

September 20, 2000

Mr. James Knubel
Chief Nuclear Officer
Power Authority of the State of
New York
123 Main Street
White Plains, NY 10601

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 3 - REQUEST FOR
ADDITIONAL INFORMATION REGARDING PROPOSED ACTIVATED
CARBON TEST AMENDMENT (TAC NO. MA7854)

Dear Mr. Knubel:

By letter dated November 29, 1999, you requested an amendment to your Technical Specifications to adopt the "Standard Test Method for Nuclear Grade Activated Carbon" for charcoal filter laboratory testing with certain exceptions. Before we can complete our review, we request that you respond to the enclosed questions. These questions were discussed with members of your staff in a teleconference on August 9, 2000. We understand that you intend to respond to our questions by October 31, 2000.

Sincerely,

/RA/

George F. Wunder, Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-286

Enclosure: As stated

cc w/encl: See next page

Mr. James Knubel
Chief Nuclear Officer
Power Authority of the State of
New York
123 Main Street
White Plains, NY 10601

September 20, 2000

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 3 - REQUEST FOR
ADDITIONAL INFORMATION REGARDING PROPOSED ACTIVATED
CARBON TEST AMENDMENT (TAC NO. MA7854)

Dear Mr. Knubel:

By letter dated November 29, 1999, you requested an amendment to your Technical Specifications to adopt the "Standard Test Method for Nuclear Grade Activated Carbon" for charcoal filter laboratory testing with certain exceptions. Before we can complete our review, we request that you respond to the enclosed questions. These questions were discussed with members of your staff in a teleconference on August 9, 2000. We understand that you intend to respond to our questions by October 31, 2000.

Sincerely,

/RA/

George F. Wunder, Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-286

Enclosure: As stated
cc w/encl: See next page

DISTRIBUTION:

PUBLIC	G. Wunder
PDI-1 Reading File	L. Berry
S. Black	OGC
M. Gamberoni	ACRS
S. Little	M. Oprendeck, RI

ACCESSION NO. ML003749090

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	PM:PDI-1	E	LA:PDI-1	SC:PDI-1				
NAME	GWunder		SLittle	MGamberoni				
DATE	9/14/00		9/14/00	9/18/00				

Official Record Copy

Indian Point Nuclear Generating Unit No. 3

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. Gerald C. Goldstein
Assistant General Counsel
Power Authority of the State
of New York
1633 Broadway
New York, NY 10019

Mr. Eugene W. Zeltmann, President
and Chief Operating Officer
Power Authority of the State
of New York
30 South Pearl Street
Albany, NY 12207-3425

Mr. Robert J. Barrett
Site Executive Officer
Indian Point 3 Nuclear Power Plant
P.O. Box 215
Buchanan, NY 10511

Ms. Charlene D. Faison
Director Nuclear Licensing
Power Authority of the State
of New York
123 Main Street
White Plains, NY 10601

Mr. F. William Valentino, President
New York State Energy, Research,
and Development Authority
Corporate Plaza West
286 Washington Ave. Extension
Albany, NY 12203-6399

Charles Donaldson, Esquire
Assistant Attorney General
New York Department of Law
120 Broadway
New York, NY 10271

Resident Inspector
Indian Point 3 Nuclear Power Plant
U.S. Nuclear Regulatory Commission
P.O. Box 337
Buchanan, NY 10511

Mr. John McCann
Nuclear Safety and Licensing
Consolidated Edison Company
of New York, Inc.
Broadway and Bleakley Avenues
Buchanan, NY 10511

Mayor, Village of Buchanan
236 Tate Avenue
Buchanan, NY 10511

Mr. Richard L. Patch, Director
Quality Assurance
Power Authority of the State
of New York
123 Main Street
White Plains, NY 10601

Mr. Paul Eddy
New York State Dept. of
Public Service
3 Empire State Plaza, 10th Floor
Albany, NY 12223

Mr. Harry P. Salmon, Jr.
Vice President - Engineering
Power Authority of the State
of New York
123 Main Street
White Plains, NY 10601

Mr. David Lochbaum
Nuclear Safety Engineer
Union of Concerned Scientists
1707 H Street, NW., Suite 600
Washington, DC 20006

REQUEST FOR ADDITIONAL INFORMATION (RAI)

The following questions refer to all four systems, (1) Containment Air Filtration System (CAFS), (2) Control Room Air Filtration System (CRAFS), (3) Fuel Storage Building Emergency Ventilation System (FSBEVS), and (4) Containment Vent and Purge System (CVAPS), unless otherwise noted:

- 1) The bed thickness was only provided for the CRAFS.

Except as noted for the CRAFS, please refer to or provide docketed information which states:

- a) the current and proposed bed thickness
 - b) actual charcoal residence times per bed depth.
- 2) a) For the CRAFS, the Response to Action 4 of GL 99-02 in the August 2, 1999 letter indicates that “..the design basis of Control Room Air Filtration System charcoal efficiency acceptance criteria is not derived from applying a safety factor of 2 and as such we are evaluating the ability of the system’s design to meet a safety factor of 2. However, the current practice installs new charcoal for each plant operating cycle....”

In the November 29, 1999 TS amendment request, the test efficiency for the CRAFS is increased from 90% to 95%, to obtain a safety factor 2. In the August 2, 1999 letter, it was stated that:

“Using the new standard, samples of the in-stock replacement charcoal was tested at the one-inch depth to correspond to the design of the CRAFS. The results of the new tests were above 94% efficiency...”

Can the 1 inch charcoal filter consistently perform at 95% efficiency?

- b) It is not clear why TS page 5.0-24, Section 5.5.10.c - “Ventilation Filter Testing Program” was included with your submittal.
- Are you converting to the ITS (improved standard technical specifications)?
- 3) a) Per the sample TS in GL 99-02, your proposed TS amendment request for each ventilation system should be revised to specify the test temperature and relative humidity.

If the test relative humidity is less than 95%, you should indicate whether TS-controlled heaters are available which have been approved by the NRC to maintain the RH during accident conditions at the lower value, typically for less than or equal to 70%.

- b) There seem to be many inconsistencies between the August 2, 1999 and the November 29, 1999 letters. For example, for the CAFS, the Response to Action 4 of GL 99-02 in

Enclosure

the August 2, 1999 letter indicates that "...an exception to the standard is being evaluated specific to the test temperature versus the application that would at best experience higher test temperatures than the standard's test temperature of 86 degree F." In the November 29, 1999 TS amendment request, the proposed test temperature for the CAFS is not stated.

Does the November 29, 1999 letter take exception to the test temperature of 30°C specified in ASTM D3803-1989?

- 4) a) Per Generic Letter 99-02, Requested Action 2, please indicate how the actual charcoal face velocities for each ventilation system were calculated.
- b) Please refer to or provide docketed information which indicates the actual charcoal face velocity for the CRAFS.

The actual system face velocities can be calculated by dividing the maximum 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. Per GL 99-02, if this value is >110% of 40 ft/min, then the TS should be revised to specify that value as the test face velocity, as appears to be the case in your proposed TS amendment request. (The guidance on calculation of the residence times in ASME AG-1-1997, Division II, Sections FD and FE, Articles I-1000, or in ANSI N510-1975 can be used to calculate the actual system face velocities).