



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

December 20, 2010

Mr. J. R. Morris  
Site Vice President  
Catawba Nuclear Station  
Duke Energy Carolinas, LLC  
4800 Concord Road  
York, SC 29745

SUBJECT: CATAWBA NUCLEAR STATION, UNITS 1 AND 2, ISSUANCE OF AMENDMENTS REGARDING REVISION OF TECHNICAL SPECIFICATION (TS) 3.8.4 "DC [DIRECT CURRENT] SOURCES – OPERATING" (TAC NOS. ME2934 AND ME2935)

Dear Mr. Morris:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 262 to Renewed Facility Operating License NPF-35 and Amendment No. 258 to Renewed Facility Operating License NPF-52 for the Catawba Nuclear Station, Units 1 and 2, respectively. The amendments consist of changes to the TSs in response to your application dated December 14, 2009, as supplemented by letters dated September 8, 2010, and October 28, 2010.

The amendments revise TS Surveillance Requirements (SRs) 3.8.4.3 and 3.8.4.6 of TS 3.8.4, "DC [Direct Current] Sources – Operating." These TS SRs address battery connection resistance values.

A copy of the related Safety Evaluation is also enclosed. A Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

If you have any questions, please call me at 301-415-1119.

Sincerely,

A handwritten signature in black ink that reads "Jon Thompson".

Jon Thompson, Project Manager  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-413 and 50-414

Enclosures:

1. Amendment No. 262 to NPF-35
2. Amendment No. 258 to NPF-52
3. Safety Evaluation

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

DUKE ENERGY CAROLINAS, LLC

NORTH CAROLINA ELECTRIC MEMBERSHIP CORPORATION

DOCKET NO. 50-413

CATAWBA NUCLEAR STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 262  
Renewed License No. NPF-35

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment to the Catawba Nuclear Station, Unit 1 (the facility) Renewed Facility Operating License No. NPF-35 filed by the Duke Energy Carolinas, LLC, acting for itself, and North Carolina Electric Membership Corporation (licensees), dated December 14, 2009, as supplemented by letters dated September 8, 2010, and October 28, 2010, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, 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 set forth in 10 CFR Chapter I;
  - 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 hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-35 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 262 , which are attached hereto, are hereby incorporated into this renewed operating license. Duke Energy Carolinas, LLC, shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Gloria Kulesa, Chief  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to License No. NPF-35  
and the Technical Specifications

Date of Issuance: December 20, 2010



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

DUKE ENERGY CAROLINAS, LLC  
NORTH CAROLINA MUNICIPAL POWER AGENCY NO. 1  
PIEDMONT MUNICIPAL POWER AGENCY  
DOCKET NO. 50-414  
CATAWBA NUCLEAR STATION, UNIT 2  
AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 258  
Renewed License No. NPF-52

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment to the Catawba Nuclear Station, Unit 2 (the facility) Renewed Facility Operating License No. NPF-52 filed by the Duke Energy Carolinas, LLC, acting for itself, North Carolina Municipal Power Agency No. 1 and Piedmont Municipal Power Agency (licensees), dated December 14, 2009, as supplemented by letters dated September 8, 2010, and October 28, 2010, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, 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 set forth in 10 CFR Chapter I;
  - 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.

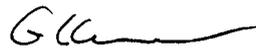
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-52 is hereby amended to read as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 258, which are attached hereto, are hereby incorporated into this renewed operating license. Duke Energy Carolinas, LLC, shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Gloria Kulesa, Chief  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to License No. NPF-52  
and the Technical Specifications

Date of Issuance: December 20, 2010

ATTACHMENT TO  
LICENSE AMENDMENT NO. 262  
RENEWED FACILITY OPERATING LICENSE NO. NPF-35  
DOCKET NO. 50-413  
AND LICENSE AMENDMENT NO. 258  
RENEWED FACILITY OPERATING LICENSE NO. NPF-52  
DOCKET NO. 50-414

Replace the following pages of the Renewed Facility Operating Licenses and the Appendix A Technical Specifications (TSs) with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

Licenses  
NPF-35, page 4  
NPF-52, page 4

TSs  
3.8.4-2  
3.8.4-3  
-

Insert

Licenses  
NPF-35, page 4  
NPF-52, page 4

TSs  
3.8.4-2  
3.8.4-3  
3.8.4-5

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 262 which are attached hereto, are hereby incorporated into this renewed operating license. Duke Energy Carolinas, LLC shall operate the facility in accordance with the Technical Specifications.

