

July 23, 2008

Mr. Thomas D. Walt, Vice President  
H. B. Robinson Steam Electric Plant,  
Unit No. 2  
Carolina Power & Light Company  
3581 West Entrance Road  
Hartsville, South Carolina 29550-0790

SUBJECT: H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 — ISSUANCE OF AMENDMENT REGARDING THE INCORPORATION OF TECHNICAL SPECIFICATION TASK FORCE STANDARD TECHNICAL SPECIFICATION CHANGE TRAVELER, TSTF-448, REVISION 3, "CONTROL ROOM HABITABILITY" (TAC NO. MD6117)

Dear Mr. Walt:

The Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 219 to Renewed Facility Operating License No. DPR-23 for the H.B. Robinson Steam Electric Plant, Unit No. 2, in response to your application dated July 17, 2007 (Agencywide Documents Access Management System (ADAMS) Accession No. ML071990437), as supplemented by letters dated November 9, 2007 (ADAMS Accession No. ML073200304), and April 1, 2008 (ADAMS Accession No. ML081010206), for implementation of the Technical Specification Task Force (TSTF) Standard TS Change Traveler, TSTF-448, Revision 3, "Control Room Habitability."

The amendment establishes more effective and appropriate action, surveillance, and administrative requirements related to ensuring the habitability of the control room envelope in accordance with the NRC-approved TSTF-448, Revision 3. This TS improvement was made available in the *Federal Register* (FR) by the NRC on January 17, 2007 (72 FR 2022).

A copy of the related safety evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly FR notice.

Sincerely,

**/RA/**

Marlayna Vaaler, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-261

Enclosures: 1. Amendment No. 219 to DPR-23  
2. Safety Evaluation

cc w/encls: See next page

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Unit No. 2**

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CAROLINA POWER & LIGHT COMPANY

DOCKET NO. 50-261

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 219  
Renewed License No. DPR-23

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Carolina Power & Light Company (the licensee), dated July 17, 2007, as supplemented by letters dated November 9, 2007, and April 1, 2008, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications, as indicated in the attachment to this license amendment; and paragraph 3.B. of Renewed Facility Operating License No. DPR-23 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 219 are hereby incorporated in the license.

The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 180 days.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA BMozafari for/*

Thomas H. Boyce, Chief  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment: Changes to Renewed Facility  
Operating License No. DPR-23  
and the Technical Specifications

Date of Issuance: July 23, 2008

ATTACHMENT TO LICENSE AMENDMENT NO. 219  
RENEWED FACILITY OPERATING LICENSE NO. DPR-23  
DOCKET NO. 50-261

Replace page 3 of Renewed Operating License No. DPR-23 with the attached page 3.

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

<u>Remove Page</u>	<u>Insert Page</u>
3.7-22	3.7-22
3.7-23	3.7-23
3.7-24	3.7-24
5.0-22	5.0-22
	5.0-22a

Replace the following pages of the Appendix B Additional Conditions with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

<u>Remove Page</u>	<u>Insert Page</u>
1	1
	2

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 219 TO  
RENEWED FACILITY OPERATING LICENSE NO. DPR-23  
CAROLINA POWER & LIGHT COMPANY  
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2  
DOCKET NO. 50-261

1.0 INTRODUCTION

By application dated July 17, 2007 (Agencywide Documents Access Management System (ADAMS) Accession No. ML071990437), as supplemented by letters dated November 9, 2007 (ADAMS Accession No. ML073200304), and April 1, 2008 (ADAMS Accession No. ML081010206), Carolina Power and Light Company, now doing business as Progress Energy Carolinas, Inc. (the licensee), requested changes to the Technical Specifications (TSs) for the H. B. Robinson Steam Electric Plant (HBRSEP). The supplemental letters provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the Nuclear Regulatory Commission (NRC) staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on August 28, 2007 (72 FR 49570).

On August 8, 2006, the commercial nuclear electrical power generation industry owners group Technical Specification Task Force (TSTF) submitted a proposed change, TSTF-448, Revision 3, "Control Room Habitability," to the improved standard technical specifications (STs) (NUREGs 1430-1434) on behalf of the industry (TSTF-448, Revisions 0, 1, and 2 were prior draft iterations). TSTF-448, Revision 3, is a proposal to establish more effective and appropriate action, surveillance, and administrative STS requirements related to ensuring the habitability of the control room envelope (CRE).

