

## **NUCLEAR DECOMMISSIONING CITIZENS ADVISORY PANEL (“NDCAP”)**

### **Monday, January 29, 2024 Hybrid Meeting (in-person and virtual) Meeting Minutes**

The meeting was called to order at about 6:30 pm by Mr. Lampert.

#### **NDCAP MEMBERS PRESENT**

- Pine duBois, Speaker of the House Appointee (in person)
- Mary Lampert, Senate President Appointee (in person)
- James Lampert, Speaker of the House Appointee (in person)
- Mary Jo Gatslick, Minority Leader of the Senate Appointee (in person)
- Michael Fortini, Minority Leader of the Senate Appointee (in person)
- David C. Nichols, Governor Baker Appointee (in person)
- Andrew Gottlieb, Governor Baker Appointee (in person)
- Dr. Barry Potvin sitting in for Henrietta Cosentino, Plymouth Select Board Appointee (in person)
- Kevin Canty, Plymouth Select Board Appointee (in person)
- Seth Pickering,<sup>1</sup> Department of Environmental Protection (in person)
- Jack Priest, Department of Public Health, Radiation Control Program (virtual)
- David Bryant, Massachusetts Emergency Management Agency (in person)
- John Slocum, Massachusetts Department of Public Utilities (in person)
- David Noyes, Holtec Decommissioning International (in person)
- Mark Lawson sitting in for John Moylan, Holtec Site Vice President (in person)
- Kelly O’Brien, UWA Representative (in person)
- Mary Waldron, Old Colony Planning Council (virtual)

#### **GUESTS IN ATTENDANCE**

- Caleb White, representing U.S. Senator Elizabeth Warren’s office.

#### **PREVIOUS MINUTES REVIEW & APPROVAL**

Mr. Noyes indicated that there was a typographical error in the Holtec section of the prior minutes (“reactor internationals” should say “reactor internals”).

Mr. Lampert suggested several amendments to the Reorganization section of the prior minutes, regarding the number of members needed to vote on Chair and Vice-Chair.

Mr. Lampert made a motion to accept the meeting minutes as amended. The motion was seconded and passed.

#### **DRAFT ANNUAL REPORT**

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<sup>1</sup> Designee of Secretary of the Executive Office of Energy and Environmental Affairs

Mr. Lampert mentioned that the draft report was sent to each individual on the panel. Comments and suggestions are highly recommended during the draft period. He concluded with indicating that he is trying to find a platform where comments and suggestions can be posted and made available online.

Ms. duBois stated that google docs is an ideal platform for comments and collaboration. Ms. Gatslick indicated that whichever platform is decided on should comply with the open meeting law.

### **WORKING GROUPS**

Mr. Lampert explained how working groups could be effective for the panel.

Ms. Lampert suggested that there be working groups focused on finances, spent fuel, water disposition, and cleanup.

Mr. Lampert concluded by asking individuals on the panel to think about possible working groups and discussion for the next meeting in March.

### **HOLTEC – HDI PILGRIM DECOMMISSIONING UPDATE**

Mr. Noyes provided a general update. In summary:

- License termination plan supporting partial site release is to be submitted in the Fall of 2024 with approval in 2027.
- Partial site release is expected to occur in 2035.
- Sampling and onsite surveys are ongoing.

Mr. Noyes provided an update on demolition. In summary:

- Demolition of the condensate water storage tanks is completed.
- The metal and waste resulting from the demolition have been sent to Texas.
- Upper Security Owner Controlled Area Access Building and Old Main Gate Stairs are next.

Mr. Noyes provided an update on reactor internal segmentation. In summary:

- 20 jet pumps are in the process of being removed and packaged for disposal.
- Advance filtration systems have been recently installed for the reactor cavity and separator pit.
- The filters will allow for high degree of purity for the water improving clarity and vision.
- Final segmentation of the fourth shroud will take place once the jet pumps are removed.

Mr. Noyes provided an update on waste. In summary:

- In 2023, over 71,000 cubic feet of material & 329 curies of waste were removed from the site.
- From 2019 to 2023: over 235,000 cubic feet of material & 1,877 curies of waste were removed.

Mr. Noyes concluded his presentation with a diagram of the building heating system for the reactor building and spent fuel pool.<sup>2</sup> He indicated that heat is being applied to the spent fuel pool to raise the temperature to 95 degrees, which has raised the temperature of the refueling floor to 60-65 degrees. Water is then used to radiate the heat throughout the reactor building to maintain temperatures and prevent freezing.

