



Duke Power Company  
A Duke Energy Company

Catawba Nuclear Station  
4800 Concord Road  
York, SC 29745

Gary R. Peterson  
Vice President

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February 20, 1998

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

SUBJECT: Duke Energy Corporation  
Catawba Nuclear Station  
Docket Nos.: 50-413 and 50-414  
Emergency Plan, Revision 98-2

Dear Sir:

Enclosed for NRC staff use and review are the revised pages associated with Catawba Nuclear Station Emergency Plan Revision 98-2. This revision is effective on the date of approval.

This revision is being submitted in accordance with 10CFR50.54(q) and does not decrease the effectiveness of the Emergency Plan.

Attachment 1 contains a detailed summary of the changes. Attachment 2 contains the 10CFR50.54(q) evaluation. Attachment 3 contains instructions for updating the Catawba Nuclear Station Emergency Plan. Attachment 4 contains the revised Catawba Nuclear Station Emergency Plan pages. The revised pages have been specifically highlighted (side-barred) to facilitate review.

Two copies of this letter are being provided to the NRC Region II Regional Administrator.

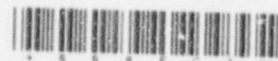
If you have any questions or require additional information, please contact Steve Christopher at 803-831-4027.

Sincerely,

G. R. Peterson  
Vice President

20451

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Page Two

Attachments: 1 - Detailed Summary of Emergency Plan Changes  
2 - 10CFR50.54(q) Evaluation  
3 - Emergency Plan Update Instructions  
4 - Emergency Plan Changes

xc: w/attachments (2 copies)

L. A. Reyes  
U. S. Nuclear Regulatory Commission  
Regional Administrator, Region II  
61 Forsyth Street, S. W.  
Suite 23T85  
Atlanta, GA 30303

(w/o attachments)

P. S. Tam  
NRC Senior Project Manager (CNS)  
U. S. Nuclear Regulatory Commission  
Mail Stop O-14H25  
Washington, DC 20555-0001

D. J. Roberts  
Senior Resident Inspector (CNS)  
U. S. Nuclear Regulatory Commission  
Catawba Nuclear Site

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bxc: w/attachments

Electronic Licensing Library (EC050)  
RCG Licensing File (CN01RC)

w/o attachment

Saluda River Electric Corporation  
P. O. Box 929  
Laurens, SC 29630

North Carolina Municipal Power Agency No. 1  
P. O. Box 29513  
Raleigh, NC 27626-0513

NC Electric Membership Corporation  
3333 North Blvd.  
P. O. Box 27306  
Raleigh, NC 27611

Piedmont Municipal Power Agency  
121 Village Drive  
Greer, SC 29651

S. R. Christopher (CN04EP)  
M. S. Kitlan (CN01RC)  
K. E. Nicholson (CN01RC)  
CN-750.25

Catawba Nuclear Station  
Emergency Plan Revision 98-2  
Detailed Summary of Emergency Plan Changes  
Attachment 1

**TABLE OF CONTENTS**

1. Page 5, Section N.4 Page Number  
Revised the page number for Section N.4 on Page 5 to be consistent with the current Section N.4 page number.

**LIST OF FIGURES, TABLES, ATTACHMENTS**

No changes.

**INTRODUCTION**

No changes.

**SECTION A - ASSIGNMENT OF RESPONSIBILITY**

No changes.

**SECTION B - SITE EMERGENCY ORGANIZATION**

No changes.

**SECTION C - EMERGENCY RESPONSE SUPPORT AND RESOURCES**

No changes.

**SECTION D - EMERGENCY CLASSIFICATION SYSTEM**

1. Page D-102, Second EAL  
Removed the words "Approaching hurricane with" from the second EAL on Page D-102. This revision was performed based on feedback Emergency Planning received from the Operator Licensing Examinations. The intent of this EAL is to classify the event when the defined winds are sustained on-site for greater than 15 minutes. During the Operator License Examinations, more than one Operator interpreted the words, "Approaching hurricane with", to mean that the event should be classified based on the National Weather Service projected storm path, projected wind strengths and prior to arrival of the defined winds on-site. The Operators classified the event while the winds were 150 miles (six hours travel time) from the site. The Operators' interpretation were graded as a misclassification. This revision provides clarification of this EAL and is consistent with the wording of the current Unusual Event EAL for sustained winds shown on Page D-96 of the Emergency Plan. This EAL revision has been reviewed and agreed to by the states and counties associated with the Catawba Nuclear Site EPZ.

