NUCLEAR DECOMMISSIONING CITIZENS ADVISORY PANEL ("NDCAP") Monday, January 23, 2023 Hybrid Meeting (in-person and virtual) Meeting Minutes

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

NDCAP MEMBERS PRESENT

- John Mahoney, Plymouth Select Board Designee Delegate (in person)
- 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)
- Seth Pickering,¹ Department of Environmental Protection (in person)
- David C. Nichols, Governor Baker Appointee (in person)
- Andrew Gottlieb, Governor Baker Appointee (in person)
- Jack Priest, Department of Public Health, Radiation Control Program (virtual)
- Henrietta Cosentino, Plymouth Select Board Appointee (virtual)
- John Viveiros, Massachusetts Emergency Management Agency (virtual)
- David Noyes,² Holtec Decommissioning International (in person)
- John Moylan, Holtec Site Vice President (in person)

NDCAP MEMBERS NOT PRESENT

- Mary Waldron, Old Colony Planning Council
- Kelly O'Brien, UWA Representative

GUESTS IN ATTENDANCE

- Benjamin Thomas, representing U.S. Senator Edward Markey's office
- Caleb White, representing U.S. Senator Elizabeth Warren's office
- Michael Jackman, representing Congressmen Bill Keating's office
- State Senator Susan L. Moran
- State Representative Mathew J. Muratore
- State Representative Kathleen R. LaNatra
- Gerard Martin, Department of Environmental Protection

REVIEW OF MINUTES

Mr. Mahoney asked the panel whether there were any concerns with the November 28, 2022, meeting minutes. Ms. Pine DuBois commented that she made some changes with regard to those in attendance. A motion to approve the prior minutes from November 28, 2022, was made and passed unanimously.

¹ Designee of Secretary Rebecca Tepper (Executive Office of Energy and Environmental Affairs)

² In place of Pat O'Brien (Holtec)

REORGANIZATION OF PANEL CHAIR/VICE CHAIR

Mr. Mahoney indicated that there is an opportunity to nominate the Chair and Vice Chair of the NDCAP.

Ms. Lampert advised postponing reorganization, as she does not believe that a policy of "hold-overs" without re-appointment (at expiration of a member's term) is correct. After contacting several state agencies and municipalities, including the Attorney General's Office, she has not received a definitive answer on panel selection. Mr. Mahoney asked Ms. Lampert whether she would like to make a motion to table reorganization to a future date.

Mr. Lampert stated that the term limits are set by statute. In July 2022, several panel members had exceeded their term limits without reappointment. He suggested pushing reorganization to avoid conflicts with reappointment procedures.

Mr. Mahoney advised the panel that he met with the Plymouth Town Manager and his advice was that the panel should continue business as usual until the state follows through with its reappointment requirements.

There was a motion to table the issue of panel reorganization which was seconded by Ms. Lampert. The motion passed with 11 in favor, 3 abstentions, and 1 opposed.

LEGISLATIVE DELEGATION

State Senator Susan L. Moran advised the panel that she refiled the previously vetoed legislation. The legislation includes:

- Moratorium on discharge of radioactive water in Cape Cod Bay until 2025
- Establishment of a commission to study the impacts resulting from discharge
- 4 public hearings in Dukes, Plymouth, Bristol, and Barnstable on commission's findings

State Representative Mathew J. Muratore explained to the panel that he filed legislation last Friday. He reminded the panel of its primary duties and objectives, based on the original 2016 legislation creating the panel. The proposed legislation includes a reduction of panel members from 21 to 15 with new or amended members.

State Representative Mathew J. Muratore then read provisions from the June 2020 settlement agreement between the Commonwealth and Holtec. He emphasized the need for state agencies to be actively involved in the future steps of the decommissioning process.

Mr. Mahoney asked about the timeline and procedure for the new proposed legislation. State Representative Kathleen R. LaNatra explained the legislative procedure and advised that further action will be taken after March.

Mr. Mahoney asked both State Representatives whether the new administration understood the decommissioning process in Plymouth. State Representative Mathew J. Muratore said Governor Maura Healey was involved with the June 2020 settlement when she was the Attorney General, so she has awareness of the situation.

Mr. Gottlieb indicated that, in his opinion, these new proposals imply that the matter of decommissioning would be in the jurisdiction of state agencies. He expressed his concerns on whether the proposed legislation would constrain the purposes of the panel.

Ms. Lampert's concern was that the new proposals focused only on Plymouth. There is a concern for the entire region. Further, she raised the issue of funding which has impacted expert testimony. Lastly, Ms. Lampert raised the issue of constraints in the ability of the panel to vote on issues.

