

Serial: RNP-RA/05-0005

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United States Nuclear Regulatory Commission Document Control Desk Washington, DC 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 DOCKET NO. 50-261/LICENSE NO. DPR-23

REQUEST FOR TECHNICAL SPECIFICATIONS
CHANGE TO SECTION 3.8.4, DC SOURCES – OPERATING

Ladies and Gentlemen:

In accordance with the provisions of the Code of Federal Regulations, Title 10, Part 50.90, Carolina Power and Light Company, also known as Progress Energy Carolinas, Inc., is submitting a request for an amendment to the Technical Specifications (TS) contained in Appendix A of the Operating License for H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2.

The proposed amendment request revises the surveillance requirements (SR) for the station batteries as specified in TS SR 3.8.4.5, the battery service test, and SR 3.8.4.6, the battery performance test.

Attachment I provides an Affirmation as required by 10 CFR 50.30(b).

Attachment II provides a description of the current condition, a description and justification of the proposed changes, a No Significant Hazards Consideration Determination, and an Environmental Impact Consideration.

Attachment III provides a markup of the affected TS pages.

Attachment IV provides a retyped version of the affected TS pages.

In accordance with 10 CFR 50.91(b), Progress Energy Carolinas, Inc., is providing the State of South Carolina with a copy of this license amendment request.

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Nuclear Regulatory Commission approval of the proposed license amendment by September 15, 2005, is requested, based on the expected upcoming performance of TS SR 3.8.4.6 during Refueling Outage 23, which is currently scheduled to start on or about September 17, 2005.

If you have any questions concerning this matter, please contact Mr. C. T. Baucom at (843) 857-1253.

Sincerely,

J. F. Lucas

Manager - Support Services - Nuclear

Attachments:

- I. Affirmation
- II. Request for Technical Specifications Change to Section 3.8.4
- III. Markup of Technical Specifications Pages
- IV. Retyped Technical Specifications Pages

CTB/cac

c: Mr. T. P. O'Kelley, Director, Bureau of Radiological Health (SC)

Mr. H. J. Porter, Director, Division of Radioactive Waste Management (SC)

Dr. W. D. Travers, NRC, Region II

Mr. C. P. Patel, NRC, NRR

NRC Resident Inspector, HBRSEP

Attorney General (SC)

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AFFIRMATION

The information contained in letter RNP-RA/05-0005 is true and correct to the best of my information, knowledge, and belief; and the sources of my information are officers, employees, contractors, and agents of Carolina Power and Light Company, also known as Progress Energy Carolinas, Inc. I declare under penalty of perjury that the foregoing is true and correct.

Executed On: 2/14/05

J. W. Moyer

Vice President, HBRSEP, Unit No. 2

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

REQUEST FOR TECHNICAL SPECIFICATIONS CHANGE TO SECTION 3.8.4

Description of Current Condition

Appendix A, Technical Specifications (TS), to Operating License (OL) No. DPR-23, for H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2, establishes the Limiting Condition for Operation (LCO) requirements for battery surveillances. Specifically, the TS LCO section 3.8.4 states the applicable requirements for operability for the DC electrical power subsystem. Surveillance Requirement (SR) 3.8.4.5 provides the requirements for the battery service testing and is modified by a note that allows substitution of SR 3.8.4.6 once per 75 months. SR 3.8.4.6 provides the requirements for performance of the battery discharge testing. The frequency of SR 3.8.4.6 has a provision for increased frequency of testing when the "A" battery has shown degradation or reaches 85% of expected life and when the "B" battery has shown degradation or reaches 95% of expected life.

Description and Justification of the Proposed Changes

The proposed changes modify the requirements of SR 3.8.4.5 and 3.8.4.6 to correct discrepancies that were introduced in conversion to Improved Standard Technical Specifications (ISTS), as approved under Amendment No. 176 to the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2, Technical Specifications on October 24, 1997. The proposed changes also include allowance to conduct a performance test or a modified performance test on the batteries.

