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

RESPONSE TO REQUEST FOR ADDITIONAL
INFORMATION REGARDING TECHNICAL SPECIFICATIONS
CHANGE REQUEST TO SECTION 3.8.4, DC SOURCES – OPERATING

Ladies and Gentlemen:

By letter dated February 14, 2005, Carolina Power and Light Company, also known as Progress Energy Carolinas, Inc., submitted 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.

On May 27, 2005, a request for additional information was received by facsimile transmission from the NRC project manager. This letter provides the HBRSEP, Unit No. 2, response to the request for additional information. In the course of developing the request for additional information response, it was determined that the proposed changes would be further modified to address the NRC staff's comments.

In support of this additional information, Attachment I provides an Affirmation as required by 10 CFR 50.30(b).

Attachment II provides the response to the request for additional information and the description and justification of the proposed changes as revised to address NRC staff comments.

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.

Progress Energy Carolinas, Inc.
Robinson Nuclear Plant
3581 West Entrance Road
Hartsville, SC 29550

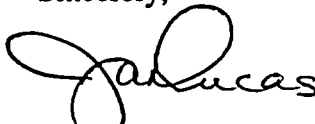
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The "No Significant Hazards Consideration Determination" and the "Environmental Impact Consideration" provided with the February 14, 2005, submittal were reviewed and determined to remain valid for the proposed revision to this amendment request.

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. Response to NRC Request for Additional Information for Technical Specifications Change to Section 3.8.4
- III. Revised 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)

AFFIRMATION

The information contained in letter RNP-RA/05-0062 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: 13 July 2005



J. W. Moyer
Vice President, HBRSEP, Unit No. 2

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

RESPONSE TO NRC REQUEST FOR ADDITIONAL INFORMATION FOR TECHNICAL SPECIFICATIONS CHANGE TO SECTION 3.8.4

By letter dated February 14, 2005, Carolina Power and Light Company, also known as Progress Energy Carolinas, Inc., submitted 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.

On May 27, 2005, a request for additional information was received by facsimile transmission from the NRC project manager. The following information is provided in response to the NRC request for additional information:

NRC Request 1:

In addition to proposing an allowance to perform a Modified Performance Discharge test in lieu of a Service Discharge test, H. B. Robinson has elected to maintain the capability to perform a Performance Discharge test in lieu of a Service Discharge test (Surveillance Requirement (SR) 3.8.4.5). However, using the results of a Performance Discharge test in lieu of Service Discharge test data does not provide assurance that the battery will be capable of meeting the H. B. Robinson duty cycle requirements. With the proposed addition of the Modified Performance test, it is not clear to the staff how maintaining the ability to perform Performance Discharge testing in lieu of Service Testing meets the intent of SR 3.8.4.5. Describe the technical basis for maintaining the capability to perform a Performance Discharge test in lieu of a Service Discharge test.

Response to Request 1:

The TS change submittal letter dated February 14, 2005, states the basis for the current allowance to substitute the performance test for the service test as follows:

“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."

Also, as noted in the description and justification for the proposed changes submitted by letter dated February 14, 2005, recent versions of IEEE Std 450 (specifically 1995 and 2000 versions) include guidance for substituting a modified performance test for a service test. IEEE Std 450-1995 states, "A modified performance test is a test of the battery capacity and the battery's ability to provide a high-rate, short-duration load (usually the highest rate of the duty cycle). This will often confirm the battery's ability to meet the critical period of the load duty cycle, in addition to determining its percentage of rated capacity. Initial conditions for the modified performance test should be identical to those specified for a service test. A modified performance test can be used in lieu of a service test at any time."

Based on the design calculations and battery design characteristics, the service test load profile and the performance test discharge rates are approximately as follows:

Battery	Service Test (amperage)			Performance Test (amperage)
	0-1 minute	1-59 minutes	59-60 minutes	
A	360	290	330	350
B	273	138	173	204

As shown by the approximate discharge rates, for each battery, the performance test discharge rate exceeds the current draw of the service test except for the first one minute of discharge. Based on comparison of these values, it can be judged that the performance test adequately verifies operability of the battery (without conducting a service test).

