

FEB 22 2017

February 17, 2017

**DEP SOUTHCENTRAL OFFICE
CLEAN WATER PROGRAM**

Mrs. Maria Bebenek
Environmental Engineering Manager
Pennsylvania Department of Environmental Protection
Southcentral Regional Office
909 Elmerton Avenue
Harrisburg, PA 17110

Subject: Exelon Generation LLC
Peach Bottom Atomic Power Station
NPDES Permit PA 0009733
Notice of Planned Measurement Uncertainty Recapture Uprate

Reference: Letter, Patrick Navin to Jay Patel, dated July 15, 2016, Notice of Planned Measurement Uncertainty Recapture Uprate

Dear Mrs. Bebenek,

This letter is a follow up notice to the referenced letter regarding Exelon Generation's LLC (Exelon) intent to perform a Measurement Uncertainty Recapture (MUR) uprate of Peach Bottom Atomic Power Station's (PBAPS) Units 2 and 3. This notice is to formally document this planned change to the plant's effluent stream as required by Part A, Section III.C of the station's NPDES permit.

The approved MUR would allow PBAPS to utilize the available tolerance of currently installed feedwater flow instrumentation to increase the licensed power output of the station. The MUR uprate will increase the station's licensed power level from 3951 MWth to 4016 MWth (less than 1.7% increase). The uprate is achieved by implementing improved techniques for calculating reactor power. This involves the use of state-of-the-art devices to more precisely measure the feedwater flow used to calculate reactor power. The MUR utilizes the more precise measurements to reduce the degree of uncertainty in the power level and to increase the maximum licensed power of the station.

The MUR uprate will not change chemical discharges from the station as plant flow rate or chemical use changes are not occurring. A plant intake to discharge temperature (Δt) increase of up to 0.4°F over current conditions will occur. As shown in the recently submitted Post-EPU Study, the actual EPU Δt increase was 22.1°F versus the 22.4°F maximum Δt used for the calibrated thermal model developed for EPU resulting in a 0.3°F margin. Therefore, the net Δt increase projected for MUR will be only 0.1°F over the 22.4°F maximum Δt model used for EPU temperature and biological projections. The Post-EPU Thermal Study confirmed that a Balanced Indigenous Community (BIC) exists in the Conowingo Pond based on actual conditions being bounded by the assumptions and inputs to the calibrated EPU model.

A review was performed to determine the downstream effects of the net 0.1°F Δt increase from MUR over the calibrated EPU model. This review determined that based on thermal mixing in the Conowingo Pond, the net temperature increase at the near field temperature stations downstream of the plant discharge would range from 0.02°F and 0.06 °F over the

EPU model. These nominal temperature increases will not have a measurable effect on the biological community in the Conowingo Pond as these increases will not result in discharge temperatures reaching or exceeding thresholds that would impact the biological community through increased avoidance, migratory blockage, or other deleterious impacts. Therefore, Exelon concludes that a BIC will be maintained in the Conowingo Pond for MUR conditions.

The MUR License Amendment is scheduled to be submitted to the NRC by the end of February, 2017 and the planned power increase of both units is currently scheduled for April, 2018. Please contact Joseph Brozonis, Sr. Environmental Chemist, if you have any questions regarding this update. Based on prior discussion with your office we understand that PA DEP's review of this change will take longer than the 30 days specified in the NPDES permit for review of an increased loading of an approved pollutant; however, we would appreciate an update on PA DEP's review schedule within the 30 day period.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick D. Navin". The signature is fluid and cursive, with a long horizontal stroke at the end.

Patrick D. Navin
Plant Manager
Peach Bottom Atomic Power Station

ccn 17-20

RECEIVED

3800-FM-BPNPMS0482 3/2012 Form



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

FEB 22 2017

PLANNED CHANGES TO WASTE STREAM REPORTING FORM
CLEAN WATER PROGRAM

Facility Name: Peach Bottom Atomic Power Station
Municipality: Delta

Month: February
County: York

Year: 2017
Permit No.: PA 0009733

Thermal (See attached letter # con 17-20)

Introduction of New Pollutant Increased Loading of Approved Pollutant

Description of Waste Containing Pollutant	Source(s) of Waste Containing Pollutant	Indirect Discharge or Hauled In	Anticipated Daily Volume of Waste Received (gallons)		Anticipated Daily Pollutant Load (lbs/day)	
			Avg	Max	Avg	Max
N/A						
Location(s) Where Wastes Will Be Introduced	Description of How Pollutant Load Will Be Treated	Pollutant Subject to ELG?	ELG Citation	Anticipated Date to Start Receiving Waste		
N/A			40 CFR			
			40 CFR			

Complete This Section Only for Increased Loading of an Approved Pollutant:

Pollutant Loads Listed in Application or Otherwise Authorized by DEP (lbs/day)	Additional Increased Load Requested by Permittee (lbs/day)	Design Conditions		Current Conditions	
		Avg Annual Flow (MGD)	Hydraulic Design Capacity (MGD)	Avg Annual Flow (MGD)	Avg Annual Organic Load (lbs/day)
Avg					
Max					
N/A					

Is the facility currently in a condition of existing or projected hydraulic or organic overload as defined in 25 Pa. Code Chapter 94? Yes No

Comment:

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: Joseph Brozonis
Title: Sr. Environmental Chemist

Signature:
Date: February 14, 2017
Phone: 717-456-3795