The first change proposes to modify the notes for SR 3.8.4.5, which is the 18-month battery service test. The proposed change would allow the battery performance test (SR 3.8.4.6) in lieu of the battery service test (SR 3.8.4.5) once per 48 months or substitution of a modified battery performance test any time the modified performance test is conducted.

During the conversion to ISTS for HBRSEP, Unit No. 2, it was incorrectly concluded that the wording of the note associated with the battery service test (SR 3.8.4.5) would be inappropriately restrictive. The ISTS note for the battery service test SR, as provided in the revision of NUREG-1431, "Standard Technical Specifications – Westinghouse Plants," in effect at the time of the conversion, stated that the modified battery discharge test (SR 3.8.4.6) may be performed in lieu of the battery service test once per 60 months. It was believed at that time that this note would not allow the performance of SR 3.8.4.6 in lieu of SR 3.8.4.5 if the SR 3.8.4.6 frequency needed to be extended in accordance with LCO 3.0.2. Therefore, the SR 3.8.4.5 note was modified at that time to include an additional 25% of the stated frequency of SR 3.8.4.6 (i.e., an additional 25% of 60 months, which is 15 months). Hence, the approved version of this SR note for HBRSEP, Unit No. 2, states that SR 3.8.4.6 could be performed in lieu of SR 3.8.4.5 once per 75 months.

It has been subsequently determined that the wording of the SR 3.8.4.5 note, as approved for HBRSEP, Unit No. 2, essentially prohibits valid substitution of a battery discharge test for a battery

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service test if the battery discharge test was performed at less than the 75 month period referred to in the note.

The TS battery testing requirements in effect at the time of conversion to ISTS were established by Amendment No. 132. The allowance to conduct the performance test in lieu of the service test was consistent with the frequency of the performance test, which was stated as once every 5 years, and the frequency requirement for the service test allowed the substitution to take place based on the normally expected frequency of the performance test. The proposed change to the note for SR 3.8.4.5 to allow this substitution to take place once per 48 months will restore the allowance to substitute the performance test for the service test as it was originally intended and approved for HBRSEP, Unit No. 2, by Amendment No. 132, within the format and rule structure framework of the ISTS and accounting for refueling outage scheduling.

The proposed change to the SR 3.8.4.5 note will also allow the substitution of a modified performance test for the service test. Therefore, the proposed change to the note for SR 3.8.4.5 requires that SR 3.8.4.6 be modified to allow the use of the modified performance test. This change will allow the flexibility of conducting either the performance test, consistent with the HBRSEP, Unit No. 2, licensing basis, or the modified performance test, consistent with NUREG-1431 requirements. The current version of NUREG-1431 is based on changes documented in a Technical Specifications Task Force (TSTF) generic change, designated TSTF-360, Revision 1. That generic change, which was approved by the NRC on December 18, 2000, deleted the "once per 60 month" restriction associated with the substitution of the modified battery performance discharge test for the battery service test.

At the time of conversion to ISTS, HBRSEP, Unit No. 2, TS requirements for battery testing were based on IEEE Standard (Std) 450-1980, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Large Lead Storage Batteries for Generating Stations and Substations." The 1980 version of IEEE Std 450 did not include guidance for substitution of the performance test for the service test, although the HBRSEP, Unit No. 2, TS did include this allowance (as approved by Amendment No. 132, as previously described). The basis for allowing the substitution of the performance test for the service test every 5 years as stated in the NRC Safety Evaluation Report (SER) for Amendment No. 132, dated February 7, 1991, remains valid. The NRC SER for Amendment No. 132 states that the performance test determines the battery's capability. Therefore, substitution of the performance test for the service test was determined to be acceptable.

The 1995 version of IEEE Std 450 specifies that the modified performance test can be performed in lieu of the battery service test. The IEEE Std 450-1995 guidance is consistent with NRC-approved generic change TSTF-360, which allows substituting a modified performance test for the service test. IEEE Std 450 also provides the guidance that the performance test and modified performance test are both acceptable means of conducting the battery capacity verification testing at a frequency of 5 years. Therefore, it is proposed that SR 3.8.4.6 be reworded to include the modified performance test and that the modified performance test can be conducted in lieu of the battery service test in accordance with the proposed change to the SR 3.8.4.5 note previously described.