The "A" battery peak discharge rate exceeds the nominal performance test amperage by only 10 amps for the first minute. During the one hour of the service test, the total amp-hours would be about 292, as compared to the performance test discharge during the first hour of approximately 350 amp-hours.

The "B" battery peak discharge rate exceeds the nominal performance test amperage by 69 amps for the first minute. During the one hour of the service test, the total amp-hours would be about 141, as compared to the performance test discharge during the first hour of approximately 204 amp-hours.

As can be seen by these comparisons, the performance test discharge rate for these batteries provides reasonable assurance that the battery is operable and capable of performing under design basis load profile conditions.

This TS change is needed because the TS for HBRSEP, Unit No. 2, as currently written, would require two discharge tests to be performed on each battery during the next refueling outage, which is scheduled to commence on or about September 17, 2005. This level of testing in a refueling outage is considered unnecessary and burdensome. It is also noted that the modified performance test poses no substantial technical or logistical difficulty over the service test or the performance test. These tests are normally conducted by connecting the battery to test equipment and

programming the test equipment with the desired load test profile. Thus, it appears that continued allowance to conduct the performance test in lieu of the service test, even though it is justifiable, is not absolutely needed.

Therefore, the proposed TS changes are being revised to eliminate the allowance to conduct the performance test in lieu of the service test. This should allow expeditious processing of the proposed amendment such that only the modified performance test will be required during the upcoming refueling outage.

NRC Request 2:

As stated in the Institute of Electrical and Electronic Engineers (IEEE) Standard 450, it is permissible to perform a modified performance test if the test's discharge rate envelopes the duty cycle of the service test. Provide the documentation that shows that the modified performance test envelopes the H. B. Robinson duty cycle of the service test.

Response to Request 2:

As indicated in the February 14, 2005, TS change submittal, the HBRSEP, Unit No. 2, TS do not currently recognize the modified performance test. Therefore, once this TS change is approved, HBRSEP, Unit No. 2, will adopt a modified performance test that is consistent with the requirements of IEEE Std 450-1995.

A valid method of modified performance test in accordance with IEEE Std 450-1995 would be conducted at the same discharge rate as the service test for the first minute. After the first minute of peak discharge, the discharge would continue at a rate consistent with a performance test (i.e., battery discharge at the design rate, as modified by temperature correction factors) until the battery exhibits indications of sufficient discharge to verify battery capacity. IEEE Std 450-1995 states that the discharge should continue until the battery terminal voltage decreases to a value equal to the minimum average voltage per cell as specified by the design of the installation.

One valid method of modified performance test for HBRSEP, Unit No. 2, would be based on peak current for the first minute, followed by a continuing discharge of the battery at a rate consistent with the battery performance test rate. This method is consistent with IEEE Std 450-1995, Section 5.4, "Modified Performance Test," which states, "Typically this test is a simulated duty cycle consisting of just two rates: the 1 min rate published for the battery or the largest current load of the duty cycle, followed by the test rate employed for the performance test. Since the ampere-hours removed by a rated 1 min discharge represent a very small portion of the battery's capacity, the test rate can be changed to that for the performance test without compromising the results of the performance test."

