

**NUCLEAR DECOMMISSIONING CITIZENS ADVISORY PANEL (“NDCAP”)  
Monday, July 22, 2024  
Hybrid Meeting (in-person and virtual)  
Meeting Minutes**

The meeting was called to order at about 6:30 pm by Chair Jim Lampert.<sup>1</sup>

**NDCAP MEMBERS PRESENT**

- James Lampert (Chair), Speaker of the House Appointee (in person)
- Mary Jo Gatslick (Vice Chair), Minority Leader of the Senate Appointee (in person)
- Mary Lampert, Senate President Appointee (in person)
- Pine duBois, Speaker of the House Appointee (in person)
- Michael Fortini, Minority Leader of the Senate Appointee (in person)
- Kevin Canty, Plymouth Select Board Appointee (in person)
- David Noyes, Holtec Decommissioning International (in person)
- John Moylan, Holtec Decommissioning International (in person)
- Andrew Gottlieb, Governor Baker Appointee (in person)
- David Nichols, Governor Baker Appointee (in person)
- Jack Priest, Department of Public Health, Radiation Control Program (in person)
- Seth Pickering,<sup>2</sup> Department of Environmental Protection (in person)
- Gregory Wade, Department of Public Utilities Appointee (virtual)
- Kristopher Callahan,<sup>3</sup> Department of Public Health Appointee (virtual)
- Kimberly Castle,<sup>4</sup> Massachusetts Emergency Management Agency (virtual)
- Mary Waldron, Old Colony Planning Council (virtual)
- Kelly O’Brien, UWA Representative (virtual)

**ADMINISTRATIVE UPDATES<sup>5</sup>**

Mr. Lampert reminded the panel that the statute requires a vote of the entire majority to take any action. The advice from the Attorney General’s Office is that a majority of all 21 members is required, even though there are four vacancies and only 17 members. Therefore, to pass anything, 11 votes are needed.

The four vacancies are for: the designee of the Secretary of Housing and Economic Development; a member of the Plymouth Nuclear Matters Committee; a member from the Plymouth Select Board; and an appointee of the President of the Senate.

**PREVIOUS MINUTES REVIEW & APPROVAL<sup>6</sup>**

Panel members discussed the previous meeting minutes and corrections.

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<sup>1</sup> Meeting begins at Minute Marker 17:46 of video. See [Nuclear Decommissioning Citizens Advisory Panel: 7/22/24 \(youtube.com\)](https://www.youtube.com/watch?v=...).

<sup>2</sup> Designee of Secretary of the Executive Office of Energy and Environmental Affairs

<sup>3</sup> Designee of Secretary of the Executive Office of Health and Human Services

<sup>4</sup> Replacing David Bryant for this meeting

<sup>5</sup> Administrative Updates begin at Minute Marker 22:30 of video.

<sup>6</sup> Previous Minutes Review & Approval begins at Minute Marker 27:55 of video.

Mr. Lampert requested that panel members who reference documents or give presentations as well as the public who read statements to the panel provide a copy of those documents or statements to NDCAP so that they can be included in the public record. The panel discussed that electronic versions of documents are preferred and can be sent to the NDCAP email address available on the NDCAP website.<sup>7</sup>

A motion to approve the minutes as amended was made by Mr. Lampert and seconded by Ms. Gatslick. A roll call was taken, and the motion passed.

### **HOLTEC – HDI PILGRIM DECOMMISSIONING UPDATE<sup>8</sup>**

Mr. Noyes provided an update.

#### Waterfall Chart<sup>9</sup>

- Formal submittal of the license termination plan (LTP) is scheduled to be submitted at the end of September 2024.
- Holtec has submitted draft copies of the LTP chapters to the NRC.
- Prior to submittal, the LTP review process will conclude in a public meeting the NRC will hold locally, scheduled for the end of August 2024.
- Site characterization continues as Holtec begins to remove some foundations on site.
- Concrete bores and subsurface sampling continue that will support the derived concentration guideline levels (DCGL) development and the determination of the LTP chapter content.
- Continue to maintain casks within their secure area for the ISFSI and continue to monitor the planting.
- Site restoration will pick up following completion of demolition of buildings in 2034.