Additionally, during the review of SR 3.8.4.6, it was determined that the provisional frequency

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requirement to conduct a performance test on the "B" battery at an accelerated frequency was incorrectly established at the time of conversion to ISTS. To compensate for the lower capacity of the "B" battery, the intent of the existing Frequency was to require more frequent testing as the capacity decreases toward the end of the battery service life. However, when the Frequency was originally proposed to the NRC by letter dated August 27, 1996, during the conversion to ISTS, the Frequency was incorrectly stated to require more frequent testing at a later time in the service life of the "B" battery.

Therefore, it is being proposed that the SR 3.8.4.6 Frequency be revised to state "60 months, and 18 months when the battery shows degradation or has reached 85% of expected life." The proposed change to SR 3.8.4.6 will require more frequent testing earlier in the service life of the "B" battery and is therefore considered more restrictive. This change will provide a more appropriate and correct statement of the accelerated frequency testing requirements for the "B" battery.

No Significant Hazards Consideration Determination

Progress Energy Carolinas, Inc., also known as Carolina Power and Light Company, is proposing a change to Appendix A, Technical Specifications, of Facility Operating License No. DPR-23, for the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2. The proposed changes revise the DC system surveillance requirements as described in Technical Specifications Section 3.8.4.

An evaluation of the proposed change has been performed in accordance with 10 CFR 50.91(a)(1) regarding no significant hazards considerations using the standards in 10 CFR 50.92(c). A discussion of these standards as they relate to this amendment request follows:

- 1. Do the Proposed Changes Involve a Significant Increase in the Probability or Consequences of an Accident Previously Evaluated?
 - No. The proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated. The proposed surveillance changes will continue to ensure that the DC system is tested in a manner that will verify operability. Performance of the required system surveillances, in conjunction with the applicable operational and design requirements for the DC system, provide assurance that the system will be capable of performing the required design functions for accident mitigation and also that the system will perform in accordance with the functional requirements for the system as described in the Updated Final Safety Analysis Report for HBRSEP, Unit No. 2. This ensures that the rate of occurrence and consequences of analyzed accidents will not change. Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.
- 2. Do the Proposed Changes Create the Possibility of a New or Different Kind of Accident From Any Previously Evaluated?
 - No. The proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated. The proposed surveillance requirement changes

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will continue to ensure that the DC system is tested in a manner that will verify operability. No physical changes to the HBRSEP, Unit No. 2, systems, structures, or components are being implemented. There are no new or different accident initiators or sequences being created by the proposed Technical Specifications changes. Therefore, these changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Do the Proposed Changes Involve a Significant Reduction in the Margin of Safety?

No. The proposed changes do not involve a significant reduction in the margin of safety. The proposed DC system surveillance requirement changes provide appropriate and applicable surveillances for the DC system. The proposed changes to surveillance requirements for the DC system will continue to ensure system operability. Therefore, these changes do not affect any margin of safety for HBRSEP, Unit No. 2.

Based on the preceding discussion, it has determined that the requested change does not involve a significant hazards consideration.

Environmental Impact Consideration

10 CFR 51.22(c)(9) provides criteria for identification of licensing and regulatory actions for categorical exclusion from performing an environmental assessment. A proposed change for an operating license for a facility requires no environmental assessment if operation of the facility in accordance with the proposed change would not (1) involve a significant hazards consideration; (2) result in a significant change in the types or significant increases in the amounts of any effluents that may be released offsite; (3) result in a significant increase in individual or cumulative occupational radiation exposure. Progress Energy Carolinas, Inc., also known as Carolina Power and Light Company, has reviewed this request and determined that the proposed change 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 needs to be prepared in connection with the issuance of the amendment. The basis for this determination follows.

Proposed Change

Progress Energy Carolinas, Inc., also known as Carolina Power and Light Company, is proposing a change to Appendix A, Technical Specifications, of Facility Operating License No. DPR-23, for the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2. This change will revise the DC system surveillance requirements, as described in Section 3.8.4 of the HBRSEP, Unit No. 2, Technical Specifications.