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2. Page D-109, EAL  
Removed the words "Approaching hurricane with" from the EAL on Page D-109. This revision was performed based on feedback Emergency Planning received from the Operator Licensing Examinations. The intent of this EAL is to classify the event when the defined winds are sustained on-site for greater than 15 minutes. During the Operator License Examinations, more than one Operator interpreted the words, "Approaching hurricane with", to mean that the event should be classified based on the National Weather Service projected storm path, projected wind strengths and prior to arrival of the defined winds on site. The Operators classified the event while the winds were 150 miles (six hours travel time) from the site. The Operators' interpretation were graded as a misclassification. This revision provides clarification of this EAL and is consistent with the wording of the current Unusual Event EAL for sustained winds shown on Page D-96 of the Emergency Plan. This EAL revision has been reviewed and agreed to by the states and counties associated with the Catawba Nuclear Site EPZ.

**SECTION E - NOTIFICATION METHODOLOGY**

No changes.

**SECTION F - EMERGENCY COMMUNICATIONS**

No changes.

**SECTION G - PUBLIC EDUCATION AND INFORMATION**

No changes.

**SECTION H - EMERGENCY FACILITIES AND EQUIPMENT**

No changes.

**SECTION I - ACCIDENT ASSESSMENT**

No changes.

**SECTION J - PROTECTIVE RESPONSE**

1. Page J-8, Figure J-2  
Replaced "(EMF53A and EMF53B)" with "(EMF53A AND/OR EMF53B)" in Figure J-2 on Page J-8. As originally written, Figure J-2 could be interpreted that both EMF53A and EMF53B were required to exceed the defined R/HR values listed in Figure J-2 to identify fission product inventory inside Containment greater than gap activity. This interpretation would be incorrect. If either or both EMF53A and EMF53B exceed the R/HR values defined in Figure J-2, fission product inventory inside Containment would be greater than gap activity. This revision clarifies the use

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of EMF53A and EMF53B to determine if fission product inventory inside Containment is greater than gap activity. This revision also provides consistency between Section J of the Emergency Plan and RP/0/A/5000/005, "General Emergency."

**SECTION K - RADIOLOGICAL EXPOSURE CONTROL**

No changes.

**SECTION L - MEDICAL AND PUBLIC HEALTH SUPPORT**

No changes.

**SECTION M - RECOVERY AND REENTRY PLANNING AND POST ACCIDENT OPERATIONS**

No changes.

**SECTION N - EXERCISES AND DRILLS**

1. Page N-1, Section N.2

Add the following sentence to Section N.2 on Page N-1:

"Catawba Nuclear Station will conduct drills in accordance with the requirements of 10CFR50, Appendix E."

This revision ensures that drills conducted between biennial NRC evaluated exercises are performed in accordance with 10CFR50 Appendix E Section IV.F.2.b.

**SECTION O - RADIOLOGICAL EMERGENCY RESPONSE TRAINING**

No changes.

**SECTION P - RESPONSIBILITY FOR THE PLANNING EFFORT**

No changes.

**SECTION Q - APPENDICES**

No changes.

**APPENDIX 1 - DEFINITIONS**

No changes.

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Emergency Plan Revision 98-2  
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APPENDIX 2 - METEOROLOGICAL PROGRAM

No changes.

APPENDIX 3 - ALERT AND NOTIFICATION SYSTEM DESCRIPTION

No changes.

APPENDIX 4 - EVACUATION TIME ESTIMATES

No changes.

APPENDIX 5 - AGREEMENT LETTERS

No changes.

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Attachment 2

EP Group Manual 5.1.4

Enclosure 5.2  
Page 1 of 5

CATAWBA NUCLEAR SITE  
10CFR50.54 (q) EVALUATION CHECKLIST

Emergency Plan Revision: 98-2

SECTION 1

Does the Emergency Plan change decrease the effectiveness of the Emergency Plan resulting in the loss of reasonable assurance that adequate protection can and will be taken in the event of a radiological emergency as required by 10CFR50.47(a)?

\_\_\_\_\_ YES        X   NO

**Justification for Answer:**

Catawba Nuclear Station Emergency Plan Revision 98-2 contains the following categories of revisions. These revisions are described in detail in Attachment 1 and do not result in the loss of reasonable assurance that adequate protection can and will be taken in the event of a radiological emergency as required by 10CFR50.47(a).