(3) Updated Final Safety Analysis Report

The Updated Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on December 16, 2002, describes certain future activities to be completed before the period of extended operation. Duke shall complete these activities no later than December 6, 2024, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

The Updated Final Safety Analysis Report supplement as revised on December 16, 2002, described above, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71(e)(4), following issuance of this renewed operating license. Until that update is complete, Duke may make changes to the programs described in such supplement without prior Commission approval, provided that Duke evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

(4) Antitrust Conditions

Duke Energy Carolinas, LLC shall comply with the antitrust conditions delineated in Appendix C to this renewed operating license.

(5) Fire Protection Program (Section 9.5.1, SER, SSER #2, SSER #3, SSER #4, SSER #5)\*

Duke Energy Carolinas, LLC shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report, as amended, for the facility and as approved in the SER through Supplement 5, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

---

\*The parenthetical notation following the title of this renewed operating license condition denotes the section of the Safety Evaluation Report and/or its supplement wherein this renewed license condition is discussed.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 258 which are attached hereto, are hereby incorporated into this renewed operating license. Duke Energy Carolinas, LLC shall operate the facility in accordance with the Technical Specifications.

(3) Updated Final Safety Analysis Report

The Updated Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on December 16, 2002, describes certain future activities to be completed before the period of extended operation. Duke shall complete these activities no later than February 24, 2026, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

The Updated Final Safety Analysis Report supplement as revised on December 16, 2002, described above, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71(e)(4), following issuance of this renewed operating license. Until that update is complete, Duke may make changes to the programs described in such supplement without prior Commission approval, provided that Duke evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

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\*The parenthetical notation following the title of this renewed operating license condition denotes the section of the Safety Evaluation Report and/or its supplements wherein this renewed license condition is discussed.

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>D. A and/or D channel of DC electrical power subsystem inoperable.</p> <p><u>AND</u></p> <p>Associated train of DG DC electrical power subsystem inoperable.</p>	<p>D.1 Enter applicable Condition(s) and Required Action(s) of LCO 3.8.9, "Distribution Systems-Operating", for the associated train of DC electrical power distribution subsystem made inoperable.</p>	<p>Immediately</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.8.4.1 Verify DC channel and DG battery terminal voltage is <math>\geq 125</math> V on float charge.</p>	<p>7 days</p>
<p>SR 3.8.4.2 Not used.</p>	
<p>SR 3.8.4.3 Verify no visible corrosion at the DC channel and DG battery terminals and connectors.</p> <p><u>OR</u></p> <p>Verify battery connection resistance of specific connection(s) meets Table 3.8.4-1 limit.</p>	<p>92 days</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
SR 3.8.4.4 Verify DC channel and DG battery cells, cell plates, and racks show no visual indication of physical damage or abnormal deterioration that could degrade battery performance.	18 months
SR 3.8.4.5 Remove visible terminal corrosion, verify DC channel and DG battery cell to cell and terminal connections are clean and tight, and are coated with anti-corrosion material.	18 months
SR 3.8.4.6 Verify all DC channel and DG battery connection resistance values meet Table 3.8.4-1 limits.	18 months
SR 3.8.4.7 Verify each DC channel battery charger supplies $\geq 200$ amps and the DG battery charger supplies $\geq 75$ amps with each charger at $\geq 125$ V for $\geq 8$ hours.	18 months
SR 3.8.4.8 -----NOTES----- 1. The modified performance discharge test in SR 3.8.4.9 may be performed in lieu of the service test in SR 3.8.4.8. 2. This Surveillance shall not be performed for the DG batteries in MODE 1, 2, 3, or 4. ----- Verify DC channel and DG 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)

Table 3.8.4-1 (page 1 of 1)

Battery Connection Resistance Limits

PARAMETER	DC CHANNEL LIMIT (micro-ohms)	DG BATTERY LIMIT (micro-ohms)
Single intercell connection	$\leq 120.5$	$\leq 102.1$
Single interrack connection	$\leq 200.0$	$\leq 200.0$
Single intertier connection	$\leq 200.0$	$\leq 200.0$
Single terminal connection	$\leq 206.9$	$\leq 194.4$
Average intercell connection	$\leq 103.4$	$\leq 97.2$