Ms. duBois reiterated concerns about the constraints in state involvement on the panel. She indicated that the main problem is the spent fuel, and hopes that the legislation will address this issue.

Mr. Michael Jackman mentioned that Congressmen Bill Keating was working with U.S. EPA to gather more updates and direction on oversight. Once that information becomes available, he will report back to the panel.

Mr. Caleb White stated that U.S. Senator Elizabeth Warren was working on the same.

Mr. Mahoney asked whether Congressmen Keating and Senator Warren have ever visited the site. Mr. White was not sure whether Senator Warren has visited the site. Mr. Mahoney asked Mr. White whether she can visit the site if she has not done so yet. According to Mr. Jackman, Congressmen Keating has been to the site.

Mr. Benjamin Thomas from U.S Senator Ed Markey's Office said he had no major updates. The office continues to work with other agencies and focus on independent analysis of the water. Mr. Mahoney asked whether Senator Markey has been down to the site. Ben said he was not sure but could coordinate to have him on site if he has not visited yet.

Ms. Cosentino expressed her concerns about the proposed legislation and lack of citizen representation. She hopes that the new proposed legislation will not exclude citizens.

HOLTEC UPDATE

Mr. David Noyes briefly updated the panel regarding the major activities associated with decommissioning, and a power point presentation was shown. In summary:

- Characterization Holtec is on track for a 2024 submission of a license termination plan.
- Dry cask storage Holtec continues to be custodians for waste storage pending final disposition.
- Reactor segmentation, waste management, and site restoration will follow the license termination planning.

Mr. Noyes then updated the panel on demolition activities:

- The Trash Compaction Facility was demolished on January 19, 2023.
- The Old Main Gate building will be the next structure to be demolished. Abatement of asbestos (including floor tile) and structural demolition will occur in the first quarter of the 2023.
- Five buildings and structures, two remaining underground storage tanks on site, and four above ground storage tanks will also be demolition during the first half of 2023.

• The administration building will remain during the early phases of demolition.

For reactor segmentation:

- 78/173 Control Rod Blades are scheduled to be removed during the first quarter of 2023.
- 130/145 Fuel Support Castings are scheduled to be removed during the first quarter of 2023.
- 108/147 Control Rod Guide Tubes are scheduled to be removed during the first quarter of 2023.
- The core plate will be removed during the first quarter of 2023.
- The jet pumps will be removed during the second quarter of 2023.

Mr. Noyes provided the panel with a review on the outfalls under the current NPDES permit:

- 11 outfalls exist under the current NPDES permit
- 6/11 are in service (5 stormwater and 1 for salt service water)
- 4/11 have been abandoned
- 1/11 is authorized for use but is not active

To date, of the 9.2 million pounds of non-radiological waste collected, 8.2 million pounds has been recycled or reused including batteries.

Regarding waste management:

- Waste is being sent off site via truck or by truck to rail via a transload facility in Mansfield.
- In 2022: 90,000 cubic feet of Class A of waste was removed from the site.
- In 2022: 62 cubic feet of Class B and C waste were removed from the site.

Holtec plans to seek modifications to the NPDES and State Surface Water Discharge Permits with a goal of permit submittal sometime in the mid to late first quarter of 2023. Mr. Noyes stated that discharge will not occur until permitting is complete.

Mr. Mahoney asked for an update regarding the on-site sampling of water in the three containment areas. Mr. Seth Pickering advised that the sampling has yet to occur, but will have an update from the state.

Ms. DuBois inquired about the capacity of the storage tanks. Mr. Noyes believed that the condensate storage tanks were 250,000 gallons and the fire water storage tank may be around 200,000 gallons. Ms. DuBois asked whether those tanks could be recycled. Mr. Noyes said no.

Mr. Priest asked whether the four abandoned outfalls were mechanically isolated. Mr. Noyes said that the equipment in those outfalls have been isolated. Mr. Priest then asked whether Mr. Noyes could describe the monitoring on the remaining outfalls. Mr. Noyes explained that there are recorders when pumps are operating. They measure differential temperature at five-minute intervals and those reports are submitted to the state. The report includes oil, grease, and pH. Also, there is radiological monitoring near the reactor building.

Mr. Nichols asked whether Holtec has spent more or less than projected on decommissioning. Mr. Noyes mentioned that Holtec may be a little under budget because of the advances made in scheduling and sale of recycled material. There will be an update in March regarding cost.