1. Editorial change to correct a page number in the Table of Contents.
2. Removed the words "Approaching hurricane with" from the applicable EALs associated with Event Category 4.1.9, "Natural Disasters and Other Hazards." This revision provides clarification of the intent of the EAL and is consistent with the wording of the current Unusual Event EAL for sustained winds shown on Page D-96 of the Emergency Plan. These EAL revisions have been reviewed by the states and counties associated with the Catawba Nuclear Site EPZ.
3. Added the word "OR" to Figure J-2 to clarify the use of EMF53A and EMF 53B when determining if fission product inventory in Containment is greater than gap activity. This revision also provides consistency between the Emergency Plan and RP/0/A/5000/005, "General Emergency."
4. Added a statement to Section N.2 to ensure that drills conducted between NRC evaluated exercises are performed in accordance with 10CFR50 Appendix E Section IV.F.2b.



Catawba Nuclear Station  
Emergency Plan Revision 98-2  
Attachment 2

EP Group Manual 5.1.4

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**CATAWBA NUCLEAR SITE  
10 CFR 50.54 (q) EVALUATION CHECKLIST**

**SECTION 2**

Does the Emergency Plan change result in the loss of ability to meet the any of the standards described in 10CFR50.47(b) or the requirements described in 10CFR50 Appendix E or any NRC approved alternatives to those standards and requirements?

\_\_\_\_\_ YES                        X   NO

**Justification for Answer:**

(The following questions summarize the standards and requirements found in 10CFR50.47(b) and 10CFR50 Appendix E and should be used to support Section 2. Yes answers to any of the following questions should be fully explained as to why the Emergency Plan change does not result in the loss of the ability to meet the standard or requirement.)

<b>10CFR50.47 (b) Review</b>		
<b>Does this change affect any of the following subject areas of 10 CFR 50.47(b)?</b>		
1. Assignment of ERO responsibilities	_____ Yes	<u>  X  </u> No
2. Assignment of on-shift ERO personnel	_____ Yes	<u>  X  </u> No
3. Arrangement for utilizing State or local resources and staff	_____ Yes	<u>  X  </u> No
4. EALs	<u>  X  </u> Yes	_____ No
5. Notifications to off-site agencies, the ERO or the public	_____ Yes	<u>  X  </u> No
6. Communications between off-site agencies, the ERO, or the public	_____ Yes	<u>  X  </u> No
7. Dissemination of public information	_____ Yes	<u>  X  </u> No
8. Adequacy of emergency facilities and equipment	_____ Yes	<u>  X  </u> No
9. Methods, systems, and equipment for off-site response to a radiological emergency	_____ Yes	<u>  X  </u> No
10. Protective Action Recommendations / Determination	_____ Yes	<u>  X  </u> No
11. Emergency Worker radiological control	_____ Yes	<u>  X  </u> No
12. Medical services for contamination injured personnel	_____ Yes	<u>  X  </u> No
13. Re-entry / Recovery plans	_____ Yes	<u>  X  </u> No
14. Drills and exercises	<u>  X  </u> Yes	_____ No
15. Radiological emergency response training	_____ Yes	<u>  X  </u> No
16. Plan development, review and distribution	_____ Yes	<u>  X  </u> No

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10CFR50.54 (q) EVALUATION CHECKLIST

1. Question 4 was answered yes because this Emergency Plan revision contains revisions to the EALs. The EAL revisions provide clarity and were made to provide consistency between Section D of the Emergency Plan and applicable Emergency Response Implementing Procedures. These EAL revisions have been reviewed by the states and counties associated with the Catawba Nuclear Site EPZ. The EAL revisions do not result in the loss of ability to meet 10CFR50.47(b).
2. Question 14 was answered Yes because this Emergency Plan revision contains a revision to Section N.2 of the Emergency Plan. A statement was added to Section N.2 to ensure that drills conducted between NRC evaluated exercises are performed in accordance with 10CFR50 Appendix E Section IV.F.2.b. The revision to Section N.2 does not result in the loss of ability to meet 10CFR50.47(b).