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO

AMENDMENT NO. 262 TO RENEWED FACILITY OPERATING LICENSE NPF-35

AND

AMENDMENT NO. 258 TO RENEWED FACILITY OPERATING LICENSE NPF-52

DUKE ENERGY CAROLINAS, LLC

CATAWBA NUCLEAR STATION, UNITS 1 AND 2

DOCKET NOS. 50-413 AND 50-414

1.0 INTRODUCTION

By application dated December 14, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML093500597), as supplemented by letters dated September 8, 2010 (ADAMS Accession No. ML102560066), and October 28, 2010 (ADAMS Accession No. ML103070122), Duke Energy Carolinas, LLC (Duke, the licensee), requested changes to the Technical Specifications (TSs) for the Catawba Nuclear Station, Units 1 and 2 (Catawba 1 and 2). The supplements dated September 8, 2010, and October 28, 2010, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published the *Federal Register* (FR) on August 10, 2010 (75 FR 48375).

The proposed changes would revise TS Surveillance Requirements (SRs) 3.8.4.3 and 3.8.4.6 of TS 3.8.4, "DC [Direct Current] Sources – Operating." These TS SRs address battery connection resistance values.

2.0 REGULATORY EVALUATION

The regulatory framework which the U.S. Nuclear Regulatory Commission (NRC) staff applied in the review of the application includes:

- Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Appendix A, "General Design Criteria [GDC] for Nuclear Power Plants," Criterion 17 (GDC 17), "Electric power systems requires, in part:

An onsite electric power system and an offsite electric power system shall be provided to permit functioning of structures, systems, and components important to safety...

The onsite electric power supplies, including the batteries, and the onsite electric distribution system, shall have sufficient independence, redundancy, and testability to perform their safety functions assuming a single failure.

In addition, GDC 17 requires provisions for minimizing the probability of losing electric power from the remaining electric power supplies as a result of loss of power from the unit, the offsite transmission network, or the onsite power supplies.

- GDC 18, "Inspection and testing of electric power systems," requires that "Electric power systems important to safety shall be designed to permit appropriate periodic inspection and testing of important areas and features ..."
- 10 CFR 50.36(c)(3), "Surveillance requirements," requires that TSs include SRs, which are "requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met."
- 10 CFR 50.63, "Loss of all alternating current power," requires that each light-water cooled nuclear power plant licensed to operate must be able to withstand for a specified duration and recover from a station blackout (SBO).

### 3.0 TECHNICAL EVALUATION

The station DC electrical power system provides the alternating current (AC) emergency power system with control power. It also provides both motive and control power to selected safety-related equipment and preferred AC vital bus power (via inverters). The DC electrical power system is designed to have sufficient independence, redundancy, and testability to perform its safety functions, assuming a single failure.

The proposed license amendment request (LAR) would revise the battery connection resistance acceptance criteria in the TS SRs to ensure that the safety-related batteries will remain operable and can perform their safety functions during postulated design basis events.

The licensee proposed the following battery connection resistance acceptance criteria for the safety-related batteries:

New Catawba 1 and 2 TS Table 3.8.4-1  
Battery Connection Resistance Limits

PARAMETER	DC CHANNEL LIMIT (micro-ohms)	DIESEL GENERATOR BATTERY LIMIT (micro-ohms)
Single intercell connection	≤175.54	≤148.94
Single interrack connection	≤200.0	≤200.0
Single intertier connection	≤200.0	≤200.0
Single terminal connection	≤206.92	≤97.24
Average intercell connection	≤103.46	≤97.24

The Catawba 1 and 2 Updated Facility Safety Analysis Report (UFSAR), Section 8.3.2.1.2.1.2 states that each 125 Volt (V) vital DC battery is “sized to supply the continuous emergency load of its own load group and the loads of another load group for a period of two hours.” The Catawba 1 and 2 125 V DC vital instrumentation and control power system consists of four independent and redundant safety-related Class 1E DC electrical power subsystems (Channels A, B, C, and D). Channels A and C provide power for Train A; Channels B and D provide power for Train B. Each channel consists of one 125 V DC battery (each battery is capable of supplying 2 channels of DC loads for a train), the associated battery charger(s) for each battery, and all the associated control equipment and interconnecting cabling. In addition, the Catawba 1 and 2 125 V DC essential diesel auxiliary power system is comprised of 125 V DC diesel auxiliary power batteries and 125 V DC diesel auxiliary power battery chargers. Each 125 V DC battery is sized to carry its duty cycle loads without its battery charger for 2 hours during a loss-of-offsite-power (LOOP) and/or loss-of-coolant accident (LOCA) and 4 hours during an SBO event.