In NRC Generic Letter 2003-01, "Control Room Habitability" (ADAMS Accession No. ML031620248), dated June 12, 2003, licensees were alerted to findings at various nuclear facilities that existing TS surveillance requirements (SRs) for the Control Room Emergency Filtration System (CREFS) (HBRSEP site-specific system name) may not be adequate.

Specifically, the results of the American Society for Testing and Materials (ASTM) E741-00, "Standard Test Method for Determining Air Change in a Single Zone by Means of a Tracer Gas Dilution," tracer gas tests to measure CRE unfiltered inleakage indicated that the differential pressure surveillance is not a reliable method for demonstrating CRE boundary operability. Licensees were requested to address existing TS as follows:

- Provide confirmation that your TSs verify the operability of the CRE boundary, and the assumed unfiltered inleakage rates of potentially contaminated air.
- If you currently have a differential pressure SR to demonstrate CRE boundary integrity, provide the basis for your conclusion that it remains adequate to demonstrate CRE integrity in light of the ASTM E741 testing results.
- If you conclude that your differential pressure SR is no longer adequate, provide a schedule for:
  - (1) Revising the SR in your TSs to reference an acceptable surveillance methodology (e.g., ASTM E741); and
  - (2) Making any necessary modifications to your CRE boundary so that compliance with your new SR can be demonstrated.
- If your facility does not currently have a TS SR for your CRE integrity, explain how and at what frequency you confirm your CRE integrity and why this is adequate to demonstrate CRE integrity.

To promote standardization and to minimize the resources that would be needed to create and process plant specific amendment applications in response to the concerns described in the generic letter, the industry and the NRC proposed revisions to CRE habitability system requirements contained in the STSs, using the STS change traveler process. This effort culminated in Revision 3 to TSTF-448, which the NRC staff approved on January 17, 2007.

Consistent with the traveler as incorporated into NUREG-1431, "Standard Technical Specifications, Westinghouse Plants," the licensee proposed revising action and SRs in TS 3.7.9, "Control Room Emergency Filtration System (CREFS)," and adding a new administrative controls program, TS 5.5.17, "Control Room Envelope Habitability Program," for HBRSEP. The purpose of the change is to ensure that CRE boundary operability is maintained and verified through effective surveillance and programmatic requirements, and that appropriate remedial actions are taken in the event of an inoperable CRE boundary.

Some editorial and plant specific changes were incorporated into this safety evaluation resulting in minor deviations from the model safety evaluation text in TSTF-448, Revision 3. These deviations are considered administrative in nature, in that they have no material impact on TSTF-448.

## 2.0 REGULATORY EVALUATION

### 2.1 Control Room and Control Room Envelope

NRC Regulatory Guide (RG) 1.196, "Control Room Habitability at Light-water Nuclear Power Reactors," Revision 0, May 2003 (ADAMS Accession No. ML031490611), uses the term "control room envelope" in addition to the term "control room" and defines each term as follows:

Control Room: The plant area, defined in the facility licensing basis, in which actions can be taken to operate the plant safely under normal conditions and to maintain the

reactor in a safe condition during accident situations. It encompasses the instrumentation and controls necessary for a safe shutdown of the plant and typically includes the critical document reference file, computer room (if used as an integral part of the emergency response plan), shift supervisor's office, operator wash room and kitchen, and other critical areas to which frequent personnel access or continuous occupancy may be necessary in the event of an accident.

Control Room Envelope: The plant area, defined in the facility licensing basis that, in the event of an emergency, can be isolated from the plant areas and the environment external to the CRE. This area is served by an emergency ventilation system, with the intent of maintaining the habitability of the control room. This area encompasses the control room, and may encompass other non-critical areas to which frequent personnel access or continuous occupancy is not necessary in the event of an accident.

NRC RG 1.197, "Demonstrating Control Room Envelope Integrity at Nuclear Power Reactors," Revision 0, May 2003 (ADAMS Accession No. ML031490664), also contains these definitions, but uses the term CRE to mean both. This is because the protected environment provided for operators varies with the nuclear power facility. At some facilities this environment is limited to the control room; at others, it is the CRE. In this safety evaluation, consistent with the proposed changes to the STSs, the CRE will be used to designate both.

## 2.2 Control Room Emergency Filtration System (CREFS)

The CREFS (HBRSEP terminology) provides a protected environment from which operators can control the unit during airborne challenges from radioactivity, hazardous chemicals, and fire byproducts, such as fire suppression agents and smoke, during both normal and accident conditions. The CREFS is designed to maintain a habitable environment in the control room envelope for 30 days of continuous occupancy after a Design Basis Accident (DBA) without exceeding a 5 roentgen equivalent man (rem) total effective dose equivalent (TEDE).

