radiological challenges is the leakage flow rate assumed in the licensing basis analyses of DBA consequences. Unfiltered air leakage limits for hazardous chemicals must ensure that exposure of CRE occupants to these hazards will be within the assumptions in the licensing basis.

 - f. The provisions of SR 3.0.2 are applicable to the Frequencies for assessing CRE habitability, determining CRE unfiltered leakage, and measuring CRE pressure and assessing the CRE boundary as required by paragraphs c and d, respectively.
-