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October 9, 2007

U. S. Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555-0001

Subject: Duke Power Company LLC d/b/a Duke Energy
Carolinas, LLC
Catawba Nuclear Station, Units 1 and 2
Docket Nos. 50-413, 50-414

Response to a Request for Additional Information
(RAI) concerning the Catawba Nuclear Station
Units 1 and 2 Proposal to Revise Commitments to
USNRC Regulatory Guide 1.82, Rev.0 "Sumps For
Emergency Core Cooling and Containment Spray
Systems" and Revising Technical Specification
Surveillance Requirement (SR) 3.5.2.8 and
Associated Bases (TAC Nos. MD5163 and MD5164)

Please find the Duke Energy Carolinas (Duke) response to a
Request for Additional Information (RAI) concerning the license
amendment request (LAR) to Revise Commitments to USNRC
Regulatory Guide 1.82, Rev.0 "Sumps For Emergency Core Cooling
and Containment Spray Systems" and Revising Technical
Specification Surveillance Requirement (SR) 3.5.2.8 and
Associated Bases. This LAR was originally submitted by a Duke
letter to the NRC dated March 29, 2007 and supplemented by an
RAI response on September 7, 2007. Additional RAIs were received
October 1, 2007. The RAI responses are included on Attachment 1
to this letter. Attachment 2 contains pages from the Catawba
UFSAR Table 3-32, Load Combinations for Category I Structures.

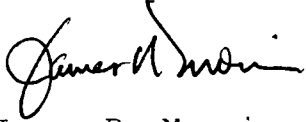
There are no regulatory commitments in this letter.

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If any questions arise or additional information is needed,
please contact Tony Jackson at (803) 831-3742.

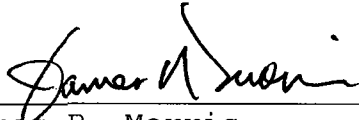
Very truly yours,

A handwritten signature in black ink, appearing to read "James R. Morris". The signature is fluid and cursive, with the first name "James" being more prominent.

James R. Morris

Attachments

James R. Morris affirms that he is the person who subscribed his name to the foregoing statement, and that all the matters and facts set forth herein are true and correct to the best of his knowledge.



James R. Morris
Vice President, Catawba Nuclear Station

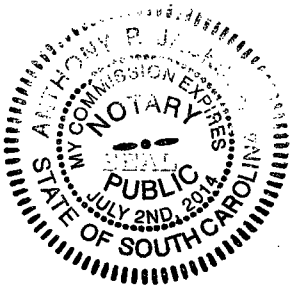
Subscribed and sworn to me:

10/9/07
Date


Notary Public

My commission expires:

7/2/2014
Date



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xc: w/attachments

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bxc (with attachments):

R. D. Hart
R. L. Gill
A. P. Jackson
K. E. Nicholson

NCMPA-1
NCEMC
PMPA
SREC
Catawba Document Control File: 801.01 - CN04DM
Catawba RGC Date File
ELL-EC050

ATTACHMENT 1

RESPONSES TO THE REQUEST FOR
ADDITIONAL INFORMATION
CATAWBA NUCLEAR STATION, UNITS 1 AND 2

- I. Estimate the fraction of the strainer area that is going to be inaccessible and uninspectable.

Response:

Prior to beginning installation, the ECCS sump strainer modification team developed and constructed a mock-up of the sump strainer assembly. To date, the strainer has yet to be fully assembled inside containment. Based on review of the mock-up and the applicable design drawings, Duke preliminarily estimates that approximately 30% of the outer surface area of the assembly will be accessible for inspection without disassembly of the structure. This estimate assumes that the back of the assembly, where the majority of filter elements are located, is inaccessible due to interferences. This also assumes the bottom of the assembly is inaccessible due to floor clearances. The front façade is believed to be fully accessible for inspection from the pipe chase area in containment. Duke will incorporate a more accurate definition of the accessible area into the inspection procedure after the sump strainer has been fully assembled for use in all future inspections after this installation outage.

- II. The following response will supplement the response to the Mechanical and Civil Engineering Branch for Question #4 on Attachment 4 of the September 7, 2007 RAI Response Letter. The original RAI #4 and response are shown first followed by the supplemental questions and responses.
 4. Attachment 3 of the LAR, dated March 29, 2007: Section 2.2, (p. 5 of 34) paragraph 3: Provide a reference of the sump strainer structural design calculation, and its support or anchoring system establishing its design adequacy. Provide a summary of the structural adequacy evaluation of the modified sump strainer including the design margins. Also, identify the design codes that were utilized in the structural design.

Response:

Enercon calculations DUK006-CALC-02 (UNIT 2)/DUK009-CALC-02 (Unit 1) are the Analyses of GSI-191 Containment Building Sump Strainer Structure Excluding Wing Walls and Water Boxes. The purpose of these calculations are to qualify the Catawba Units 1 and 2 Containment Building Sump Strainer for loading associated with dead weight, seismic (including hydrodynamic mass) and differential pressure (psid), in order to meet the design requirements of Catawba Nuclear Station Units 1 and 2. All assumptions used in this calculation meet the Current Licensing Basis. The Containment Building Sump strainer supporting structure is being installed under Design Change CD200490 (Unit 2)/CD100493 (Unit 1).

Enercon calculations DUK006-CALC-05 (Unit 2)/DUK009-CALC-05 (Unit 1) are the Analyses of GSI-191 Containment Building Sump Strainer Structure Wing Plenums and Water Boxes. The purpose of this calculation is to qualify the Catawba Units 1 and 2 New Containment Recirc Sump Strainer {Wing Plenums (Tube modules in Wing area) & Waterboxes} for loading associated with dead weight, seismic (including hydrodynamic mass) and differential pressure, in order to meet the design requirements of Catawba Nuclear Station Units 1 and 2. All assumptions used in this calculation meet the Current Licensing Basis. This Containment Building New Sump Strainer associated supporting structure is being installed under Design Change number CD200490 (Unit 2)/CD100493 (Unit 1).

The design margins are identified throughout the calculations and are available for review. However, since the Chemical Effects Testing is not complete the PSID margins across the structure are not known at this time. The structure was designed to withstand 7 psid. These calculations have been originated and design verified by Enercon and will receive their final approval at completion of installation and after any field changes/Chemical Effects results have been incorporated.

- In RAI response for EMCB RAI question #4, the licensee did not include the list identifying the design codes and the load combinations used in the structural design of the strainer assembly. Can the licensee provide this information?

Response:

The Design Codes are shown below:

American Institute of Steel Construction (AISC) Manual of Steel Construction, 9th Edition
American Society of Mechanical Engineers (ASME) Section III, 1989 Edition
American Welding Society (AWS) D1.6, 1999 "Structural Welding code Stainless Steel"

Load combinations used in the structural design of the strainer assembly as outlined in CNS UFSAR Table 3-32 are shown on Attachment 2 of this letter.

- III. The following chart and graph will replace information in the response to the Mechanical and Civil Engineering Branch for Question #7 on Attachment 4 of the September 7, 2007 RAI Response Letter. An error in the reference height was discovered in the Catawba NPSH calculation and thus the accompanying graph and chart for NPSH have been revised to correct this difference.

Temp	1A ND Pump NPSHa/Margin	1A NS Pump NPSHa/Margin
200	28/12	25/5
190	33/17	30/10
170	41/25	38/18
150	46/30	43/23
130	50/34	47/27
120	51/35	48/28

