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Three Empire State Plaza, Albany, NY 12223-1350
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November 30, 2022

VIA EMAIL

Hon. Michelle L. Phillips
Secretary to the Commission
3 Empire State Plaza
Albany, NY 12223-1350

Re: Matter No. 21-01188 – In the Matter of the Indian Point Closure Task Force and Indian Point Decommissioning Oversight Board.

Dear Secretary Phillips:

Please accept for filing in the above-captioned matter, Indian Point Decommissioning Oversight Board Questions and Answers. Should you have any questions regarding this filing, please contact me. Thank you.

Respectfully submitted,

Tom Kaczmarek
Executive Director
Indian Point Closure Task Force
Indian Point Decommissioning Oversight Board

Responses to Public Comments and Questions
September 22, 2022 DOB Meeting

[Decommissioning &
Spent Fuel
Management](#)

[Decommissioning Monitoring](#)

[Spent Fuel Pool
Water](#)

[Emergency
Management](#)

The source of the responses and the data contained herein should be assumed to be New York State unless otherwise noted.

DECOMMISSIONING AND SPENT FUEL MANAGEMENT

1. Are dry casks tested in a fire scenario? Do they get damaged if knocked over due to a gas explosion?

According to the DOB’s independent technical expert Dave Lochbaum, “dry casks are designed and analyzed for numerous postulated challenges including explosions, fires, and tip-overs. Each cask design is subjected to tests to demonstrate that the computer models are accurate. As documented in the most recent Final Safety Analysis Report¹ for the Hi-Storm 100 casks like those used at Indian Point, the casks were subjected to, and withstood, tip-over, a fire accident, tornadoes, floods, and explosions, among a number of other accident scenarios.

Dry casks have also been evaluated for even more severe fire scenarios during transport. A report² by Pacific Northwest National Laboratory (PNNL) evaluated four “what if” fire events, including one scenario in which a shipment included dry casks. While none of these events were specific to onsite storage configurations, they involved high temperatures for long durations.

Bottom line - casks are robust. Spent fuel in dry casks is safer and more secure than fuel in spent fuel pools or reactor vessels.”

DECOMMISSIONING MONITORING

2. Who is the medical/health expert evaluating the health and safety at the school and the monitoring program?

Expert staff of the New York State Department of Health (DOH) have served as active members of the DOB’s Monitoring Working Group since the group’s inception in summer 2021. DOH is also supporting the request for proposals (RFP) to procure community air monitoring for the school district and communities surrounding Indian Point and will participate in the contractor selection process to ensure the selected vendor meets the requisite criteria.

¹ Holtec International Final Safety Analysis Report for the HI-STORM 100 Cask System, April 15, 2022.

² A Compendium of Spent Fuel Transportation Package Response Analyses to Severe Fire Accident Scenarios. Pacific Northwest National Laboratory. March 2017.

3. Will the data from the monitoring be reported to the public and publicly available?

The Monitoring Working Group is in the process of issuing an RFP to procure environmental consulting services to establish a Community Air Monitoring Plan (CAMP), including determining how monitoring data is used. Further public comment will be sought as the process proceeds.

Existing protocols remain in place to ensure public safety notifications are made and other actions are taken if existing monitors and verification protocols indicate the presence of an imminent risk to the public. In addition, as a cornerstone of each public meeting of the DOB, the Department of Public Service reports on the latest readings of the Reuter-Stokes (RS) radiological monitors as well as any actionable anomalies and will continue to do so while the RS monitors remain in commission.

4. Were there any parents of the school children on the Monitoring Working Group?

The Monitoring Working Group was established immediately following the creation of the DOB thanks to the advocacy of parents in the community and the Superintendent of the Hendrick Hudson School District. While the Working Group is comprised solely of DOB Board Members and technical experts, the Group included Superintendent Hochreiter and regularly received, considered, and incorporated input from parents and their surrogates in determining scientific-based solutions to incorporate the BV Elementary School, and the health and safety considerations of its student body, in any monitoring plan. Further public comment will be sought as the process of establishing a Community Air Monitoring Plan (CAMP) proceeds.

SPENT FUEL POOL WATER

5. The NYS Department of Health used to make water monitoring of radiation available to the public. The last data were released in 2003. Where is the data from the past 20 years? Will it be presented as part of the DOB discussion of wastewater discharge?

The New York State Department of Health (DOH) maintains its publicly-viewable and downloadable reports, including on the monitoring of radiation in water near Indian Point, at www.Health.Data.NY.Gov. A direct link to data on tritium levels may be found [here](#). A direct link to data on iodine-131 levels may be found [here](#). This data collected by DOH will serve as critical inputs into the DOB discussion on spent fuel pool water discharge at an upcoming meeting.

6. Does tritiated water evaporate more quickly than regular water? If not, how it is possible to evaporate 92% of tritiated water and not just be evaporating 92% of all the water?