Mr. Lampert asked what the total ABC low-level radioactive waste shipped to date is. Mr. Noyes said he did not have an answer towards the total amount since the decommissioning process began but could get back to him on that issue. Mr. Priest advised that the year-to-year number is on the DPH website.

Ms. Lampert referred to a letter from EPA regarding the need for a NPDES permit modification. Holtec indicated that they would comply with federal regulations. However, she asked Mr. Noyes to clarify whether Holtec would comply with state laws and regulations, including the Ocean Sanctuary Act, Damage to the Environment Law, Massachusetts Clean Water Act, M.G.L. c. 21E, and the Massachusetts Endangered Species Act. Mr. Noyes explained that the state, through the coastal zone management review, will consider the applicability of these various laws. Any conditions would be in the state's surface water discharge permit.

Mr. Gottlieb asked to confirm that the torus has enough capacity to hold the water currently being used. Mr. Noyes clarified that the torus can hold 1.6 million gallons.

Ms. Cosentino asked Mr. Noyes to explain the salt service water system outfall. Mr. Noyes said the water in that system is being used to cool heat loads with equipment in the turbine building.

INTERAGENCY WORK GROUP ACTIVITIES UPDATE

On January 12, 2023, a meeting was held with MassDEP, EEA, AGO, U.S. EPA and Holtec. The purpose of the meeting was to outline the permitting process for any proposal by Holtec to discharge water from the spent fuel pool or any decommissioning related wastewater. State agencies were given the opportunity to provide feedback on the permit procedures which Holtec agreed to consider.

CZM and EEA are considering the implications of the Ocean Sanctuaries Act.

MassDEP and DPH continue to work with Holtec to determine a protocol for sampling water from the reactor building:

- MassDEP and DPH were on site to observe where the samples are proposed to be taken.
- The three locations will be the spent fuel pool, separator dryer pit and torus.
- The split sampling will be provided to the state for independent testing.
- Holtec has provided a draft sampling protocol to MassDEP and DPH.
- The protocol will be finalized before the actual sampling events take place.
- MassDEP has identified a laboratory to analyze samples.

MassDEP, DPH, and AGO continue to review Holtec's environmental assessment work plan and radioactive management plan. Holtec's phase 2 comprehensive site assessment will be due in April of 2025. This assessment is required because Holtec identified hazardous materials on site.

MassDEP's asbestos section continues to be actively engaged in overseeing the demolition activities that is occurring at the site.

Holtec made a request to MassDEP to change the wastewater disposal system to a Title 5 system. Under this proposal, the flows from the plant would discharge to a Title 5 system and the existing treatment facility would be taken offline.

Mr. Gerard Martin explained the anti-degradation provisions of the surface water quality standards.

- A review is conducted whenever Holtec makes a request to modify a permit.
- The purpose of the review is to determine whether the anti-degradation provisions apply.
- Anti-degradation applies when there are new and/or increased point source discharges.

The discharge from the spent fuel pool would be considered a new discharge. The analysis is carried out by MassDEP and determines whether there is a potential for any new or increased discharges of pollutants to degrade the water quality. According to Mr. Martin, radionuclides are not pollutants under the Clean Water Act.

Ms. DuBois asked how MassDEP would review and analyze commingled water since in the past, the water in the spent fuel pool may have been in the separator pit and torus. Mr. Martin said that MassDEP was looking into that.

Mr. Lampert asked Mr. Martin whether he said radionuclides were not listed under the Clean Water Act. Mr. Martin said that radionuclides were not.

Ms. DuBois asked Mr. Pickering who at CZM was at the meeting with EPA. Mr. Pickering said several individuals from the agencies were in attendance and could send Ms. DuBois a list. She then asked which lab was selected for the sampling. Mr. Pickering said it was a lab in Denver called Eurofin.

Ms. DuBois then asked whether the transfer from the wastewater treatment to septic met the new requirements regarding nitrogen. There was discussion between Ms. DuBois and Mr. Martin about watersheds leading into Cape Cod Bay. Thereafter, Mr. Martin confirmed that Plymouth was included in the new regulation.

Ms. Lampert clarified whether spent fuel pool and any water used for decommissioning was considered a new source. Mr. Pickering said he believed so but would have to check the permit to confirm.

Mr. Pickering stated that MEMA continues to work with local partners on public safety planning and it is scheduling the next quarterly work group meeting with former EPZ communities.

Mr. Nichols asked whether Holtec objected to anything proposed by the state during their meeting in January. Mr. Pickering said no.

Ms. Gatslick asked when the review of the site plan would be completed. Mr. Pickering said he cannot confirm a completion date. There were some delays amongst the agencies but hopes to have it soon.