Basis

The proposed change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) for the following reasons:

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- 1. As demonstrated in the No Significant Hazards Consideration Determination, the proposed changes do not involve a significant hazards consideration.
- 2. The proposed DC system surveillance requirement changes pertain to the performance of service tests and performance tests on the station batteries used in the DC system. The proposed changes do not affect the generation or control of effluents. Therefore, the proposed changes will not result in a significant change in the types or significant increases in the amounts of any effluents that may be released offsite.
- 3. The proposed changes, as previously described, do not affect any parameters that would cause an increase in occupational radiation exposure. There are no proposed physical changes to the facility or any process changes that would result in additional radiation exposure. Therefore, the proposed changes will not result in a significant increase in individual or cumulative occupational radiation exposure.

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H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 REQUEST FOR TECHNICAL SPECIFICATIONS CHANGE TO SECTION 3.8.4

MARKUP OF TECHNICAL SPECIFICATIONS PAGES

		SURVEILLANCE	FREQUENCY
SR	3.8.4.2	Verify battery cells, cell plates, and racks show no visual indication of physical damage or abnormal deterioration that could degrade battery performance.	18 months
SR	3.8.4.3	Remove visible terminal corrosion, verify battery cell to cell and terminal connections are clean and tight, and are coated with anti-corrosion material.	18 months
SR	3.8.4.4	Verify each battery charger supplies ≥ 300 amps at ≥ 125 V for ≥ 4 hours.	18 months
	3.8.4.5 48	NOTES 1. The performance discharge test in SR 3.8.4.6 may be performed in lieu of the service test in SR 3.8.4.5 once per 75 months. ✓ 2. This Surveillance shall not be performed in MODE 1, 2, 3, or 4. Verify battery capacity is adequate to supply, and maintain in OPERABLE status, the required emergency loads for the design duty cycle when subjected to a battery service test.	and the modified performance discharge test in SR 3.8.4.6 may be performed in lieu of the service test SR 3.8.4.5 at any time.

(continued)

SURVEILLANCE F	EQUIREMENTS (continued) SURVEILLANCE	FREQUENCY
SR 3.8.4.6	NOTE	
	the manufacturer's rating when subjected to a performance discharge test.	60 months AND
	or a modified performance discharge test.	18 months when battery shows degradation or has reached 85% for battery "A" of expected life

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H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 REQUEST FOR TECHNICAL SPECIFICATIONS CHANGE TO SECTION 3.8.4

RETYPED TECHNICAL SPECIFICATIONS PAGES

SURVEILLANCE REQUIREMENTS (continued)

•		SURVEILLANCE	FREQUENCY
SR	3.8.4.2	Verify battery cells, cell plates, and racks show no visual indication of physical damage or abnormal deterioration that could degrade battery performance.	18 months
SR	3.8.4.3	Remove visible terminal corrosion, verify battery cell to cell and terminal connections are clean and tight, and are coated with anti-corrosion material.	18 months
SR	3.8.4.4	Verify each battery charger supplies \geq 300 amps at \geq 125 V for \geq 4 hours.	18 months
SR	3.8.4.5	 NOTES. The performance discharge test in SR 3.8.4.6 may be performed in lieu of the service test in SR 3.8.4.5 once per 48 months and the modified performance discharge test in SR 3.8.4.6 may be performed in lieu of the service test in SR 3.8.4.5 at any time. This Surveillance shall not be performed in MODE 1, 2, 3, or 4. 	18 months
		Verify battery capacity is adequate to supply, and maintain in OPERABLE status, the required emergency loads for the design duty cycle when subjected to a battery service test.	

(continued)

HBRSEP Unit No. 2

3.8-20

Amendment No. ___

SURVEILLANCE REQUIREMENTS (continued)

	SURVEILLANCE	FREQUENCY
SR 3.8.4.6	This Surveillance shall not be performed in MODE 1, 2, 3, or 4. Verify battery capacity is > 80% for the "A" Battery and 91% for the "B" battery of the manufacturer's rating when subjected to a performance discharge test or a modified performance discharge test.	60 months AND 18 months when battery shows degradation or
		has reached 85% of expected life.