According to the DOB's independent technical expert Dave Lochbaum, *"in the mid-2000s in response to water leaking from the spent fuel pools at Indian Point and from a discharge line at the Braidwood nuclear plant in Illinois, plant owners installed wells to monitor their sites for leakage. Monitoring wells at the Pilgrim plant in Massachusetts detected tritium. NRC attributed it to rainfall. To probe this assertion, Mr. Lochbaum reviewed the annual radiological effluent reports for Pilgrim. In the prior years, 94 percent of the tritium released from the plant was via evaporation of spent fuel pool water. Only 6 percent of the tritium released from the plant was in the thousands of gallons of water discharged to the bay.*

The evaporation rate for tritiated water is the same as for normal water. As spent fuel pool water evaporates, owners periodically top off the level to maintain it within a specified range. As "clean" water flows through spent fuel bundles in storage racks in the pool, water molecules may absorb a neutron emitted from the decaying fuel and have a hydrogen atom become tritium.

Evaporation from the spent fuel pool flows through a ventilation system. The ductwork contains radiation detectors that stop the flow if high radiation levels are detected. Periodically, samples of the flow are drawn and analyzed to define the isotopic composition of the exhaust gas. The flow rate is recorded and multiplied by the isotopic concentrations to determine how much of each radionuclide has been released to the atmosphere. Those tallies are then reported annually to the NRC."

EMERGENCY MANAGEMENT

Preparatory Exercises

7. Can you provide a list of scenarios that have been the basis for drills for emergency planning?

Due to critical, sensitive infrastructure information, the details of emergency planning exercises are often not able to be divulged. That said, we can confirm the scenario drilled in September 2022 was premised on a pipeline rupture in the area of Indian Point and that additional exercises involving both infrastructure sites will be planned.

8. Can you provide a list of departments/agencies that participated in those drills?

According to Enbridge, the following entities were represented at the July 2022 training. Some additional individuals participated but did not indicate the agency they represent. Their names have not been included on this list:

Enbridge	Holtec
Westchester County Office of Emergency Management	New York Department of Public Service
Buchanan Fire Department	Montrose Fire Department
New York State Police	Verplanck Fire Department
New York Division of Homeland Security and Emergency Services	Veterans Administration

According to Enbridge, the following entities were represented at the September 2022 Tabletop Exercise:

Enbridge	New York Department of Public Service
Westchester County Office of Emergency Management	Montrose Fire Department
Buchanan Fire Department	Verplanck Fire Department
Holtec	White Plains Hospital

Peekskill Fire Department
Mohegan Lake Fire Department

Yorktown Heights Fire
Department

9. Did the “table-top” “virtual” non-training assume the need to evacuate people within 1-2 miles from the site of a pipeline rupture?

Evacuation considerations were covered as part of the September 2022 drill. While there was a virtual meeting option, both Enbridge and local first responders were in-person at this drill. The virtual meeting option was primarily used by observers.

10. How did the September 2022 training compare to other exercises?

The September 2022 exercise was consistent with federal regulations. New York State is continuing to engage with Enbridge to continue providing constructive exercises next year and on an ongoing basis.

11. How many local responders and from which municipalities have been to Enbridge’s training facility?

Enbridge does not have a training facility but indicated it has always and continues to invite surrounding OEM branches to tour operating facilities.

In addition, Enbridge hosts liaison meetings for local emergency officials to inform and educate on emergency response to Enbridge’s pipelines. Below are local and emergency response officials that have attended Enbridge’s past liaison meetings:

10/18/16 – Oxford, CT/Southeast NY regional Liaison meeting – 23 NY 1st responders.

Village of Buchanan
Town of Cortlandt
Mahopac Hamlet
Town of Yorktown
Town of Southeast

Village of Brewster
NYSOEM
Westchester OEM
City of Peekskill

10/22/19 - Oxford, CT/Southeast, NY regional Liaison meeting – 18 1st responders, 4 NYDPS, 1 NYCDEP

Village of Buchanan
Town of Cortlandt
Town of Yorktown
Town of Southeast

Village of Brewster
City of Peekskill
New Rochelle

5/18/22- NY Liaison virtual / in person, Middletown, NY – 46 NY 1st responders (In person 29)

Mount Hope

Sullivan County

North White Plains
Dig Safely NY
MTA Police
Hamptonburgh
Forestburgh

Goshen
NY State Police
Johnson
Ramapo
Sparrow Bush

12. How does Enbridge train first responders without providing training materials?

Enbridge indicated it provides mailing information packets to responders as required by PHMSA. This is complemented with liaison meetings either via an Enbridge employee or through the Paradigm meetings that Enbridge is a partner with neighboring pipeline companies. Additionally, Enbridge offers free, online training on pipeline response at www.emergencyresponderinfo.com.

