

Point Beach Nuclear Plant 6610 Nuclear Rd., Two Rivers, WI 54241 (920) 755-2321

NPL 99-0406

July 29, 1999

U.S. NUCLEAR REGULATORY COMMISSION ATTN: Document Control Desk Washington, D.C. 20555-0001

DOCKETS 50-266 AND 50-301
RESPONSE TO NRC GENERIC LETTER 99-02,
"LABORATORY TESTING OF NUCLEAR-GRADE ACTIVATED CHARCOAL"
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

Ladies/Gentleman:

Wisconsin Electric Power Company (WE), licensee for the Point Beach Nuclear Plant (PPNP), has reviewed the information contained in Generic Letter 99-02 "Laboratory Testing of Nuclear-Grade Activated Charcoal," dated June 3, 1999. The Generic Letter (GL) was issued to alert addressees that the NRC has determined that testing nuclear-grade activated charcoal to standards other than American Society for Testing and Materials (ASTM) D3803-1989, "Standard Test Method for Nuclear-Grade Activated Carbon," does not provide assurance for complying with the current licensing basis as it relates to the dose limits of General Design Criterion (GDC) 19 of Appendix A to Part 50 of Title 10 of the Code of Federal Regulations (10 CFR) and Subpart A of 10 CFR Part 100. The purpose of this letter is to provide WE's response to the requested actions of GL 99-02 for the PBNP.

Included in the GL was the following requested action:

Requested Action 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 americ ment or additional testing is required)."

9908040060 990729 PDR ADOCK 05000266 P PDR

WE Response:

The PBNP Technical Specifications (TS) required charcoal testing is performed in accordance with ASTM D3803-1989.

Specific Test Protocol:

The Bases of TS Section 15.4.11, "Control Room Emergency Filtration," defines the specific standard for laboratory analysis of charcoal adsorber. Specifically, the bases states the following: "The charcoal absorbent laboratory sample analysis is performed in accordance with ASTM D3803-89, "Standard Test Method for Nuclear-Grade Activated Carbon." In addition, the inlet iodide concentration, relative humidity and test temperature indicated below are called out in the Technical Specification test requirement.

Temperature, Relative Humidity, Charcoal bed thickness, Total residence time per bed depth, and Penetration at which the TS require the test to be performed:

The test protocol includes the following nominal conditions:

Pre-Equilibration time: 16 hr
Equilibration Time: 2 hr
Load Time: 1 hr
Elution Time: 1 hr

Test Temperature: 30 °C
Test Relative Humidity: 95%

Test Velocity: 12.2 m/min
Carbon Bed Thickness: 2 inches
Residence Time (Calculated): 0.25 seconds

Methyl Iodide Inlet Concentration: 1.75 mg/cubic meter

The maximum penetration allowed by Technical Specification 15.3.12 is 1% (minimum efficiency 99.0% allowed).

Discussion:

Laboratory testing of PBNP charcoal samples is performed by NUCON Intl. This company performs charcoal sample analysis for numerous other licensees. The testing is performed in accordance with ASTM D3803-89, as required by the PBNP purchase order issued to the company to perform the testing. NUCON Intl. confirms that the charcoal analysis is done in accordance with ASTM D3803-89 in the test reports for the specific sample tests.

As indicated in the GL, WE only needs to address Requested Action 1 of the GL because the PBNP TS require laboratory testing of charcoal samples in accordance with the ASTM D3803-1989 protocol at 30 °C (86 °F), and the company that performs the testing for PBNP tests the samples in accordance with this standard. Accordingly, a WE response to the other Requested Actions of GL 99-02 is not required nor provided. As WE is already in conformance with the testing requirements of ASTM D8303-1989, a Technical Specification Amendment or additional testing is not required.

We believe this information is responsive to your request. Please contact us if you have any questions or require additional information.

Sincerely,

A. J. Cayia Manager

Regulatory Services & Licensing

Subscribed to and sworn before me

on this 29 day of

Notary Public, State of Wisconsin

My Commission expires on

MAW/tat

cc: NRC Regional Administrator

NRC Resident Inspector NRC Project Manager

PSCW