



Richard B. Abbott  
Vice President  
Nuclear Engineering

Phone: 315.349.1812  
Fax: 315.349.4417

November 3, 2000  
NMP2L 1994

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

RE: Nine Mile Point Unit 2  
Docket No. 50-410  
NPF-69

**Subject:** *Nine Mile Point Unit 2 Application for Amendment Regarding Generic Letter 99-02, TAC No. MA9401*

Gentlemen:

Niagara Mohawk Power Corporation (NMPC) hereby transmits supplemental information in support of previously submitted applications for amendment to Nine Mile Point Unit 2 (NMP2) Operating License NPF-69. The initial application was dated November 30, 1999 (NMP2L 1913). By letter dated June 28, 2000 (NMP2L 1966) NMP2 provided Improved Technical Specifications (ITS) formatted pages to replace the previously submitted Current Technical Specifications pages. Supplemental information is provided in the Attachment to this letter to respond to the NRC request for additional information documented in letter dated October 26, 2000.

On June 3, 1999, the NRC issued Generic Letter (GL) 99-02, Laboratory Testing of Nuclear-Grade Activated Charcoal. GL 99-02 was issued to alert addressees 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 Criteria 19 of Appendix A to 10CFR Part 50 and Subpart A of 10CFR Part 100. The GL also requested that all addressees determine whether their Technical Specifications (TS) reference ASTM D3803-1989 for charcoal filter laboratory testing. Addressees whose TS do not reference ASTM D3803-1989 should either amend their TS to reference ASTM D3803-1989 or propose an alternative test protocol.

As noted above, NMP2 elected to amend the TS. The previously submitted amendment request required that a laboratory analysis of a representative carbon sample be tested in accordance with ASTM D3803-1989 per the requirements of GL 99-02. The purpose of this letter is to provide supplemental information in support of the previous submittal per the NRC's request for additional information.

A081

Pursuant to 10CFR50.91(b)(1), NMPC has provided a copy of this supplemental information to the appropriate state representative. As previously noted, NMPC requests approval of the requested license amendment by November 17, 2000 to support ITS implementation.

Very truly yours,



Richard B. Abbott  
Vice President Nuclear Engineering

RBA/DEV/kap  
Attachment

xc: Mr. H. J. Miller, NRC Regional Administrator, Region I  
Ms. M. K. Gamberoni, Section Chief PD-I, Section 1, NRR  
Mr. G. K. Hunegs, NRC Senior Resident Inspector  
Mr. P. S. Tam, Senior Project Manager, NRR  
Mr. John P. Spath  
NYSERDA  
286 Washington Avenue Ext.  
Albany, NY 12203-6399  
Records Management

## **ATTACHMENT**

### **REQUEST FOR ADDITIONAL INFORMATION**

### **NIAGARA MOHAWK POWER CORPORATION**

### **NINE MILE POINT NUCLEAR STATION UNIT 2**

#### **RESPONSES TO NRC REQUEST FOR ADDITIONAL INFORMATION (RAI) DOCUMENTED IN LETTER DATED OCTOBER 26, 2000**

##### **RAI No. 1:**

*Requested Action 1 of GL 99-02 requested that each licensee provide the specific test protocol, temperature, relative humidity, charcoal bed depth, total residence time per bed depth, and penetration for each engineered safety feature ventilation system. Please provide the following information:*

- (1) charcoal bed depth for the Control Room Envelope Filtration (CREF) System.*
- (2) total residence time per bed depth for the CREF and the Standby Gas Treatment (SGT) System.*

##### **Response:**

Item (1): The charcoal bed depth for the CREF System is 4 inches (nominal).

Item (2): Total residence time per bed depth is:

CREF:	0.5 seconds
SGT:	0.48 seconds

##### **RAI No. 2:**

*Requested Action 2 of 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."*

*Please provide information which indicates the actual system face velocity for the CREF and describe how it is calculated for both systems. The actual system face velocities can be calculated by dividing the maximum accident condition system flow rates specified in the Technical Specification (TS) (nominal + typically 10% upper value) by the total exposed surface area of the charcoal filter media. (The guidance on calculation of the residence times in American Society of Mechanical Engineers AG-1-1997, Division II, Sections FD and FE,*

*Articles I-1000, or in American National Standards Institute N510-1975 can be used to calculate the actual system face velocities). It should be noted that the face velocity should be consistent with the bed depth and residence time. (Bed Depth = Face Velocity x Residence Time)*

**Response:**

Design face velocity for the CREF System filter is 40 ft/min. This value, along with the system design flow rate, minimum residence time, and nominal bed depth, were specified in the original filter procurement documents. These parameters allowed the equipment vendor to determine the required net effective area of the charcoal filter media.

The SGT filter face velocity value that is incorporated into the TS (44.9 ft/min) was calculated by dividing the system design flow rate by the actual total exposed area of the charcoal filter media.

For both filters, the face velocity is consistent with the bed depth and residence time.

**RAI No. 3:**

*In order for the staff to verify that a safety factor as low as 2 is used, the staff needs to know the charcoal adsorber removal efficiencies which are credited in the radiological accident analyses for organic iodide. Please provide information stating the credited organic iodide efficiency for each system.*

**Response:**

Charcoal adsorber removal efficiencies that are credited in the accident radiological consequence analyses are documented in NMP2 USAR Tables 15.4-10 (Control Rod Drop Accident), 15.6-6 (Steam Line Break Accident), and 15.6-13 (Loss of Coolant Accident), as follows:

CREF:	99%
SGT:	99%