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M. S. Tuckman
Executive Vice President
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August 9, 2002

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Subject: Comments on draft plant-specific Supplement 9 to NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants" Catawba Nuclear Station, Docket Nos. 50-413 and 50-414

By letter dated June 13, 2001, Duke Energy Corporation (Duke) submitted an Application to Renew the Facility Operating Licenses of McGuire Nuclear Station and Catawba Nuclear Station (Application). The staff has reviewed the information provided in the Environmental Report contained in the Application as well as the information provided in Duke letters dated February 1 and 8, 2002. By letter dated May 14, 2002, the staff forwarded a copy of the draft plant-specific Supplement 9 to NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants" for McGuire and provided Duke the opportunity to submit comments. Accordingly, please find Duke comments on draft Supplement 9 to NUREG-1437.

In addition to providing comments on the draft Supplement 9, Duke is also in the process of reviewing the conclusions contained in Section 5.2.7 of the draft Supplement 9. In this section, the staff concluded that two of the severe accident mitigation alternatives (SAMAs): one related to hydrogen control in SBO sequences is cost beneficial under certain assumptions, which are being examined in connection with the resolution of GSI-189, "Susceptibility of Ice-Condenser and Mark III Containments to Early Failure from Hydrogen Combustion During a Severe Accident" and a second SAMA related to the installation of flood protection around the 6900/4160 volt transformers. Duke is in the process of reviewing both of these SAMA and has provided its position in a separate letter dated August 8, 2002.

If there are any questions, please contact either Bill Miller at (704) 373-7900 or Bob Gill at (704) 382-3339.

Very truly yours,

M. S. Tuckman
M. S. Tuckman

Attachment

AD85

Affidavit

M. S. Tuckman, being duly sworn, states that he is Executive Vice President, Nuclear Generation Department, Duke Energy Corporation; that he is authorized on the part of said Corporation to sign and file with the U. S. Nuclear Regulatory Commission the attached comments on draft plant-specific Supplement 8 to NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants," and that all the statements and matters set forth herein are true and correct to the best of his knowledge and belief. To the extent that these statements are not based on his personal knowledge, they are based on information provided by Duke employees and/or consultants. Such information has been reviewed in accordance with Duke Energy Corporation practice and is believed to be reliable.

M. S. Tuckman

M. S. Tuckman, Executive Vice President
Duke Energy Corporation

Subscribed and sworn to before me this 9TH day of August 2002.

Mary P. Nelson
Notary Public

My Commission Expires:

JAN 22, 2006

xc: (w/ Attachment)

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Attachment 1

*Comments on Draft Plant-Specific Supplement 9 to NUREG-1437,
“Generic Environmental Impact Statement for License Renewal of Nuclear
Power Plants”*

Catawba Nuclear Station, Units 1 and 2

*Attachment 1
Comments on Draft NUREG-1437, Supplement 9
Catawba Nuclear Station, Units 1 and 2*

Chapter Executive Summary
Section Not Applicable

Comment Number	Page	Line	Comment
1	xix	12-14	The staff's conclusion statement contained in these lines contradicts the staff conclusion statement contained in Section 5.2.7, page 5-28, lines 20-21.

Chapter 1.0 Introduction
Section 1.5 Compliance and Consultations

Comment Number	Page	Line	Comment
2	1-9	8	From Table 1-1, under Column reading "Permit Expiration or Consultation Date": The permit expiration date is listed as "April 30, 2006". The NPDES permit issue date was April 30, 2001, however the permit was not issued until well into the 5-year cycle. Therefore the expiration date on the permit is not the full 5 years from date of issue. Correct the permit expiration date to be "June 30, 2005".

Chapter 2.0 Description of Nuclear Power Plant and Site and Plant Interaction with the Environment
Section 2.1.2 Reactor Systems

Comment Number	Page	Line	Comment
3	2-4	38	Line 38 should be revised to state: "...5.0 percent by weight uranium-235."