The CREFS consists of two redundant trains, each capable of maintaining the habitability of the CRE. The CREFS is considered operable when the individual components necessary to limit operator exposure are operable in both trains. A CREFS train is considered operable when the associated:

- Air Cleaning Unit Fan and Air Recirculation Fan are operable;
- High efficiency particulate air filters and charcoal adsorbers are not excessively restricting flow, and are capable of performing their filtration functions;
- Ductwork, and dampers are operable and air circulation can be maintained; and
- CRE boundary is operable (the single boundary supports both trains).

The CRE boundary is considered operable when the measured unfiltered air leakage is less than or equal to the leakage value assumed by the licensing basis analyses of design basis accident consequences to CRE occupants.

### 2.3 Regulations Applicable to Control Room Habitability

In Appendix A, “General Design Criteria for Nuclear Power Plants,” to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, “Domestic Licensing of Production and Utilization Facilities,” General Design Criteria (GDC) 1, 2, 3, 4, 5, and 19 apply to CRE habitability.

The GDC in existence at the time HBRSEP was licensed for operation in July 1970 were contained in Proposed Appendix A to 10 CFR Part 50, “General Design Criteria for Nuclear Power Plants,” published in the *Federal Register* on July 11, 1967. (Appendix A to 10 CFR Part 50, which became effective in 1971 and as subsequently amended, is somewhat different from the proposed 1967 criteria.) The applicable GDC are summarized below:

- GDC 1, “Quality Standards and Records,” states that structures, systems, and components (SSCs) important to safety shall be designed, fabricated, erected, and tested to quality standards commensurate with the importance of the safety functions performed.
- GDC 2, “Design Basis for Protection Against Natural Phenomena,” states that SSCs important to safety shall be designed to withstand the effects of earthquakes and other natural hazards.
- GDC 3, “Fire Protection,” states that SSCs important to safety shall be designed and located to minimize the effects of fires and explosions.
- GDC 4, “Environmental and Dynamic Effects Design Bases,” states that SSCs important to safety shall be designed to accommodate the effects of, and to be compatible with the environmental conditions associated with normal operation, maintenance, testing, and postulated accidents, including loss-of-coolant accidents (LOCAs).
- GDC 5, “Sharing of Structures, Systems, and Components,” states that SSCs important to safety shall not be shared among nuclear power units unless it can be shown that such sharing will not significantly impair their ability to perform their safety functions, including, in the event of an accident in one unit, the orderly shutdown and cooldown of the remaining units.
- GDC 19, “Control Room,” states that a control room shall be provided from which actions can be taken to operate the nuclear reactor safely under normal conditions and to maintain the reactor in a safe condition under accident conditions, including a LOCA. Adequate radiation protection shall be provided to permit access and occupancy of the control room under accident conditions without personnel receiving radiation exposures in excess of specified values.

Because the design of the plant is not being changed by the proposed amendment, the plant continues to meet the intent of GDC 1, 2, 3, 4, 5, and 19. This safety evaluation was prepared based on the model safety evaluation published in the *Federal Register* on January 17, 2007 (72 FR 2022). Changes were made to accommodate plant specific design variations from that assumed in the model, but are consistent with the intent of the model and are acceptable.

## 2.4 Adoption of TSTF-448, Revision 3, by HBRSEP

Adoption of TSTF-448, Revision 3, will assure that the facility's TS Limiting Condition for Operation (LCO) for the CREFS is met by demonstrating operability of the CRE boundary. In support of this, TSTF-448, Revision 3, also adds TS administrative controls to assure the habitability of the CRE.

The changes made by TSTF-448, Revision 3, to the STS requirements for the CREFS and the CRE boundary conform to 10 CFR 50.36(d)(2) and 10 CFR 50.36(d)(3). Their adoption will better assure that HBRSEP's CRE will remain habitable during normal operation and DBA conditions. These changes, as applied to HBRSEP, are therefore acceptable from a regulatory standpoint.

## 3.0 TECHNICAL EVALUATION

The NRC staff reviewed the proposed changes against the corresponding changes made to the STSs by TSTF-448, Revision 3, which the NRC staff has found to satisfy applicable regulatory requirements, as described above in Section 2.0. The emergency operational mode of the CREFS at HBRSEP pressurizes the CRE to minimize unfiltered air inleakage. The proposed changes are consistent with this design.