NRC Request 3:

SR 3.8.4.6 allows an 18-month testing frequency if a battery shows signs of degradation or reaches 85% of the service life expected for the application. This frequency is not consistent with

NUREG-1431, "Standard Technical Specifications Westinghouse Plants," and IEEE Standard 450 testing frequency of every 12 months. IEEE Standard 450 states that annual Performance Tests of battery capacity should be made on any battery that shows signs of degradation or has reached 85% of the service life expected for the application. Degradation is indicated when the battery capacity drops 10% from its capacity on the previous performance test, or is below 90% of the manufacturer's rating. H. B. Robinson's 18-month battery performance testing interval leaves a 6-month uncertainty regarding the battery operability. A degraded battery, if utilized beyond one year, is believed to have a high probability of DC system failure. The increased Performance Discharge testing frequency of every 12 months is based on an accelerated rate of capacity loss with a battery that shows degradation or has reached 85% of the expected life with capacity less than 100% of manufacturer's rating. Failure of the DC system during or following operational occurrences or accidents have significant safety and risk implications. Provide the technical justification for the 18-month testing frequency when a battery shows signs of degradation or reaches 85% of the service life expected for the application.

In addition to the above, NUREG-1431 and IEEE Standard 450 recommends performing a performance discharge test at least once per 24 months for any battery that has reached 85% of the expected life with capacity greater than or equal to 100% of manufacturer's rating. Provide the technical justification for not performing performance discharge testing on a battery that meets the aforementioned criteria.

Response to Request 3:

The 18-month accelerated test frequency for performance testing in the current HBRSEP, Unit No. 2, TS was approved by the NRC on October 24, 1997, under Amendment No. 176. At the time of conversion to Improved Standard Technical Specifications in 1997, the HBRSEP, Unit No. 2, TS did not include a requirement for accelerated performance testing of station batteries. The TS requirement that was proposed and approved at that time was based on the recognition that the 12-month accelerated test frequency would require a unit shutdown to conduct this testing and that an 18-month accelerated test frequency is consistent with the nominal operating cycle length for HBRSEP, Unit No. 2. Additionally, it should be noted that IEEE Std 450-1995 and 2002 do not contain explicit technical justification for the 12-month frequency. It appears that the 12-month frequency is based on the judgment of the committee. Therefore, there is no guidance upon which to base a technical justification that would refute the accelerated test frequency guidance of IEEE Std 450-1995.

The criteria for accelerated battery testing are based on battery life and degradation. Appropriate battery life-cycle management should reduce the likelihood of triggering the accelerated testing requirement. Therefore, the proposed TS changes are being revised to include the requirements for accelerated testing, consistent with IEEE Std 450-1995 and NUREG-1431. This should allow expeditious processing of the proposed amendment.

Revised 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 will make the SR 3.8.4.5 and 3.8.4.6 requirements consistent with guidance contained in IEEE Std 450-1995 and NUREG-1431.

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 modified battery performance test (SR 3.8.4.6) in lieu of the battery service test (SR 3.8.4.5).

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 in the ISTS (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 Limiting Condition for Operation (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 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. However, guidance in IEEE Std 450-1995 published subsequent to the approval of Amendment No. 132 does not allow substitution of the performance test for the service test. That guidance only allows substitution of the modified performance test for the service test.

Therefore, the proposed change to the note for SR 3.8.4.5 will only allow the substitution of a modified performance test for the service test. This will establish consistency with NUREG-1431 and IEEE Std 450-1995 requirements.

At the time of conversion to ISTS, the 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 at that time.

It is also noted that the modified performance discharge test poses no substantial technical or logistical difficulty over the service test or the performance test. These tests are normally conducted by connecting the battery to test equipment and programming the test equipment with the desired load test profile. Thus, it appears that continued allowance to conduct the performance test in lieu of the service test, even though it is justifiable, is not absolutely needed. Therefore, the proposed TS changes are being revised to eliminate the allowance to conduct the performance test in lieu of the service test.

The other changes proposed by this amendment request pertain to SR 3.8.4.6, which establishes the performance discharge test requirements. As described in IEEE Std 450-1995, the modified performance test is a method of capacity test, similar to the performance test, that can be substituted for the service test. The proposed changes to SR 3.8.4.5 will allow the use of the modified performance discharge test. Therefore, a change is proposed to the SR 3.8.4.6 requirement to include the modified performance discharge test.