During normal operation, the 125 V DC load is powered from the battery chargers with the batteries floating on the system. In case of loss of normal power to the battery charger, the DC load is automatically powered from the safety-related batteries. Each Catawba 1 and 2 125 V DC vital (i.e., safety-related) battery is separately housed in a ventilated room apart from its charger and distribution centers. Each channel is located in an area separated physically and electrically from the other channel to ensure that a single failure in one subsystem does not cause a failure in a redundant subsystem. The batteries for the channels of vital DC are sized to produce the required capacity at 80 percent of nameplate rating, corresponding to warranted capacity at end-of-life cycles and the 100-percent design demand (i.e., a 1.25 aging factor is used in sizing of the Catawba 1 and 2 safety-related batteries).

In the LAR, the licensee stated that the battery charger for each channel of DC has sufficient capacity for the steady state operation of connected loads required during normal operation, while at the same time maintaining its battery bank fully charged. Each battery charger also has sufficient capacity to restore the battery from the design minimum charge to its fully-charged state within 8 hours while supplying normal steady state loads discussed in Chapter 8 of the Catawba 1 and 2 UFSAR.

The existing Catawba 1 and 2 TS SRs 3.8.4.3 and 3.8.4.6 currently require the licensee to verify the battery connection resistances on the safety-related batteries. The existing TS SR acceptance criteria are less conservative than the specified limits for the individual parts of the safety-related batteries (i.e., intercell, intertier, interrack, and terminal connections). As a result, the total resistance of the battery, as determined by summing the individual values of the battery connection resistance, could exceed the value of total battery resistance reflected in the load and voltage study calculations. In the LAR, the licensee stated that the battery manufacturer acceptance criteria in terms of maximum intercell voltage drop was applied in the analysis of battery connection resistance and established the proposed battery resistance acceptance values for the TS SRs. The licensee has proposed modifying Catawba 1 and 2 TS SRs 3.8.4.3 and 3.8.4.6 by adding an additional acceptance criterion to verify average intercell connection resistance which is within pre-established limits that ensure the safety-related batteries can perform their safety functions and will remain operable during postulated design basis events. The licensee has proposed these changes to restore the required conservatism to their TSs and to ensure the availability of adequate DC power as specified in the Catawba 1 and 2 safety analyses. The licensee stated that this change is necessary since the parameters currently specified in the existing SRs do not, by themselves, ensure that the batteries will be maintained in a condition such that they will be able to perform their safety function.

In the LAR, the licensee stated that it has considered these resistance values when calculating the acceptable voltages at the devices powered by batteries for the event-specific load profiles for the safety-related batteries to address the LOOP/LOCA events and the SBO event. This evaluation included verifying values of resistance for intercell, interrack, intertier, terminal connections, and the average intercell connection resistance of the battery. The licensee also uses these resistance values to calculate the acceptable voltages at the devices powered by the safety-related batteries. It is the NRC staff's understanding that the licensee used the revised battery connection resistance limits in the DC system voltage drop calculation and verified that the minimum-required voltage and current exist for the devices fed from the safety-related batteries to perform their safety function for the LOOP/LOCA and SBO events.

To validate the licensee's proposed new resistance values, the NRC staff requested the licensee to provide a summary of the resistance calculation which established the proposed TS battery connection resistance limits. Specifically, the NRC staff requested the licensee to provide the technical basis and a summary of the calculation for the proposed TS resistance values (i.e., resistance values for intercell, intertier, interrack, terminal, and the average battery intercell connection). In response to the NRC staff's request, the licensee provided a detailed discussion on how the various connection resistances were derived including how the battery manufacturer's acceptance limits were applied. Based on its review of the licensee's response, the NRC staff finds that the licensee has adequately incorporated the battery manufacturer's acceptance limits in establishing the proposed battery connection resistance values.