13. How are other counties within the 10-mile Emergency Planning Zone incorporated in emergency preparedness planning and exercises?

Westchester, Putnam, Rockland, and Orange counties all participate in training and exercise activities for Indian Point. Exercises, coordinated by New York State, provide an opportunity for all four counties to practice a coordinated response to a simulated emergency at Indian Point.

Public Information

14. Have the conflicting emergency instructions for residents near the pipeline AND the plant been reconciled?

The DOB has not seen language that reflects an unambiguous conflict as the question implies or suggests. In any event, according to Westchester County OEM, any threat to life safety would be addressed first, with first responders taking steps to evacuate those at the highest risk in the immediate area of a pipeline incident. If there were an emergency at Indian Point, steps would then be taken to assess the situation and determine the required protective action (evacuate or shelter-in-place) in coordination with the local Incident Commander.

15. Has PHMSA, NTSB, or NRC ever participated in a drill/scenario?

Per Enbridge, PHMSA & NTSB are not typically included in exercises but notifications to the agencies are simulated based on the applicable reporting requirements. Additionally, PHMSA audits Enbridge's exercises and associated documentation. The Nuclear Regulatory Commission has not been invited nor participated in an emergency exercise for Enbridge in this area. There are currently no federal requirements on who is invited to participate in natural gas pipeline drills. All emergency response & operational requirements can be found in 49 CFR Part 192.

Emergency Protocols

16. Does the "mutual aid" for fire response include a pipeline fire?

According to Westchester County OEM, the Fire Mutual Aid Plan covers countywide response to fires and other incidents. Its purpose is to provide a framework for Fire Departments to support

one another during a major emergency. Hazardous materials emergency response training is provided countywide to all Firefighting personnel, however training for pipeline emergencies has so far been targeted at those departments that may respond immediately to a pipeline incident. Multiple fire departments participated in the most recent training/exercise activities conducted in cooperation with Enbridge and the County in July 2022 and September 2022.

According to Enbridge, the company's role in the event of a fire would be to assess the situation and protect the public, environment, and surrounding assets. Enbridge states it accomplishes that by finding the root cause of the fire and correcting the issue if possible at that time, isolating the fire, manipulating the system to starve the fire of fuel, then once the flames are extinguished continue to constantly monitor the situation until the area is deemed safe and make the necessary repairs to remediate. Further, Enbridge clarifies that any mutual aid agreements are between the local fire departments, county emergency management, and state agencies. Enbridge only considers mutual aid agreements between industry partners if a mutually beneficial agreement for response is requested. Enbridge currently does not have any mutual aid agreements in the area of Westchester and/or Rockland Counties. Any other information requests regarding mutual aid agreements between fire departments and their details regarding training can be directed to those fire departments or Westchester County OEM.

17. How are other counties within the 10-mile EPZ incorporated in emergency protocols? What happens if a 9-1-1 call is received by Rockland County?

Westchester, Putnam, Rockland and Orange counties all participate in training and exercise activities for Indian Point. Exercises, coordinated by New York State, provide an opportunity for all four counties to practice a coordinated response to a simulated emergency at Indian Point. If Rockland County receives a 911 call intended for Westchester County, that call is routed to Westchester County for further processing.

18. What alternate means of communication and evacuation do first responders have if door-to-door methods prove unsafe or otherwise unattainable?

According to Westchester County OEM, any threat to life safety would be addressed first, with first responders taking steps to evacuate those at the highest risk in the immediate area of a pipeline incident. During the initial response this would primarily be a "door to door" evacuation. Other methods of public alerting may include outbound calling, Wireless Emergency Alerts and/or the Emergency Alert System (EAS) depending on the scenario and the area to be notified.

Gas Pipeline Management

19. Are there any emergency shut off valves at Indian Point to isolate it in the event of a rupture (on any of their 3 pipelines on the property)?

Yes. There are remote-operated valves that are able to isolate gas flow to all three pipelines

traversing the Indian Point site.

20. We have been told by other pipeline safety experts that automated systems meant to maintain pressure in the pipeline could respond to a pressure drop due to a rupture by increasing flow in the pipeline- contrary to Marlon Browne telling us it requires a human to do. Can we have an independent expert speak to this?

The question does not identify the other pipeline safety experts, the nature of such statements, or when statements were made. DPS Staff interprets that the question seeks to refer to the Stony Point Compressor Station, which is upstream to the three pipelines traversing the Indian Point site. According to Enbridge, the estimated isolation time of the pipelines (3 to 8 minutes) includes isolation of the Stony Point Compressor Station (Stony Point). In addition, Stony Point provides valuable monitoring that would provide notice of an emergency on the pipelines to pipeline operators. Stony Point, like any other compressor station on Enbridge's system, contains devices and automated processes that monitor various parameters of station and pipeline conditions and will display abnormal operating situations if present.