### 3.1 Proposed Changes

The proposed amendment would strengthen CRE habitability TS requirements by changing TS 3.7.9, "CREFS" and adding a new TS administrative controls program on CRE habitability. Accompanying the proposed TS changes are appropriate conforming technical changes to the TS Bases, as well as the addition of a condition to HBRSEP TS Appendix B, "Additional Conditions." The changes to the TS Bases and were not reviewed by the NRC staff and their issuance should not be construed to imply approval of the TS Bases. Except for plant specific differences, all of these changes are consistent with STSs as revised by TSTF-448, Revision 3.

The NRC staff compared the proposed TS changes to the STSs and the STS markups and evaluations in TSTF-448, Revision 3. The staff verified that differences from the STSs were adequately justified on the basis of plant-specific design or retention of current licensing basis. HBRSEP TS 5.5.14, "TS Bases Control Program," is the appropriate control mechanism for updating and maintaining the adequacy of the TS Bases.

### 3.2 Editorial Changes

The licensee proposed editorial changes to TS 3.7.9, "CREFS" to establish standard terminology, such as "control room envelope (CRE)" in place of "control room," except for the plant specific name for the CREFS, and "verify mitigating actions ensure CRE occupancy for design basis conditions" in place of various phrases to describe the hazards that CRE occupants are protected from by the CREFS. These changes improve the usability and quality of the presentation of the TSs, have no impact on safety, and meet 10 CFR 50.36. Therefore, the NRC staff concludes that these changes are acceptable.

### 3.3 TS 3.7.9, CREFS

The licensee proposed to establish new action requirements in TS 3.7.9, "CREFS" for an inoperable CRE boundary. Currently, if one CREFS train is determined to be inoperable due to an inoperable CRE boundary, existing Action A would apply and require restoring the train (and the CRE boundary) to operable status in 7 days. If two trains are determined to be inoperable due to an inoperable CRE boundary, existing Condition E specifies 48 hours to restore at least one of the trains (and the CRE boundary) to operable status. If Condition E cannot be met within the designated completion time, Action F requires the plant be in Mode 3 in 6 hours and be in Mode 5 in 36 hours.

These existing Actions are more restrictive than would be appropriate in situations for which CRE occupant implementation of compensatory measures or mitigating actions would temporarily afford adequate CRE occupant protection from postulated airborne hazards. To account for such situations, the licensee proposed to revise the action requirements to add a new Condition G, "One or more CREFS trains inoperable due to inoperable CRE boundary in MODE 1, 2, 3, or 4." This new action would allow 90 days to restore the CRE boundary (and consequently, the affected CREFS trains) to operable status, provided that mitigating actions are immediately implemented and within 24 hours are verified to ensure, that in the event of a DBA, CRE occupant radiological exposures will not exceed the calculated dose of the licensing basis analyses of DBA consequences, and that CRE occupants are protected from hazardous chemicals and smoke.

The 24-hour completion time of new Required Action G.2 is reasonable based on the low probability of a DBA occurring during this time period, and the use of mitigating actions. The 90 day completion time of new Required Action G.3 is reasonable based on the determination that the mitigating actions will ensure protection of CRE occupants within analyzed limits while limiting the probability that CRE occupants will have to implement protective measures that may adversely affect their ability to control the reactor and maintain it in a safe shutdown condition in the event of a DBA. The 90 day completion time is a reasonable time to diagnose, plan and possibly repair, and test most anticipated problems with the CRE boundary. Therefore, proposed Actions G.1, G.2, and G.3 are acceptable.

To distinguish new Condition G from the existing condition for one CREFS train inoperable, Condition A is revised to state, "One CREFS train inoperable for reasons other than Condition G." To distinguish new Condition G from the existing condition for two CREFS trains inoperable, Condition E is revised to state, "Two CREFS trains inoperable for reasons other than Condition G in MODE 1, 2, 3, or 4." The changes to existing Conditions A and E are less restrictive because these Conditions will no longer apply in the event one or two CREFS trains are inoperable due to an inoperable CRE boundary during power operations. This is acceptable because the new Action G establishes adequate remedial measures in this condition.