Additionally, the licensee opted to add an additional parameter, "average intercell connection resistance," in the proposed TS SR for effectively monitoring the intercell resistances. However, the NRC staff did not find any definition of this new parameter in the LAR. Therefore the NRC staff requested the licensee to provide a definition of this new parameter and a regulatory commitment to incorporate this definition in the TS bases. In a letter dated September 8, 2010, the licensee provided the following definition of "average intercell connection resistance"

Average intercell connection resistance is defined as the battery manufacturer's maximum allowed intercell connection voltage drop divided by the maximum battery duty cycle load current, and includes the battery post to intercell connection resistance.

In this letter, the licensee also provided a regulatory commitment to include this definition in the TS Bases. The NRC staff finds the licensee's response adequate and acceptable.

In a letter dated September 8, 2010, the licensee stated that errors were discovered during the preparation of its response in the Catawba 1 and 2 supporting calculations for the proposed TS Table 3.8.4-1 related to the battery connection resistance limits. As a result, several proposed battery connection resistance values in the original LAR (i.e. on page 2 of 9 and in TS Table 3.8.4-1) were revised. The licensee also provided the revised values in this letter.

The NRC staff noted that the licensee's September 8, 2010, response to the NRC staff's RAI included two recommendations from the battery vendor documented in Enclosure 2 to this letter. One of the recommendations is to review the previously collected data on the intercell connection resistances. If the resistances have increased significantly, the connections should be cleaned. The second recommendation is to add one 1/4" intercell connector to each side of the battery posts for a total of 2 x 1/4"-thick connectors on each side. In a letter dated October 28, 2010, the licensee stated that they have taken action to review all the test and surveillance data from initial installation to present and found no adverse trends on any connections and updated the maintenance procedures to include such actions. On the second recommendation, the licensee stated that the existing batteries have conservative margins as shown by previous tests and analyses and stated that they have evaluated the vendor recommendations and decided not to implement them at this time. However, if any margin issues occur in future, they will have options to re-evaluate these recommendations. The NRC staff finds the licensee's clarifications reasonable and, therefore, acceptable.

The NRC staff evaluated the licensee's request to modify SR 3.8.4.3 and SR 3.8.4.6 for the intercell, interrack, intertier and terminal connections acceptance criteria and by adding an additional acceptance criterion for the average intercell connection resistance within pre-established limits. Based on the above evaluation, the NRC staff finds that the proposed changes to the Catawba 1 and 2 TSs provide reasonable assurance of the continued availability of the required electrical power to shut down the reactor and to maintain the reactor in a safe condition after an anticipated operational occurrence or a postulated design-basis accident. Furthermore, the NRC staff concludes that the proposed TS changes are in accordance with 10 CFR 50.36 and 10 CFR 50.63 and meet the intent of GDCs 17 and 18. Therefore, the NRC staff finds the proposed changes acceptable.

#### 4.0 STATE CONSULTATION

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

#### 5.0 ENVIRONMENTAL CONSIDERATION

The amendments change the SRs. The NRC staff has determined that the amendments involve 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 amendments involve no significant hazards consideration, and there has been no public comment on such finding (75 FR 48375). Accordingly, the amendments meet 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 amendments.

## 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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: P. Sahay

Date: December 20, 2010

December 20, 2010

Mr. J. R. Morris  
Site Vice President  
Catawba Nuclear Station  
Duke Energy Carolinas, LLC  
4800 Concord Road  
York, SC 29745

SUBJECT: CATAWBA NUCLEAR STATION, UNITS 1 AND 2, ISSUANCE OF AMENDMENTS REGARDING REVISION OF TECHNICAL SPECIFICATION (TS) 3.8.4 "DC [DIRECT CURRENT] SOURCES – OPERATING" (TAC NOS. ME2934 AND ME2935)

Dear Mr. Morris:

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A copy of the related Safety Evaluation is also enclosed. A Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

If you have any questions, please call me at 301-415-1119.

Sincerely,

/RA/

Jon Thompson, Project Manager  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-413 and 50-414

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\*input provided via memo dated 11/18/2010 ML103190111

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