



Tennessee Valley Authority, Post Office Box 2000, Decatur, Alabama 35609-2000

November 18, 1999

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

Gentlemen:

In the Matter of	)	Docket Nos. 50-259
Tennessee Valley Authority	)	50-260
		50-296

**BROWNS FERRY NUCLEAR PLANT (BFN) UNITS 1, 2, AND 3 - RESPONSE TO NRC GENERIC LETTER (GL) 99-02 - LABORATORY TESTING OF NUCLEAR-GRADE ACTIVATED CHARCOAL**

This letter provides BFN's response to the subject GL dated June 3, 1999, regarding testing of nuclear-grade activated charcoal. The specific NRC request is repeated as follows.

Within 180 days 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, relative humidity, charcoal bed thickness, total residence time per bed depth, penetration at which 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).

A081

TVA Reply:

The laboratory testing requirements for nuclear-grade activated charcoal for BFN Units 1, 2, and 3, Engineered Safety Feature (ESF) ventilation systems is provided in the following excerpt from BFN Technical Specifications, Section 5.5.7, Ventilation Filter Testing Program. The affected ESF systems include standby gas treatment and control room ventilation system filters.

TS 5.5.7.c Demonstrate for each of the ESF systems that a laboratory test of a sample of the charcoal adsorber, shows a methyl iodide efficiency  $\geq 90\%$  when tested in accordance with ASTM D3803-1989.

This testing shall be performed 1) every 24 months, 2) after every 720 hours of system operation, or 3) following significant painting, fire, or chemical release in any ventilation zone communicating with the system.

The requested test parameters are provided in the table:

Temperature	30.0° ± 0.4° Centigrade
Relative Humidity	91.0 - 96.0 Percent
Total residence time per bed depth	0.25 Seconds
Bed Thickness	50 ± 1 millimeter
Penetration	Calculated in accordance with ASTM D3803-1989

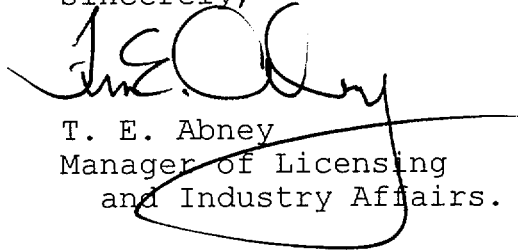
These test parameters, although not specifically listed in the BFN TS, are addressed in ASTM D3803-1989 and correspondingly are included in BFN's surveillance procedures for charcoal laboratory testing.

In the supporting discussion in the GL, NRC indicated that the staff had performed an internal survey of the operating plants to determine those plants whose TS referenced ASTM D3803-1989, and that testing in accordance with ASTM D3803-1989 was appropriate. The BFN TS clearly reference the subject ASTM.

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There are no commitments contained in this letter. If you have any questions regarding this information, please contact me at (256) 729-2636.

Sincerely,



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and Industry Affairs.

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