



November 04, 1999
RC-99-0214

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

Attention: Ms. K. R. Cotton

Gentlemen:

Subject: VIRGIL C. SUMMER NUCLEAR STATION (VCSNS)
DOCKET NO. 50/395
OPERATING LICENSE NO. NPF-12
RESPONSE TO THE GENERIC LETTER 99-02,
"LABORATORY TESTING OF NUCLEAR-GRADE
ACTIVATED CHARCOAL

Generic Letter 99-02, "Laboratory Testing of Nuclear-Grade Activated Charcoal", requires all licensees to adopt ASTM D3803-1989 (or equivalent) test protocol when performing Technical Specifications (TS) required testing of Engineered Safeguards Feature (ESF) charcoal filtration systems. The Nuclear Regulatory Commission (NRC) developed four groupings of plants based on current technical specification testing requirements. The groups are as follows: (1) plants in compliance with their TS that test in accordance with ASTM D3803-1989, (2) plants in compliance with their TS that test with a protocol other than ASTM D3803-1989, (3) plants not in compliance with their TS that test in accordance with ASTM D3803-1989, and (4) plants not in compliance with their TS that test in accordance with a protocol other than ASTM D3803-1989. Based on the existing TS requirements for the Spent Fuel Pool Ventilation System and the Control Room Normal and Emergency Air Handling System, South Carolina Electric and Gas Company (SCE&G) has determined that VCSNS is categorized within Group 1.

SCE&G acting for itself and as agent for South Carolina Public Service Authority, hereby submits the attached in response to Generic Letter 99-02, "Laboratory Testing of Nuclear-Grade Activated Charcoal". This submittal addresses the 180 day response action required by Action Item 1 for plants categorized as Group 1 plants through the discussion presented in the Generic Letter.

A081

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These statements and matters set forth herein are true and correct to the best of my knowledge, information, and belief.

Should you have questions, please call Mr. Jim Turkett at (803) 345-4047.

Very truly yours,

Stephen A. Byrne FOR GST

Gary J. Taylor

JT/GJT
Attachment

c: J. L. Skolds
W. F. Conway
J. J. Galan (w/o Attachment)
R. J. White
L. A. Reyes

NRC Resident Inspector
J. B. Knotts, Jr.
RTS (LTR 990002,)
File (815.14)
DMS (RC-99-0214)

STATE OF SOUTH CAROLINA :
:
COUNTY OF FAIRFIELD :

TO WIT :

I hereby certify that on the 4th day of Nov. 1999, before me, the subscriber, a Notary Public of the State of South Carolina personally appeared Stephen A. Byrne, being duly sworn, and states that he has signature authority for the Vice President, Nuclear Operations of the South Carolina Electric & Gas Company, a corporation of the State of South Carolina, that he provides the foregoing response for the purposes therein set forth, that the statements made are true and correct to the best of his knowledge, information, and belief, and that he was authorized to provide the response on behalf of said Corporation.

WITNESS my Hand and Notarial Seal

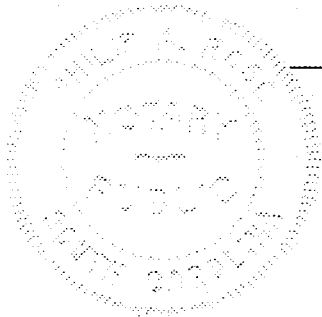
Stephen A. Byrne

Notary Public

My Commission Expires

July 13, 2005

Date



Response Requirements:

Generic Letter 99-02, Laboratory Testing of Nuclear Grade Activated Charcoal, requires all Licensees to adopt ASTM D3803-1989 (or equivalent) test protocol when performing Technical Specification (TS) required testing of ESF charcoal filtration systems. The NRC developed 4 groupings of plants based on current Tech Spec test requirements. The groups are as follows: (1) plants in compliance with their TS that test in accordance with ASTM D3803-1989, (2) plants in compliance with their TS that test in accordance with a test protocol other than ASTM D3803-1989, (3) plants not in compliance with their TS that test in accordance with ASTM D3803-1989, and (4) plants not in compliance with their TS that test in accordance with a test protocol other than ASTM D3803-1989. Based on our existing TS test requirements for the Spent Fuel Pool Ventilation System and the Control Room Normal and Emergency Air Handling System, Virgil C. Summer Nuclear Station (VCSNS) is categorized within Group 1.

There are 5 Requested Actions provided in GL 99-02. Requested Action Item 1 states that plants which currently test to ASTM D3803-1989 and which are in compliance with their TS requirements are only required to address Requested Action Item 1. VCSNS meets these requirements and is therefore only required to address Requested Action Item 1.

Requested Action for Item 1 is as follows: (1) Within 180 days of the date of this generic letter, submit a written response to the NRC describing your current TS requirements for the laboratory testing of charcoal samples for each ESF ventilation system including the specific test protocol, temperature, RH, charcoal bed thickness, total residence time per bed depth, and penetration at which the TS require the test to be performed. If your current TS specifically require laboratory testing of charcoal samples in accordance with the ASTM D3803-1989 protocol at 30°C [86°F], and you have been testing in accordance with this standard, then you only need to address this requested action (i.e. no TS amendment or additional testing is required).

From Requested Action Item 1 the specific response requirements for each ESF ventilation system are as follows:

- The current Technical Specification requirements,
- The specific Test Protocol,
- The test temperature,
- The test relative humidity,
- The charcoal bed thickness,
- The total residence time per bed depth, and
- The acceptable penetration.

Response:

VCSNS has two ESF ventilation systems, which utilize charcoal filtration. They are designated as the Spent Fuel Pool Ventilation System and the Control Room Normal and Emergency Air Handling System. The requested information for each ventilation system is provided below.

SPENT FUEL POOL VENTILATION SYSTEM

The current VCSNS TS 4.9.11.b.2 requirements are:

“Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of ASTM D3803-1989, at a relative humidity of 95% and 30°C with a methyl iodide penetration of <2.5%”.

The specific Test Protocol:

ASTM D3803-1989.

The test temperature:

30 °C

The test relative humidity:

95%

The charcoal bed thickness:

2 inches

The total residence time per bed depth:

0.2676 seconds

The acceptable penetration:

<2.5%

CONTROL ROOM NORMAL AND EMERGENCY AIR HANDLING SYSTEM

The current VCSNS TS 4.7.6 c.2 requirements are:

“Verifying, within 31 days after removal, that a laboratory analysis of a representative charcoal sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of ASTM D3803-1989, at a relative humidity of 70% and 30°C with a methyl iodide penetration of <2.5%.”

The specific Test Protocol:

ASTM D3803-1989.

The test temperature:

30 °C

The test relative humidity:

70%

The charcoal bed thickness:

2 inches

The total residence time per bed depth:

0.2595 seconds

The acceptable penetration:

<2.5%