*Attachment 1
Comments on Draft NUREG-1437, Supplement 9
Catawba Nuclear Station, Units 1 and 2*

Chapter 2.0 Description of Nuclear Power Plant and Site and Plant Interaction with the Environment
Section 2.1.7 Power Transmission Systems

Comment Number	Page	Line	Comment
4	2-14	14	The term "conservation easements" should be replaced with "protection of rare species". Duke does not currently have conservation easements with SCDNR for transmission ROWs.

Chapter 2.0 Description of Nuclear Power Plant and Site and Plant Interaction with the Environment
Section 2.2.1 Land Use

Comment Number	Page	Line	Comment
5	2-14	34	"4916 ha (12,139 ac)" should read "4,917 ha (12,149 ac)"
6	2-14	35	The statement "Full pond was achieved in 1904..." is somewhat misleading. Construction of a much smaller dam was completed in 1904. This dam was completely covered by the current and much larger Wylie dam which resulted in a significantly larger reservoir. Change the statement to read: "The lake was initially impounded in 1904. Present full pond was obtained in 1924 with an increase in the dam height.
7	2-16	1	"Duke owns the land that underlays the lake..." is not entirely correct. Change the statement to read: "Duke either owns the land under the lake or owns flood rights to the land under the lake".
8	2-16	9	The fenced cemetery referenced as part of the site is not part of Catawba Nuclear site. The site is owned and operated by the Concord Cemetery Association.

*Attachment 1
Comments on Draft NUREG-1437, Supplement 9
Catawba Nuclear Station, Units 1 and 2*

Chapter 2.0 Description of Nuclear Power Plant and Site and Plant Interaction with the Environment
Section 2.2.8.1 Housing

Comment Number	Page	Line	Comment
9	2-27	24-25	From Table 2-4, under Column reading "Number of Personnel": Currently reads: Other – NC 95 Other – SC 96 In order to correctly reflect the number counts as given in Table 2-5, change to: Other - NC 112 Other - SC 79

Chapter 2.0 Description of Nuclear Power Plant and Site and Plant Interaction with the Environment
Section 2.2.8.2 Public Services

Comment Number	Page	Line	Comment
10	2-32	24-25	Lines Read: "There are 24 counties within the 80-km (50 mi) radius of the Catawba site: 13 in South Carolina and 10 in North Carolina. The 23-county area is served by 3 major interstate freeways." Correct the sentences to read: "There are 24 counties within the 80-km (50 mi) radius of the Catawba site: 11 in South Carolina and 13 in North Carolina. The 24-county area is served by 3 major interstate freeways."

*Attachment 1
Comments on Draft NUREG-1437, Supplement 9
Catawba Nuclear Station, Units 1 and 2*

Chapter 2.0 Description of Nuclear Power Plant and Site and Plant Interaction with the Environment

Section 2.2.8.4 Visual Aesthetics and Noise

Comment Number	Page	Line	Comment
11	2-36	5	"4912 ha (12,139 ac)" should read "4,917 ha (12,149 ac)"

Chapter 2.0 Description of Nuclear Power Plant and Site and Plant Interaction with the Environment

Section 2.2.8.5 Demography

Comment Number	Page	Line	Comment
12	2-38	31	"4912 ha (12,139 ac)" should read "4,917 ha (12,149 ac)"
13	2-38	34	Duke owns eight (not nine) public recreational access locations on Lake Wylie and one additional access location immediately downstream of the lake. Of these nine access areas, only two (not 3) are leased to other operators.

Chapter 2.0 Description of Nuclear Power Plant and Site and Plant Interaction with the Environment

Section 2.2.9.2 Historic and Archaeological Resources at Catawba

Comment Number	Page	Line	Comment
14	2-48	25	The Concord Cemetery is not located within the Catawba site, but adjacent to it. The cemetery is owned and operated by the Concord Cemetery Association.
15	2-48	37	The Concord Cemetery is not located within the Catawba site, but adjacent to it. The cemetery is owned and operated by the Concord Cemetery Association.