Mr. Noyes was asked to explain what a DCGL is. DCGLs are not included in the waterfall chart but are part of the site characterization plan. Brief discussion followed relating to DCGLs.

Mr. Lampert asked Mr. Noyes for clarification of what “waste management,” “earthwork,” and “restoration” mean as they relate to the waterfall chart.

- Waste management encompasses the removal of material from the site – anything being disposed of as radiological material and any non-radiological material that needs to be controlled. Spent fuel is tracked separately and is not related to waste management.
- Earthwork encompasses grading the site area back to its original survey prior to construction of the plant – i.e., 1967 levels.
- Restoration is meeting the state and federal standard.

Mrs. Lampert asked Mr. Noyes about the use of asbestos in concrete. Mr. Noyes responded that any concrete demolition and parts not taken out are sampled for asbestos.

#### Demolition<sup>10</sup>

- The final two underground storage tanks on the site have been removed.

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<sup>7</sup> See [Nuclear Decommissioning Citizens Advisory Panel | Mass.gov](#).

<sup>8</sup> Holtec HDI Decommissioning Update begins at Minute Marker 45:30 of video.

<sup>9</sup> Minute Marker 45:30 of video.

<sup>10</sup> Minute Marker 58:00 of video.

- Removal of the previous emergency planning zone sirens is ongoing; four of 113 sirens have been removed and all 113 are expected to be removed by the end of 2024. Holtec is coordinating with local law enforcement for traffic details where necessary (e.g., when road access is obscured).
- No buildings are currently undergoing active demolition. Remaining buildings are those that will remain.

#### Reactor Internal Segmentation<sup>11</sup>

- Nearing completion of removing all the internals associated with the reactor vessel.
- Three of four feedwater spargers have been removed. The fourth sparger has been removed; there is one section of hangar that is left to be removed.
- Continuing demobilization of the segmentation effort to support dismantlement of reactor vessel internals.
- Drain down of water in the reactor cavity and dryer separator pit (approximately 425,000 gallons of water) is scheduled to be drained to the Torus in fall 2024.

Mr. Lampert asked Mr. Noyes about whether that water will remain only in the Torus and the spent fuel pool. Mr. Noyes responded that there is water in motion at times in radwaste collection systems and some water that has yet to be drained in other systems, but the large quantities of water discussed will only be located at the locations discussed. Mr. Lampert asked for clarification that approximately 460,000 gallons of water will remain in the spent fuel pool; Mr. Noyes confirmed that number. Mr. Gottlieb asked whether the amount of water in the spent fuel pool remains constant over time. Mr. Noyes responded that the water is subject to evaporation and does get replenished but not within a tight range.

Mr. Gottlieb asked what purpose the water serves. Mr. Noyes responded that it is for the waste that is currently stored there. The waste that has been segmented in the dryer separator pit and is being readied to be put into staging casks will go into the spent fuel pool following the drain down until a waste campaign is conducted. Mr. Noyes stated that there is no firm schedule for the packaging and removal of waste yet.

- Approximately 100,000 gallons of water will remain in the reactor vessel. The reactor vessel will not be drained until Holtec is ready to segment the reactor vessel, between 2032 and 2034.

Mr. Gottlieb asked whether the driver for the schedule was the previously cited regulatory uncertainty. Mr. Noyes responded that the delay for that schedule is related to a variety of factors—poor market performance impacting the expected growth of the decommissioning fund, higher than expected cost of labor, uncertainty associated with the ability to process the water, and uncertainty with the disposition of the water.

Mr. Gottlieb asked Mr. Noyes whether the delay could be decreased, and time uncertainty resolved, because of the regulatory decision released earlier in 2024. Mr. Noyes responded that there are remaining avenues to consider the option of liquid discharge, which are an appeal and future litigation. Mr. Gottlieb responded that Holtec could resolve time uncertainty by accepting the regulatory permit decision and questioned whether the delay is intended to be used to allow evaporation of the water.