The licensee proposed to modify the CREFS LCO by adding a Note allowing the CRE boundary to be opened intermittently under administrative controls. As stated in the LCO Bases, this Note "only applies to openings in the CRE boundary that can be rapidly restored to the design condition, such as doors, hatches, floor plugs, and access panels. For entry and exit through doors, the administrative control of the opening is performed by the person(s) entering or exiting the area. For other openings, these controls should be proceduralized and consist of stationing a dedicated individual at the opening who is in continuous communication with operators in the CRE. This individual will have a method to rapidly close the opening and to restore the CRE

boundary to a condition equivalent to the design condition when a need for CRE isolation is indicated.” The allowance of this Note is acceptable because the administrative controls will ensure that the opening will be quickly sealed in the event CRE isolation is needed to maintain the validity of the licensing basis analyses of DBA consequences.

The licensee proposed to add a new Condition H to TS 3.7.9 that states, “Required Action and associated Completion Time of Condition G not met in MODE 1, 2, 3, or 4.” If Condition H cannot be met within the designated completion time, the associated Actions require the plant be in Mode 3 in 6 hours and be in Mode 5 in 36 hours. This change will ensure that if Condition G cannot be met, actions will be taken to protect the CRE occupants. Therefore, this change is acceptable.

In the emergency pressurization mode of operation, the CREFS air recirculation fans move recirculation air through the air cleaning unit filter train while the control room exhaust to the outdoors is isolated, thereby pressurizing the CRE to minimize unfiltered air inleakage past the CRE boundary. The licensee proposed to delete the CRE pressurization SR. This SR requires verifying that one CREFS train can maintain a pressure of 0.125-inches water gauge, relative to outside air, during the pressurization mode of operation at a makeup flow rate of less than or equal to 400 cubic feet per minute.

The deletion of this SR is proposed because measurements of unfiltered air leakage into the CRE at numerous reactor facilities demonstrated that a basic assumption of this SR, an essentially leak tight CRE boundary, was incorrect for most facilities. Hence, meeting this SR by achieving the required CRE pressure is not necessarily a conclusive indication of CRE boundary leak tightness (i.e., CRE boundary operability).

In its response to Generic Letter 2003-01, dated December 8, 2003 (ADAMS Accession No. ML033421035), the licensee reported that it had determined that the HBRSEP CRE pressurization surveillance, SR 3.7.9.4, was inadequate to demonstrate the operability of the CRE boundary, and proposed to replace it with an inleakage measurement SR and a CRE Habitability Program in TS Section 5.5, in accordance with the approved version of TSTF-448. Based on the subsequent adoption of TSTF-448, Revision 3, the licensee's proposal to replace SR 3.7.9.4 is acceptable.

The proposed CRE inleakage measurement SR states “Perform required CRE maintenance and testing in accordance with the CRE Habitability Program.” The proposed CRE Habitability Program TS 5.5.17, requires that the program include, “requirements for 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, Revision 0, ‘Demonstrating Control Room Envelope Integrity at Nuclear Power Reactors.’” This guidance references ASTM E741 as an acceptable method for ascertaining the unfiltered leakage into the CRE. The licensee has proposed to follow this method; therefore, the proposed CRE inleakage measurement SR 3.7.9.4 is acceptable.

### 3.4 TS 5.5.17, CRE Habitability Program

The proposed administrative controls program TS is consistent with the model program TS in TSTF-448, Revision 3. In combination with SR 3.7.9.4, this program is intended to ensure the operability of the CRE boundary, which as part of an operable CREFS, will ensure that CRE habitability is maintained such that 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 access and occupancy of the CRE under DBA conditions without personnel receiving radiation exposures in excess of 5 rem TEDE for the duration of the accident.

A CRE Habitability Program TS acceptable to the NRC staff requires the program to contain the following elements:

- Definitions of CRE and CRE boundary. This element is intended to ensure that these definitions accurately describe the plant areas that are within the CRE, and also the interfaces that form the CRE boundary, and are consistent with the general definitions discussed in Section 2.1 of this safety evaluation. Establishing what is meant by the CRE and the CRE boundary will preclude ambiguity in the implementation of the program.
- Configuration control and preventive maintenance of the CRE boundary. This element is intended to ensure the CRE boundary is maintained in its design condition. Guidance for implementing this element is contained in RG 1.196, which endorsed, with exceptions, NEI 99-03, "Control Room Habitability Assessment Guidance," Revision 0, dated June 2001 (ADAMS Accession No. ML020600236). Maintaining the CRE boundary in its design condition provides assurance that its leak-tightness will not significantly degrade between CRE inleakage determinations.
- Assessment of CRE habitability at the frequencies stated in Sections C.1 and C.2 of RG 1.197, Revision 0. The licensee proposed the following exception to C.1 and C.2 of RG 1.197, to be listed in the TSs with this program element:

Unfiltered air inleakage testing shall include the ability to deviate from the test methodology of ASTM E741. These exceptions shall be documented in the test report.