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**CATAWBA NUCLEAR SITE  
10 CFR 50.54 (q) EVALUATION CHECKLIST**

10CFR50. Appendix E Review			
Does this change effect any of the following subject areas of 10 CFR 50, Appendix E?			
(i)(ii)(iii) Emergency plans as described in the FSAR	Yes	X	No
(iv) A. Organization for coping with radiological emergencies	Yes	X	No
(iv) B. Assessment of radiological emergencies	X	Yes	No
(iv) C. Classifications, EALs and ERO activation	X	Yes	No
(iv) D. Notification of Federal, State and local agencies and the public	Yes	X	No
(iv) E. ERFs, equipment, and communications	Yes	X	No
(iv) F. Training, drills, and exercises	X	Yes	No
(iv) G. Plans and procedures and surveillance of equipment and supplies	Yes	X	No
(iv) H. Re-entry and Recovery following an accident	Yes	X	No

1. Question (iv) B was answered yes because the word "OR" was added to Figure J-2. The revision to Figure J-2 clarifies the use of EMF53A and EMF53B when determining if fission product inventory in Containment is greater than gap activity. This revision also provides consistency between the Emergency Plan and RP/0/A/5000/005, "General Emergency." The revision to Figure J-2 does not result in the loss of ability to meet the requirements described in 10CFR50 Appendix E.
  
2. Question (iv) C was answered yes because this Emergency Plan revision contains revisions to the EALs. The EAL revisions provide clarity and were made to provide consistency between Section D of the Emergency Plan and applicable Emergency Response Implementing Procedures. These EAL revisions have been reviewed by the states and counties associated with the Catawba Nuclear Site EPZ. The EAL revisions do not result in the loss of ability to meet the requirements described in 10CFR50 Appendix E.
  
3. Questions (iv) F were answered yes because Section N.2 of the Emergency Plan was revised. A statement was added to Section N.2 to ensure that drills conducted between NRC evaluated exercises are performed in accordance with 10CFR50 Appendix E Section IV.F.2.b. The revision to Section N.2 does not result in the loss of ability to meet the requirements described in 10CFR50 Appendix E.

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10 CFR 50.54 (q) EVALUATION CHECKLIST

SECTION 3

Does the Emergency Plan change delete or contradict any regulatory requirement?

\_\_\_\_\_ YES       X  NO

Justification for Answer:

This evaluation did not identify any instances where Emergency Plan Revision 98-2 would delete or contradict any regulatory requirement.

Attach additional pages as required.

Prepared By: Steve Christy

Date: 2/17/98

Reviewed By: [Signature]

Date: 2/18/98

**CATAWBA NUCLEAR STATION  
EMERGENCY PLAN REVISION 98-2  
ATTACHMENT 3  
EMERGENCY PLAN UPDATE INSTRUCTIONS**

Replace Revision 98-1 Cover Sheet with Revision 98-2 Cover Sheet

**Table of Contents**

Replace page 5

**List of Figures, Tables, Attachments**

No changes.

**Introduction**

No changes.

**Tab A - Assignment of Responsibility**

No changes.

**Tab B - Onsite Emergency Organization**

No changes.

**Tab C - Emergency Response Support & Resources**

No changes.

**Tab D - Emergency Classification System**

Replace pages D-102

D-109

**Tab E - Notification Methods & Procedures**

No changes.

**Tab F - Emergency Communications**

No changes.

**Tab G - Public Education & Information**

No changes.

**Tab H - Emergency Facility & Equipment**

No changes.

**CATAWBA NUCLEAR STATION  
EMERGENCY PLAN REVISION 98-2  
ATTACHMENT 3  
EMERGENCY PLAN UPDATE INSTRUCTIONS**

**Tab I - Accident Assessment**

No changes.

**Tab J - Protective Response**

Replace page J-8

**Tab K - Radiological Exposure Control**

No changes.

**Tab L - Medical & Public Health Support**

No changes.

**Tab M - Recovery & Re-entry Planning**

No changes.

**Tab N - Exercises & Drills**

Replace page N-1

**Tab O - Radiological Emergency Response Training**

No Changes

**Tab P - Development, Periodic Review & Distribution of Emergency Plans**

No changes.

**Tab Q - Appendices**

No changes.

**Appendix 1 - Definitions**

No changes.

**Appendix 2 - Meteorological Systems**

No Changes

CATAWBA NUCLEAR STATION  
EMERGENCY PLAN REVISION 98-2  
ATTACHMENT 3  
EMERGENCY PLAN UPDATE INSTRUCTIONS

**Appendix 3 - Alert & Notification System**  
No changes.

**Appendix 4 - Evacuation Time Estimates**  
No changes.

**Appendix 5 - Agreement Letters**  
No changes.