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<sup>11</sup> Minute Marker 1:00:20 of video.

Mr. Noyes stated that Holtec believes that liquid discharge remains the most environmentally responsible way to deal with the water. Ms. duBois voiced disagreement with Mr. Gottlieb's statements.

Mrs. Lampert asked Mr. Noyes how much the investments increased over the last year and Mr. Noyes stated that he did not know. Mr. Noyes requested that panel members submit written questions for Holtec.

#### Regulatory Update<sup>12</sup>

- Holtec received the final denial in relation to its application for permit modification for decommissioning related wastewater discharge.
- Holtec is evaluating next steps and determining whether to file an appeal to the Massachusetts Department of Environmental Protection (DEP); an appeal must be filed within 30 days of the final decision.
- DEP issued an evaluation of HDI's Potential to Emit analysis determining that emissions are below the air pollution control regulation thresholds.
- Holtec is preparing NPDES and surface water discharge permit renewals to be submitted by December 30, 2024; the current 2020 permits expire in 2025.

Mr. Lampert sought clarification about the surface water discharge permit renewal. Brief discussion followed regarding potential permit changes.

#### Site Source Term Reduction Update<sup>13</sup>

- To date, 15,244 cubic feet of material has been transported to Texas for disposal, including a total activity of 32 curies.
- The project total is just under 2,000 curies of material and over 250,000 cubic feet.

#### Additional Questions for Mr. Noyes<sup>14</sup>

Ms. duBois asked about remaining intake structure below grade. Mr. Noyes responded that it is a concrete-type vault with piping and no final decisions have been made regarding the piping, but it would be filled with appropriate flowable fill material.

Mr. Lampert asked about decreases in the total quantity of water in several locations over six years and whether the majority of that decrease of about 800-900,000 gallons was a result of evaporation.<sup>15</sup> Mr. Noyes responded that all of that decrease was a result of evaporation. Mr. Lampert asked if water from the CST and Torus was used to keep water in the cavity and spent fuel pool at desired levels. Mr. Noyes responded that it was. Discussion ensued between Mr. Lampert and Mr. Noyes regarding water quantity and evaporation rates.

Mr. Lampert asked Mr. Noyes whether the cost of completing decommissioning would be paid by Holtec.

Ms. duBois raised the issue of climate change and the effects of delay.

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<sup>12</sup> Minute Marker 1:11:50 of video.

<sup>13</sup> Minute Marker 1:15:45 of video.

<sup>14</sup> Minute Marker 1:16:35 of video.

<sup>15</sup> Minute Marker 1:18:45 of video.

Mr. Gottlieb asked Mr. Noyes whether he could state that there is no other technology being considered by Holtec to increase the rate of evaporation. Mr. Noyes stated that there was nothing planned that he was aware of.

Mr. Priest asked whether the cost of Holtec's appeal of the final permit decision came from the decommissioning fund.<sup>16</sup> Mr. Noyes responded that it did. Mr. Priest and Mr. Noyes discussed the financial implications of filing an appeal compared to trucking the water off site. Mrs. Lampert brought up the issue of inflation and increased costs in the future. Ms. duBois stated that trucking material off site would have greater climate change implications than other alternatives. Mr. O'Brien asked about the cost of alternate options and Mr. Priest requested a financial breakdown of different alternatives. Mr. Noyes stated that a truck can transport 4,000 gallons of water and that Holtec calculated costs of alternatives in its alternatives evaluation that was submitted as part of its permit amendment application.

### **INTERAGENCY WORK GROUP (IWG) UPDATE<sup>17</sup>**

Mr. Pickering provided an update on behalf of the IWG.

Mr. Pickering began by stating that he would not be discussing item 5 on the agenda because the state was not prepared to answer the questions that had been sent to them. Mr. Lampert discussed the purpose of agenda item 5.

#### Administrative Update

- Mr. Gregory Wade is the new designee for the DPU on NDCAP.

