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

Subject: Entergy Operations, Inc.
Additional Information Pertaining to NRC Generic Letter 99-02, "Laboratory Testing of Nuclear-Grade Activated Charcoal"

River Bend Station	Waterford Steam Electric Station – Unit 3
Docket No. 50-458	Docket No. 50-382
License No. NPF-47	License No. NPF-38

- Reference:
1. NRC Generic Letter 99-02, "Laboratory Testing of Nuclear-Grade Activated Charcoal," dated June 3, 1999
 2. Letter CNRO-99/00026, "Proposed Amendment to Technical Specifications Laboratory Testing of Activated Charcoal," dated November 23, 1999

CNRO-2000-00032

Gentlemen:

By this letter, Entergy Operations, Inc. (Entergy) is providing information as requested in recent telephone conversations with the NRC staff concerning our response to NRC Generic Letter 99-02, "Proposed Amendment to Technical Specifications Laboratory Testing of Activated Charcoal," as provided in Reference 2.

Specifically, this letter responds to comments pertaining to River Bend Station (RBS) and Waterford Steam Electric Station – Unit 3 (W3). Entergy is transmitting a separate letter responding to comments pertaining to Arkansas Nuclear One – Units 1 and 2. There were no outstanding comments requiring a response for Grand Gulf Nuclear Station. If you have any further questions or comments pertaining to this information, please contact Mr. Guy Davant at (601) 368-5756.

A081

This letter contains no commitments.

Yours truly,



MAK/GHD/baa

attachments: 1. River Bend Station
2. Waterford Steam Electric Station – Unit 3

cc: Mr. C. M. Dugger (W3)
Mr. R. K. Edington (RBS)

Mr. T. W. Alexion, NRC Project Manager, ANO
Mr. T. R. Farnholtz, NRC Senior Resident Inspector, W3
Mr. J. F. Harold, NRC Project Manager, RBS
Mr. N. Kalyanam, NRC Project Manager, W3
Mr. E. W. Merschoff, NRC Regional Administrator, Region IV
Mr. T. W. Pruett, NRC Senior Resident Inspector, RBS
Mr. S. P. Sekerak, NRC Project Manager, GGNS

RIVER BEND STATION

NRC Comment:

On proposed Technical Specifications (TS) page 5.0-12 in 5.5.7.c, it appears that the intended values for the proposed test penetrations are 0.5% instead of the 0.175% as shown. If that is your intention, please revise proposed TS 5.5.7.c accordingly.

Response:

The marked up Page 5.0-12 contained in Attachment 5 correctly shows the revised criterion values for Standby Gas Treatment System (SGTS), Fuel Building Ventilation System (FBVS), and Control Room Fresh Air System (CRFAS) methyl iodide penetration to be 0.5%. The revised Page 5.0-12 contained in Attachment 5 is incorrect. A corrected page is included.

5.5 Programs and Manuals

5.5.7 Ventilation Filter Testing Program (VFTP) (continued)

- b. Demonstrate for each of the ESF systems that an in-place test of the charcoal adsorber shows a penetration and system bypass < 0.05% when tested in accordance with Regulatory Guide 1.52, Revision 2, and ANSI N510-1989 at the system flowrate specified below \pm 10%:

<u>ESF Ventilation System</u>	<u>Flowrate</u>
SGTS	12,500 cfm
FBVS	10,000 cfm
CRFAS	4,000 cfm

- c. Demonstrate for each of the ESF systems that a laboratory test of a sample of the charcoal adsorber, when obtained as described in Regulatory Guide 1.52, Revision 2, shows the methyl iodide penetration less than the value specified below when tested in accordance with ASTM D3803-1989 at a temperature of 30°C and the relative humidity specified below:

<u>ESF Ventilation System</u>	<u>Penetration</u>	<u>RH</u>
SGTS	0.5%	70%
FBVS	0.5%	70%
CRFAS	0.5%	70%

- d. Demonstrate for each of the ESF systems that the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers is less than the value specified below when tested in accordance with Regulatory Guide 1.52, Revision 2, and ANSI N510-1989 at the system flowrate specified below \pm 10%:

<u>ESF Ventilation System</u>	<u>Delta P</u>	<u>Flowrate</u>
SGTS	< 8" WG	12,500 cfm
FBVS	< 8" WG	10,000 cfm
CRFAS	< 8" WG	4,000 cfm

(continued)

WATERFORD STEAM ELECTRIC STATION – UNIT 3

NRC Comment:

The following request refers to all four ventilation systems:

- (1) Shield Building Ventilation System,
- (2) Control Room Emergency Air Filtration System,
- (3) Controlled Ventilation Area System, and
- (4) Fuel Handling Building Ventilation System.

GL 99-02 states, "If the system has a face velocity greater than 110% of 0.203 m/s [40 ft/min], then the revised TS should specify the face velocity."

Under Section D in Attachment 1 of the November 23, 1999 letter (CNRO-99/00026), it states: "The affected systems for each facility have face velocities of approximately 40 ft/min, recognizing air flow distribution tolerances of $\pm 20\%$ are acceptable per RG 1.52. Therefore, this specific request is not applicable."

Concerning the actual and test face velocities, please indicate the actual system face velocities and how they are calculated.

Response:

The following table contains the requested information.

	Shield Building Ventilation System	Control Room Emergency Air Filtration System	Controlled Ventilation Area System	Fuel Handling Building Ventilation System
System Face Velocity*	40 fpm $\pm 10\%$ (Based on 10,000 cfm $\pm 10\%$ system flowrate as required by TS 4.6.6.1.b.3)	40 fpm $\pm 10\%$ (Based on 4,225 cfm $\pm 10\%$ system flowrate as required by TS 4.7.6.1.b.3)	40 fpm $\pm 10\%$ (Based on 3,000 cfm $\pm 10\%$ system flowrate as required by TS 4.7.7.b.3)	40 fpm $\pm 10\%$ (Based on 4,000 cfm $\pm 10\%$ system flowrate as required by TS 4.9.12.b.3)

* Per the vendor technical manual for the associated charcoal filter train, each charcoal adsorber is designed for a nominal face velocity of 40 fpm based on a design volumetric flow rate for the system. The charcoal is tested at flow rates specified in TS. TS-required volumetric flow rates are $\pm 10\%$; therefore, face velocities will also be $\pm 10\%$.