During the review of SR 3.8.4.6, it was determined that the provisional frequency requirement to conduct a performance discharge 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 (i.e., 95% of the expected battery life). Therefore, the requirement for the "B" battery to be tested more frequently at 95% of the expected battery life is being replaced by accelerated testing requirements that are consistent with IEEE Std 450-1995 and NUREG-1431.

Additionally, the NRC request for additional information sought further technical justification for the differences between the HBRSEP, Unit No. 2, TS requirements and the guidance contained in NUREG-1431 and IEEE Std 450-1995. The specific requirements in question pertain to the accelerated test frequency requirements for conditions where battery degradation limits or 85% of the expected life have been exceeded. As noted in the response to the request for additional information, IEEE Std 450-1995 and 2002 do not contain explicit technical justification for the 12-month frequency. It appears that the 12-month frequency is based on the judgment of the

committee. Therefore, there is no guidance upon which to base a technical justification that would refute the accelerated test frequency guidance of IEEE Std 450-1995.

Therefore, it is being proposed that the SR 3.8.4.6 Frequency be revised to state “60 months AND 12 months when the battery shows degradation or has reached 85% of expected life with capacity < 100% of manufacturer’s rating AND 24 months when battery has reached 85% of expected life with capacity ≥ 100% of manufacturer’s rating.” 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. Additionally, this change will establish test frequency requirements for both batteries that are consistent with NUREG-1431 and IEEE Std 450-1995.

No Significant Hazards Consideration Determination

The “No Significant Hazards Consideration Determination” and “Environmental Impact Consideration” remain unchanged and unaffected. These sections of the original TS change submittal are repeated for completeness of this submittal, as follows:

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 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 been 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:

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.

United States Nuclear Regulatory Commission
Attachment III to Serial: RNP-RA/05-0062
3 Pages (including cover page)

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

REQUEST FOR TECHNICAL SPECIFICATIONS CHANGE TO SECTION 3.8.4

REVISED MARKUP OF 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 ≥ 300 amps at ≥ 125 V for ≥ 4 hours.	18 months
<p>SR 3.8.4.5</p> <p>.....NOTES.....</p> <p>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 <u>once</u> <u>per 5 months</u>.</p> <p>2. This Surveillance shall not be performed in MODE 1, 2, 3, or 4.</p> <p>.....</p> <p>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.</p>	<p>modified</p> <p>18 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.4.6NOTE..... This Surveillance shall not be performed in MODE 1, 2, 3, or 4.</p> <p>Verify battery capacity is $\geq 80\%$ for the "A" Battery and 91% for the "B" battery of the manufacturer's rating when subjected to a performance discharge test.</p>	<p>60 months</p> <p>AND 12</p> <p>18 months when battery shows degradation or has reached 85% for battery "A" and 95% for battery "B" of expected life.</p>

or a modified performance
discharge test.

with capacity
< 100% of
manufacturer's
rating

AND

24 months when
battery has
reached 85% of
expected life
with capacity
 $\geq 100\%$ of
manufacturer's
rating.

United States Nuclear Regulatory Commission
Attachment IV to Serial: RNP-RA/05-0062
3 Pages (including cover page)

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

REQUEST FOR TECHNICAL SPECIFICATIONS CHANGE TO SECTION 3.8.4

RETYPE 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 ≥ 300 amps at ≥ 125 V for ≥ 4 hours.	18 months
SR 3.8.4.5 -----NOTES----- 1. 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. 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.	18 months

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.4.6 -----NOTE----- This Surveillance shall not be performed in MODE 1, 2, 3, or 4. ----- Verify battery capacity is \geq 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.</p>	<p>60 months <u>AND</u> 12 months when battery shows degradation or has reached 85% of expected life with capacity < 100% of manufacturer's rating. <u>AND</u> 24 months when battery has reached 85% of expected life with capacity \geq 100% of manufacturer's rating.</p>