Ms. Lampert asked about the demolition of buildings and how far below ground does Holtec have to go. Mr. Pickering did not have a clear answer and said it depended on elevations. Mr. Priest said it is mentioned in the settlement agreement. Mr. Noyes advised that it also includes that Holtec cannot leave any oil or hazardous material. Ms. Cosentino asked whether economic impacts are discussed when a new or modified NPDES permit application is submitted to the U.S. EPA. Mr. Martin said it may be if the discharge is significant.

REVIEW OF ANNUAL REPORT

Ms. Gatslick proposed that the report contain a section on recommendations from this panel based on the feedback and comments received. She stated to the panel that comments were received within 1-2 hours prior to tonight's meeting and has not had an opportunity to read or address them.

Mr. Lampert indicated that there is a fundamental disagreement about the purpose of the annual report. He suggested that this disagreement should be resolved.

Mr. Noyes referred to the statute and stated that the purpose of the panel is to advise the governor, not make specific recommendations. He believes that including recommendations will delay the report.

Ms. Lampert believes that state agencies, members of the public, and the Governor are not interested in a bare outline report. In her opinion, the same individuals may not be interested in a 'blow-by-blow' of the panel's meetings. She believes that the recipients would be interested in decommissioning, discharge, and other site-related issues. Ms. Lampert expressed that both sides of all issues should be presented, but that the current draft is one-sided. She suggested that more time could be taken to finalize the report.

Mr. Priest suggested that the panel work collaboratively to create a valuable report to the governor. In addition to the four main points already raised, he suggested that there be a fifth point to include legislation. Also, he suggested having a short synopsis of each meeting.

Ms. Cosentino suggested that the synopsis be shorten to four or five pages.

Mr. Mahoney proposed creating a working group amongst the panel to assist in the annual report. He suggested that a second draft be provided 3-4 weeks prior to the next panel meeting.

Ms. Gatslick suggested that the first appendix be removed and a hyperlink be created to the meeting minutes; a legislation section could be added. These changes would shorten the report.

PUBLIC COMMENTS

Timothy Bennett Jr. expressed his concerns regarding the potential discharge of decommissioning water. He advised the panel that individuals such as himself, his brother, and his neighbors will deal with the consequences of such action and hopes that Holtec will not be permitted to discharge.

Brian Campbell explained to the panel his support for discharge. He referred to Doctor James Conca's presentation, which indicated that discharge from nuclear facilities was a routine activity with low risks.

Chris Nord suggested including an executive summary for full length reports. He then read a statement regarding the adverse effects of tritium. He concluded by asking the panel to weigh all sides regarding the disposition of the water.

Art Desloges reminded the panel that the statute mandates members of the panel to advise the governor and the general court. He then listed a set of agencies and organizations including the

Wampanoag Tribe who oppose the discharge of water into Cape Cod Bay. He believes that the panel has yet to voice an opinion on the subject matter and advised that an emergency letter be sent ahead of the panel's annual report to the governor.

Diane Turco continues to express her opposition to not discharge the water into Cape Cod Bay. She referred to a letter from the U.S. EPA stating that Holtec was not authorized to discharge the water under the current permit. She also referred to another letter from Holtec stating that it the water would be combined and treated prior to discharge. Mr. Noyes agreed that discharge was not authorized for water (in the spent fuel pool, dryer pit, and torus) and acknowledged that there was a different understanding of the permit and its requirements.

Ms. Turco then asked Mr. Noyes whether Holtec would comply with state regulations including M.G.L. Chapter 21E. Mr. Martin briefly explained the chapter. She proceeded to point out that the June 2020 settlement agreement requires Holtec to comply with Chapter 21E. Mr. Martin stated that Chapter 21E does not cover permanent discharges because it applies to accidental discharges.

Paul Quintal from Plymouth stated that he was concerned about the health of marine life in the Cape Cod Bay. He then asked Mr. Noyes whether Holtec has considered any of the concerns raised during these meetings. Mr. Noyes responded that Holtec is considering them.

Joanne Corrigan compared the ongoing decommissioning at Pilgrim with Vermont. She disagreed with the proposal of getting the state involved due to lack of involvement by the state in the past. She then advised the panel that Doctor James Conca was using data for his presentation from 1975.

Ryan Collins mentioned that he was glad that the plant was being decommissioned. He reminded the panel that individuals who reside in Plymouth and nearby municipalities oppose the discharge into Cape Cod Bay. He stated that their request is a simple one.

ADJOURNMENT

A motion to adjourn was made and passed unanimously.

The meeting was adjourned at about 9:30 pm.