Attachment 1
Comments on Draft NUREG-1437, Supplement 9
Catawba Nuclear Station, Units 1 and 2

Chapter 2.0 Description of Nuclear Power Plant and Site and Plant Interaction with the Environment
Section 2.2.10 Related Federal Project Activities and Consultations

Comment Number	Page	Line	Comment
16	2-49	22	Line Reads: "This lake was formed by impounding the water of the Catawba River, and full pond was achieved in 1904." Correct the sentence to read: "This lake was formed by impounding the water of the Catawba River in 1904."
17	2-49	24	"4912 ha (12,139 ac)" should read "4,917 ha (12,149 ac)"

Chapter 4.0 Environmental Impacts of Operation
Section 4.1.2 Microbiological Organisms (Public Health)

Comment Number	Page	Line	Comment
18	4-14	40-41	Statement reads: Based on Catawba-specific experience, a review of available technical literature on thermophilic organisms, and the fact that there is little heated This sentence is incomplete.

Attachment 1
Comments on Draft NUREG-1437, Supplement 9
Catawba Nuclear Station, Units 1 and 2

Chapter 5.0 Environmental Impacts of Postulated Accidents
Section 5.2.2.1 Duke's Risk Estimates

Comment Number	Page	Line	Comment
19	5-6	20	5.8E-05/ry should be 5.8E-05/yr Duke's reported risk estimates are base on a calendar year basis, not a reactor year basis. The capacity factor used in the PRA is 0.9.
20	5-6	25 2 cases	"per reactor-year" should be "per year"
21	5-7	17	Table 5-3 - Heading "Frequency (per reactor-year)" should be Frequency (per year)
22	5-8	23	"reactor-year" should be "year"
23	5-8	26	"per reactor-year" should be "per year"
24	5-9	2	"per reactor-year" should be "per year"
25	5-9	3	"per reactor-year" should be "per year"

Chapter 5.0 Environmental Impacts of Postulated Accidents
Section 5.2.2.2 Review of Duke's Risk Estimates

Comment Number	Page	Line	Comment
26	5-11	10	"per reactor-year" should be "per year"

Attachment 1
Comments on Draft NUREG-1437, Supplement 9
Catawba Nuclear Station, Units 1 and 2

Chapter 5.0 Environmental Impacts of Postulated Accidents
Section 5.2.3.1 Process for Identifying Potential Design Improvements

Comment Number	Page	Line	Comment
27	5-12	25	“per reactor-year” should be “per year”
28	5-12	29	“per reactor-year” should be “per year”
29	5-14		Table 5-5 Footnote (a) “per reactor-year” should be “per year”
30	5-14		Table 5-5 Footnote (b) “per reactor-year” should be “per year”
31	5-15	10	Table 5-6 - The cost of enhancement provided by Duke for the back-up power to the igniters (\$540,000) is a per unit cost and should not be divided by 2. One of the major cost categories for the candidate modification is in the installation labor, primarily pulling cables. It was judged that finding a location for the diesel that would allow it to serve either unit would dramatically increase the cable pulling cost component. As such, it was judged that having a diesel for each unit would be less expensive (given the low cost of the hardware) than pulling cables to both units from a single location.
32	5-15	22	Table 5-6 – Delete Footnote (c)

Chapter 5.0 Environmental Impacts of Postulated Accidents
Section 5.2.4 Risk Reduction Potential of Design Improvements

Comment Number	Page	Line	Comment
33	5-17	28	“per reactor-year” should be “per year”
34	5-17	29	“per reactor-year” should be “per year”
35	5-17	35	“per reactor-year” should be “per year”

Attachment 1
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Catawba Nuclear Station, Units 1 and 2

Chapter 5.0 Environmental Impacts of Postulated Accidents
Section 5.2.5 Cost Impacts of Candidate Design Improvements

Comment Number	Page	Line	Comment
36	5-19	17	“\$205,000 per site” should be “\$205,000 per unit” see comment 28
37	5-19	24	“\$540,000 per site” should be “\$540,000 per unit” see comment 28
38	5-19	27-29	The sentence, “In order to provide ...” should be deleted as it is not appropriate to divide these costs by 2.
39	5-19	36-38	The sentence, “Duke further noted that ...” should be modified. The discussion that Duke provided relative to powering the air-return fans was in the context of powering the igniters. The mixing afforded by the fans may or may not be significant to the effectiveness of PARs, but in any case Duke provided no position on the need for fans when using PARs.