Regarding the water discharge permit modification application:<sup>18</sup>

- DEP completed its review of Holtec's application for a discharge permit modification and issued a final determination denying the request.
- Holtec's permit modification application seeks authorization to discharge wastewater that qualifies as industrial wastewater into Cape Cod Bay and is prohibited by the Ocean Sanctuaries Act.
- DEP held a public comment period and a public hearing and received more than 1,000 comments as part of an extensive review of the Holtec permit modification request.
- The Healey-Driscoll Administration will continue to monitor Holtec's role in the decommissioning of the Pilgrim facility to ensure the work meets state standards to protect the environment and public health.

Mr. Lampert asked whether DEP would respond to all comments. Mr. Pickering stated that DEP was developing a response to comments and that there would be a response to comments.

Regarding water evaporation:<sup>19</sup>

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<sup>16</sup> Minute Marker 1:31:45 of video.

<sup>17</sup> IWG update begins at Minute Marker 1:48:35 of video.

<sup>18</sup> Minute Marker 1:56:15 of video.

<sup>19</sup> Minute Marker 1:58:35 of video.

- DEP reviewed Holtec’s Potential to Emit air contaminants from evaporation of water and determined that such evaporation does not require an air quality permit. The total potential to emit for regulated pollutants is less than 30 pounds and the threshold requiring a permit is 2,000 pounds (one ton).
- If Holtec intends to change current operations in a way that would increase air emissions, Holtec must notify DEP to ensure compliance with all applicable state laws and regulations.
- Holtec has conducted updated sampling on July 16, 2024 with DEP and DPH representatives present and would provide sampling results to the state. DEP does not anticipate the sampling would materially change the Potential to Emit calculations.

Mrs. Lampert asked when the panel could expect to see the results of the sampling. Mr. Noyes responded that results are expected within three weeks and would be sent to DEP and shared the same way as past sampling was shared.

Mr. Lampert noted statutory definitions of air pollutant and air contaminant and asked why the radioactive water was not included in the emissions calculation.<sup>20</sup> Mr. Pickering responded that the calculations do not include potential emissions of radionuclides for evaporation of water which is regulated by NRC standards. Pilgrim’s air releases of radioactive particulate tritium in 2023 were well below NRC standards as published in the Pilgrim Nuclear Power Station 2023 annual radiological environmental operating report that was submitted to the NRC. Mr. Lampert and Mr. Pickering discussed these definitions and standards and Mr. Pickering requested that Mr. Lampert submit his question in writing.

Regarding site assessment work plan/MCP:<sup>21</sup>

- The Attorney General’s Office is working to finalize the state’s response to Holtec’s site assessment work plan.
- Response actions under the Massachusetts Contingency Plan (MCP, or M.G.L. c. 21E) are ongoing.
- The Phase II Comprehensive Site Assessment, which documents the nature and extent of contamination and contains a risk characterization, is due to be submitted to DEP by April 21, 2025.

Other updates:<sup>22</sup>

- DEP’s asbestos section continues to be actively engaged in overseeing ongoing demolition activity occurring at the site and is meeting regularly with the company to manage the asbestos discovery/identification and abatement/removal processes.
- DEP is continuing to evaluate Holtec’s request to change its wastewater disposal system to a Title 5 system. The plant has run into some issues with the soil at the site. Mr. Noyes confirmed issues regarding the ability to site in a location where the soil will accept the discharge.
- MEMA continues to work with local partners on public safety planning and will schedule additional trainings as appropriate.

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<sup>20</sup> Minute Marker 2:00:20 of video.

<sup>21</sup> Minute Marker 2:07:55 of video.

<sup>22</sup> Minute Marker 2:08:25 of video.

Mr. Lampert commented that the discussion was now up to Item 5 and asked that panel members and the public read the questions attached to the meeting agenda and provide any thoughts or additions to those, as well as provide additional comments or questions, if any.