The licensee considered the ability to make small deviations from the details of ASTM E741 necessary. In a phone conference on December 19, 2007, the licensee noted that at least one of the test vendors used the American Society of Mechanical Engineers (ASME) Performance Test (PT) 19.1 to determine test uncertainty instead of section A1 of ASTM E741 (the ASME PT 19.1 being a more rigorous approach). The licensee noted that this approach is consistent with the methods and intent of ASTM E741; thus, use of these small deviations is considered acceptable.

This element is intended to ensure that the plant assesses CRE habitability consistent with Sections C.1 and C.2 of RG 1.197 and NRC-approved exceptions. Assessing CRE habitability at the NRC-accepted frequencies provides assurance that significant degradation of the CRE boundary will not go undetected.

- Measurement of CRE pressure with respect to all areas adjacent to the CRE boundary at designated locations for use in assessing the CRE boundary at a frequency of 18 months on a staggered test basis with respect to the CREFS trains.

This element is intended to ensure that CRE differential pressure is regularly measured to identify changes in pressure warranting evaluation of the condition of the CRE boundary. Obtaining and trending pressure data provides additional assurance that significant

degradation of the CRE boundary will not go undetected between CRE leakage determinations.

- Quantitative limits on unfiltered leakage. This element is intended to establish the CRE leakage limit as the CRE unfiltered infiltration rate assumed in the CRE occupant radiological consequence analyses of DBAs. Having an unambiguous criterion for the CRE boundary to be considered operable in order to meet LCO 3.7.9, will ensure that associated action requirements will be consistently applied in the event of CRE degradation resulting in leakage that exceeds the quantitative limit.

Consistent with TSTF-448, Revision 3, the program states that the provisions of HBRSEP TS Section 3.0.2 "Surveillance Requirements," are applicable to the program frequencies for performing the activities required by program elements "c," parts (i) and (ii) (assessment of CRE habitability and measurement of CRE leakage), and "d" (measurement of CRE differential pressure). This statement is needed to avoid confusion. SR 3.0.2 is applicable to the surveillance that references the testing in the CRE Habitability Program. However, SR 3.0.2 is not applicable to Administrative Controls unless specifically invoked. Providing this statement in the program eliminates any confusion regarding whether SR 3.0.2 is applicable, and is therefore acceptable.

Proposed TS 5.5.17 states that (1) a CRE Habitability Program shall be established and implemented, (2) the program shall include all of the NRC staff required elements, as described above, and (3) the provisions of SR 3.0.2 shall apply to program frequencies. This is consistent with the model program TS approved by the NRC staff in TSTF-448, Revision 3, and is acceptable.

### 3.5 Implementation of New Surveillance and Assessment Requirements by the Licensee

The licensee proposed a license condition regarding the initial performance of the new surveillance and assessment requirements. The new license condition adopts the conditions in section 2.3 of the model application published in the *Federal Register* on January 17, 2007 (72 FR 2022). Plant specific changes were made to the proposed license condition. The proposed plant specific license condition is consistent with the model application, and is therefore acceptable.

The HBRSEP license condition states:

Upon implementation of the amendment adopting TSTF-448, Revision 3, the determination of control room envelope (CRE) unfiltered air leakage as required by TS 5.5.17.c.(i), the assessment of CRE habitability as required by Specification 5.5.17.c.(ii), and the measurement of CRE pressure as required by Specification 5.5.17.d, shall be considered met.

Following implementation:

- (a) The first performance of Specification 5.5.17.c.(i), shall be within the specified Frequency of 6 years, plus the 18-month allowance of SR 3.0.2, as measured from January 27, 2003, the date of the most recent successful tracer gas test, or within the next 18 months if the time period since the most recent successful tracer gas test is greater than 6 years.

- (b) The first performance of the periodic assessment of CRE habitability, Specification 5.5.17.c.(ii), shall be within the next nine months.
- (c) The first performance of the periodic measurement of CRE pressure, Specification 5.5.17.d, shall be within 18 months, plus the 138 days allowed by SR 3.0.2, as measured from the date of the most recent successful pressure measurement test.

#### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the South Carolina State official was notified of the proposed issuance of the amendment. The State official had no comments.

#### 5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes SRs. The NRC staff has determined that the amendment involves no significant increase in the amounts and no significant change in the types of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on the finding as published in the *Federal Register* on August 28, 2007 (72 FR 49570). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

#### 6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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