Mr. Gottlieb asked Mr. Noyes what were the disadvantages of using the conventional heaters to prevent the building from freezing. Mr. Noyes indicated that the disadvantages include the discharge of hydrocarbons and the cost.

Mr. Gottlieb asked Mr. Noyes what will be included in the financial report. Mr. Noyes stated that the report to be submitted in March 2024 to the NRC is not finalized. Mr. Gottlieb then expressed his concerns about not receiving any information about the financial report in advance.

Mr. Nichols asked Mr. Noyes whether the 8-year gap/pause between 2024 and 2032 has always existed. Mr. Noyes mentioned that there was a change from the original schedule because of delays of certain demolition activities.

Ms. Gatslick asked Mr. Noyes to discuss whether there were any unmonitored pathways for release. Mr. Noyes affirmed that everything released from the stack is being monitored. The monitoring is federally regulated and documented. An individual can submit a Freedom of Information Act (FOIA) to the NRC for those documents.

Ms. Lampert referred to Section 3-10L of the settlement agreement indicating that Holtec would comply with all environmental and health laws. In her opinion, she believes that evaporation would constitute a violation of the Ocean Sanctuaries Act. She then asked Mr. Noyes how evaporation is not a violation. A discussion ensued between Ms. Lampert and Mr. Noyes on applicability of standards.<sup>3</sup>

Dr. Potvin asked whether the use of heaters has affected the water evaporation rate. Mr. Noyes stated that it is unclear whether the rate was affected. Additional discussion ensued about worker safety, tritium monitoring, and other issues.

Ms. Lampert raised questions about the delay in the decommissioning timeline. Mr. Noyes indicated that the first four-year delay was due to economic reasons, and the second four-year delay was due to the delay in wastewater discharge. Ms. Lampert also asked about the orientation of the stack.

Mr. Priest added clarification about the nature of air monitoring currently conducted. DPH's off site monitors are located in the community.

Mr. Nichols asked whether any radiological particulates have been detected. Mr. Noyes stated that radiological compounds (tritium) are detectable, but are a very small portion of allowable volumes.

Mr. Lampert asked whether Holte can project the rate of water evaporation over 8 years. Mr. Noyes indicated that this is not possible. Mr. Noyes clarified that 1.9-2 million of water existed when the plant was purchased by Holtec in 2019. Mr. Noyes stated that about 150,000 gallons evaporated between

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<sup>2</sup> Minute markers 21:40-25:02 of video.

<sup>3</sup> Minute markers 31:50-35:03 of video.

January 2022 and late third quarter of 2023; approximately 950,000 gallons currently remains. He clarified that all water has to be disposed of before the reactor building can be demolished.

Mr. Lampert asked what the value of the decommissioning trust fund was at the end of 2023. Mr. Noyes agreed to look into this.

#### **PANEL DISCUSSION AND QUESTIONS: WASTEWATER DISPOSAL OPTIONS**

Mr. Lampert suggested a discussion among panel members regarding three potential disposal options: evaporation, storage, and shipping.

Ms. duBois expressed her opinions and concerns with sending the water offsite via truck. She stated that trucking the water is dangerous and expensive, and would involve a lot of resources.<sup>4</sup>

Ms. Lampert expressed her opinions and concerns with discharging the water into Cape Cod Bay.<sup>5</sup>

Dr. Potvin asked Mr. Noyes to clarify what happens to the water once it arrives to the facility in Texas. Mr. Noyes explained that the water is mixed with clay and then buried.

Dr. Potvin asked Mr. Noyes whether shipping the water offsite would expedite the closure of the plant. Mr. Noyes indicated that it would speed up the process but at the cost of the environment. A discussion ensued between Dr. Potvin and Mr. Noyes on the environmental impacts.<sup>6</sup>

A discussion ensued between Mr. Noyes and Mr. Lampert regarding the remaining water on site and whether an estimate could be made on how much water would be on site in 2032.<sup>7</sup>

#### **INTERAGENCY WORK GROUP (IWG) UPDATE**

Mr. Pickering provided an update. He began with administrative announcements:

- Several vacancies on this panel are still in the process of being filled.
- The AGO will hold webinar trainings on the open meeting law.
- Questions about the open meeting law can be emailed to the AGO.