Chapter 5.0 Environmental Impacts of Postulated Accidents
Section 5.2.6.1 Duke Evaluation

Comment Number	Page	Line	Comment
40	5-22	34	3.81E+08 should be 3.1E+08 see page 12 of Attachment H

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Catawba Nuclear Station, Units 1 and 2

Chapter 5.0 Environmental Impacts of Postulated Accidents
Section 5.2.6.2 Staff Evaluation

Comment Number	Page	Line	Comment
41	5-25	14	"30 percent" should be "24 percent" See Table 5-3 of the SEIS
42	5-25	29	"per reactor-year" should be "per year"
43	5-25	30	"per reactor year" should be "per year"
44	5-26	3-5	The discussion concerning NUREG/CR-6427 should more accurately characterize the insights from the NUREG. This NUREG provided a simplified level 2 analysis for the purpose of investigating the importance of DCH. The conservative assumptions applied in this analysis with regard to hydrogen generation and the probability of ignition make it useful for understanding the uncertainties associated with early containment failure probabilities. The NUREG should not be interpreted as the latest information with respect to a realistic or best-estimate evaluation of the potential for early containment failure as a result of hydrogen combustion during station blackouts.
45	5-26	3	"per reactor-year" should be "per year"
46	5-26	20 2 cases	"per reactor-year" should be "per year"
47	5-27	5 & 9	Table 5-7 - \$270,000 should be \$540,000 and \$102,5000 should be \$205,000 The cost provided by Duke are per unit costs and should not be divided by 2
48	5-27	11-13	Table 5-7 - Delete Footnote (a)

*Attachment 1
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Catawba Nuclear Station, Units 1 and 2*

Chapter 6.0 Environmental Impacts of the Uranium Fuel Cycle and Solid Waste Management
Section 6.1 The Uranium Fuel Cycle

Comment Number	Page	Line	Comment
49	6-6	25	<p>This page presents a brief chronology of events that have occurred in the area of high level waste disposal subsequent to the GEIS being published in 1996. The chronology ends at the President's recommendation in February 2002.</p> <p>While it may seem a bit odd for this type of information to be contained in an environmental document, Duke believes that the chronology should remain in the SEIS and should be updated to reflect significant events that have taken place since then. For example:</p> <p>"On April 8, 2002, Governor Guinn of Nevada issued a "Notice of Disapproval" regarding the recommendation of the President. As required by the Nuclear Waste Policy Act, the matter was then referred to the Congress. Subsequently, [insert final decision of Congress and date]."</p>

Chapter Chapter 8.0 Environmental Impacts of Alternatives to Operating License Renewal
Section Section 8.2.2.1 Oil and Natural-Gas-Fired (Combined Cycle) Closed-Cycle Cooling System

Comment Number	Page	Line	Comment
50	8-32	23	Reference to SCDNR should be replaced with SCDHEC

Attachment 1
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Catawba Nuclear Station, Units 1 and 2

Chapter Chapter 8.0 Environmental Impacts of Alternatives to Operating License Renewal
Section Section 8.2.3.1 Nuclear Power Generation - Closed-Cycle Cooling System

Comment Number	Page	Line	Comment
51	8-41	18	Reference to SCDENR should be replaced with SCDHEC

Chapter Appendix E
Section Table E-1

Comment Number	Page	Line	Comment
52	E-2	11	Expiration date of NPDES wastewater permit is 6/30/05 rather than 4/30/06.