Ms. Gatslick asked to move Item 5 to the next meeting's agenda and requested a deadline from Mr. Noyes and Mr. Pickering for receiving questions to allow them to respond for the next meeting. Mr. Nichols suggested splitting up Mr. Lampert's questions included in the agenda over two meetings.

The panel skipped agenda Item 7, Status of the Decision on Holtec's request, and moved this item to September's meeting.

### **PUBLIC COMMENTS**<sup>23</sup>

Diane Turco asked two questions and made two requests:

- Whether Holtec was planning to turn the heaters back on. Mr. Noyes stated that Holtec is planning on turning the heaters back on when they process BC waste and for the winter.
- Whether DEP determined that Holtec could not dump its water into Cape Cod Bay because it was industrial wastewater; Mr. Pickering confirmed.
- Ms. Turco requested DEP to follow its mandate and advise Governor Healey to enforce the Ocean Sanctuaries Act, which includes gaseous materials, to prohibit Holtec from polluting the environment by evaporating the industrial wastewater and asked for a formal written response to this request.
- Ms. Turco requested NDCAP to follow its mandate and advise Governor Healey to initiate an independent investigation into the allegations in the whistleblower letters.

Andrew Jackson stated that it would be faster to have the water evaporated or discharged instead of discussing it being shipped out.

Doctor Barry Potvin asked if Holtec could give an estimate of what it would cost to ship one truck with 4,000 gallons of water to the disposal site. Mr. Noyes stated that he did not have the estimate but could provide it. Dr. Potvin's stated that shipping water to a disposal facility would be the safest way to remove the material at the least risk to the people of Plymouth.

Brian Campbell read a statement expressing his strong support for discharging treated water into Cape Cod Bay and discussed the closure of Indian Point Power Plant in New York and the increase in emissions after Indian Point's and Pilgrim's closures.

Chris Nord stated that he submitted questions at the meeting in March but did not receive answers, although his questions were read into the minutes at the last meeting. Mr. Nord thinks it would be worthwhile to entertain the notion of shipping waste by truck to rail lines to avoid sending trucks the entire distance to the disposal site.

Joanne Corrigan is concerned about how citizens will be notified if there is a leak from a cask if all 113 sirens are removed and would like to know what the plan is if there is an emergency. Mr. Noyes responded that under the current configuration the emergency plan was modified because there is not a plausible scenario where sufficient radiation would be released such that an individual would have to

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<sup>23</sup> Public comment begins at Minute Marker 2:17:10 of video.

evacuate. Mr. Lampert added that the emergency planning people in each town have come up with emergency plans and that it might be good to have them join a future meeting.

Sean Noyes gave a statement on why the tritium discharge would not be harmful and discussed the Fukushima discharge as an example. Mr. Lampert suggested that Mr. Sean Noyes or Mr. Campbell consider talking to the legislature because he does not believe that the risk of the release is relevant to the Ocean Sanctuaries Act as written.

Paul Quintal offered the idea to barge waste off site. Mr. Noyes responded that he was not aware whether that idea had been discussed. Mr. Quintal added his concern regarding environmental monitoring of the site and asked whether Holtec was monitoring environmental concerns. Mr. Noyes responded that Holtec monitors day-to-day releases from commercially available information. Mr. Quintal then asked whether there was a plan for a catastrophic attack on the canisters. Mr. Lampert and Mr. Noyes both stated that there are security plans in place.

Ben Cronin gave a statement regarding the standard for releasing nuclear wastewater and its application to gaseous discharges. Mr. Cronin also cited the Massachusetts Endangered Species Act and its application to Cape Cod Bay and surrounding areas.

#### **ADJOURNMENT**

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

Adjournment took place at around 9:15 p.m.

#### **DOCUMENTS AND EXHIBITS USED AT MEETING**

- Holtec Presentation
- IWG Presentation
- Agenda (including attachments)
- Statement of Dr. Cronin
- Statement of Sean Noyes
- Statement of Brian Campbell

See <https://www.mass.gov/info-details/nuclear-decommissioning-citizens-advisory-panel-meetings> for documents of which NDCAP has copies.