Mass DEP has received and reviewed letters about potential state regulatory oversight of evaporation and other issues at Pilgrim. Mass DEP will coordinate with other agencies to ensure decommissioning is protective of the environment.

Mass DEP has requested that Holtec:

- Calculate and submit an analysis of the potential emissions from non-radiological pollutants resulting from evaporation off the reactor.
- The request is currently under internal review and will be passed along thereafter.

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<sup>4</sup> Minute markers 1:07:50- 1:14:33 of video.

<sup>5</sup> Minute markers 1:14:33-1:19:49 of video.

<sup>6</sup> Minute markers 1:21:25-1:24:19 of video.

<sup>7</sup> Minute markers 1:24:19-1:25:32 of video.

- Calculations should include potential emissions of pollutants detected during reactor system water sampling conducted in April of 2023 and any other pollutants since that time.
- The analysis will be used to determine applicability of Mass DEP's air quality permitting.
- The permitting threshold must be greater than one ton per year for air pollution plan approvals.

With regard to the surface water discharge permit modification application:

- MassDEP is in the process of reviewing documents in preparation to issue a final determination.
- The final determination is subject to an administrative appeal process.
- Prior permits permitting discharge were submitted by Holtec as supplemental information.

On January 19, 2024, the AGO provided comments on Holtec's work plan. The letter indicated that Holtec must make several substantive changes to the work plan to comply with the settlement agreement. Thereafter, Holtec should submit the plan for state approval.

Lampert asked if there was a timing requirement – Mr. Priest indicated it was 30 days.

Response actions under the MCP are ongoing. The Phase Two Comprehensive Site Assessment is due to be submitted by April 21, 2025 .

Holtec continues to conduct groundwater sampling and those results will be included in the status report submitted to MassDEP.

MassDEP asbestos section continues to be actively engaged in overseeing demolition activities.

MassDEP continues to evaluate Holtec's request to modify its wastewater disposal system to a Title 5 system.

Mr. Pickering indicated that there were no changes to the update with MEMA.

### **PUBLIC COMMENTS & QUESTIONS**

In his opinion, Kai Jackson stated that evaporation has less of an environmental impact than shipping water offsite.

Several questions were raised by Shiela Jackson about high beta gamma radiation and filtration. A discussion ensued among Shiela Jackson, Mr. Priest and Mr. Noyes about filtration, testing samples, and non-radiological material.<sup>8</sup>

Diane Turco asked whether the water from the refuel floor was being treated and monitored. Mr. Noyes mentioned that the water on the refuel floor has a filtration system, which treats the water. He indicated that samples are taken from the reactor building's vent and tested weekly.

A discussion took place among Ms. Turco, Mr. Noyes, and Mr. Priest about evaporation rates.<sup>9</sup> Due to several variables mentioned by Mr. Noyes, it is difficult to predicate how much evaporation will take

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<sup>8</sup> Minute marker 1:37:00-1:43:44 of video.

<sup>9</sup> Minute marker 1:46:03-1:48:35 of video.

place during the next eight years. Mr. Priest suggested that Holtec provide an update at the next meeting about evaporation rates based on recent activity at the plant.

Ms. Turco then stated the following:

- Tritium cannot be filtered out of the water.
- There is no such thing as a safe dose of radionuclides.

Brian Tucker indicated that he may be able to assist in some of the working groups mentioned at the beginning of the meeting.

Mr. Tucker asked Mr. Noyes several questions about evaporation.<sup>10</sup>

A discussion ensued among Richard Rothstein, Mr. Priest, and Mr. Pickering about permits and air emissions.<sup>11</sup>

Joanne Wilson Kennan read statements from an article dated June 13, 2024 in the Plymouth Independent newspaper. She then read two provisions from the settlement agreement requiring that Holtec comply with all applicable rules and regulations. She reminded the panel and public that the settlement agreement is still in effect.

Brian Campbell expressed his support for discharging the water from the station.

## **ADJOURNMENT**

Mr. Lampert made a motion to adjourn which was seconded and passed.

Adjournment took place at around 8:30 p.m.

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<sup>10</sup> Minute marker 1:51:19-1:53:45 of video.

<sup>11</sup> Minute marker 1:53:53-2:00:10 of video.