

**NUCLEAR DECOMMISSIONING CITIZENS ADVISORY PANEL (“NDCAP”)  
Monday, November 22, 2021  
Hybrid In-Person/Virtual Meeting  
Meeting Minutes**

Meeting called to order at about 6:30 pm by NDCAP Chair John Mahoney.

**NDCAP MEMBERS PRESENT**

- John T. Mahoney, Representative of the Town of Plymouth (Chair) (in person)
- Pine duBois, Speaker of the House Appointee (Vice Chair) (in person)
- Richard Grassie, Minority Leader of the House Appointee (in person)
- Pat O’Brien, Representative of Pilgrim Nuclear Power Station (in person)
- Mary Lampert, Senate President Appointee (in person)
- Seth Pickering<sup>1</sup>, Department of Environmental Protection (in person)
- Henrietta Cosentino, Plymouth Select Board Appointee
- Susan Whitaker, Executive Office of Housing and Economic Development (virtual)
- Jack Priest, Department of Public Health, Radiation Control Program (virtual)
- Robert Hayden<sup>2</sup>, Department of Public Utilities (virtual)
- Mary Waldron, Old Colony Planning Council (virtual)
- Robert Jones<sup>3</sup>, Executive Office of Health and Human Services (virtual)
- John Moylan, Pilgrim Nuclear Power Station Site Vice President (virtual)
- John G. Flores, Governor Baker Appointee (virtual)

**NDCAP MEMBERS NOT PRESENT**

- Kevin O’Reilly, Speaker of the House Appointee
- Richard Quintal, Representative of the Town of Plymouth
- David C. Nichols, Governor Baker Appointee
- Paul D. Smith<sup>4</sup>, Representative of UWUA Local 369
- Amy Naples, Senate President Appointee
- (Vacant), Minority Leader of the Senate Appointee
- John Viveiros,<sup>5</sup> Massachusetts Emergency Management Agency

**GUESTS IN ATTENDANCE**

- Amy Snyder, NRC
- Bruce Watson, NRC
- Tamara Bloomer, NRC
- Anthony Dimitriadis, NRC
- Harold Anagnostopoulos, NRC
- Judy Chang, EEA
- Gerald Martin, DEP

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<sup>1</sup> Designee of Secretary Theoharides (EEA)

<sup>2</sup> Designee of Matthew Nelson (DPU)

<sup>3</sup> Designee of Secretary Sudders (Executive Office of Health and Human Services)

<sup>4</sup> Designee of Richard Sherman (Representative of UWUA Local 369)

<sup>5</sup> Designee of Dawn Brantley (MEMA)

## Approved

- 1 • John Drobinski, ERM
- 2 • Michael Jackman, staff Cong. Bill Keating
- 3 • Dave Noyes, Holtec
- 4 • Ben Thomas, staff Sen. Ed Markey
- 5 • Rich Rothstein, former NDCAP
- 6 • 17 members of press and public attended virtually and several in person

### REVIEW OF MINUTES

8  
9 The draft minutes from the September 27, 2021 meeting were reviewed.

10  
11 Ms. duBois made the following corrections:

- 12 • Paul Smith and Robert Jones were in attendance at the meeting, not absent.
- 13 • Guests in attendance should include: David Noyes (Holtec), Scott Young (Staff for Senator
- 14 Pacheco), Gerald Martin (DEP), Sean Mullin, Rich Rothstein, John Drobinski (ERM).

15  
16 Ms. duBois read the following corrections submitted by Jack Priest in advance of the meeting:  
17 Requested change of minutes on Page 7, lines 18-22 from:

18  
19 “Ms. Lampert also stated that the template for panel questions. She stated Mr. Priest had offered to  
20 work with Mr. Lampert create an amalgamated template for questions to send to the NDCAP chairs,  
21 however this has not been completed. Mr. Priest stated that he is not the Secretary for the Panel and  
22 that another chair member could volunteer to do that. Ms. Lampert volunteered. Mr. Mahoney stated  
23 he and the vice chair would take that under advisement.”

24  
25 To be changed to:

26 “Ms Lampert also raised the issue of the template for panel questions. She stated Mr. Priest had offered  
27 to work with Mr. Lampert to create an amalgamated template for questions to send to the NDCAP  
28 chairs was submitted. Although a template was provided, a final approved document has not been  
29 completed. Mr. Priest suggested that other panel members could be engaged and a member could  
30 volunteer to do that. Ms. Lampert volunteered to take on this task. Mr. Mahoney stated he and the vice  
31 chair would take that under advisement.”

32  
33 Motion was made to approve the minutes as amended which was seconded.

34  
35 The September 27, 2021 minutes were approved by unanimous vote.

### PROJECT UPDATE FROM HOLTEC

#### General Holtec Update

38  
39  
40  
41 Mr. O’Brien provided an update of activities at the site and showed a power point presentation.

42  
43 Mr. O’Brien presented Holtec’s timeline. So far, 31 of 34 casks are completed for the fuel campaign, and  
44 59 of the 62 total casks are loaded. The Fuel Campaign is on track to be completed by December 10.

45  
46 47 Casks have been transported to the upper ISFSI pad.  
47

## Approved

1 Abatement for the FFD/Medical Building started on 11/19 and demolition is scheduled for 12/8/21.  
2 Abatement for the O&M building is scheduled for 12/1/21 and demolition for 12/15/21. Abatement and  
3 demolition for the Old Executive Administration Building and Two Story Butler Building are scheduled  
4 for January and February.

5  
6 Segmentation, waste reduction, and waste management activities are ongoing. 95 of 154 Riser tubes  
7 have been crushed.

### Environmental

8  
9  
10 Mr. Noyes provided an update of an incident that occurred on November 9, 2021. On November 9<sup>th</sup>,  
11 Holtec reported a violation of the facility's National Pollutant Discharge Elimination System (NPDES)  
12 Permit to the US EPA and MassDEP. The violation involved the pumping of approximately 7,250 gallons  
13 of rain and groundwater from an underground cable vault to an adjacent storm sewer. A corresponding  
14 report was made to the US NRC due to the environmental report made to a government agency.

15  
16 The water was non-radiological and no visible sheen or odor was noted. Laboratory analysis is being  
17 performed to determine the presence of any pollutants. A causal analysis is being performed to  
18 determine what process or performance issues contributed to the event. The event was self-identified  
19 and was capture and place in our corrective action process.

### Site Characterization

20  
21  
22  
23 Mr. Drobinski provided an update on continued site characterization activities. All analysis and sampling  
24 is complete and results from the laboratory are anticipated in the middle of December.

### Staffing

25  
26  
27  
28 Mr. O'Brien stated that a staff reduction is planned for January 6, 2022. Holtec held a job fair on  
29 November 16<sup>th</sup> and is working with local employers to identify opportunities for those leaving the site.

### Questions

30  
31  
32  
33 Mr. Grassie asked about the 3 canisters scheduled as greater than Class C waste, and when they will be  
34 transported to the upper pad. Mr. O'Brien responded that they would follow the fuel campaign and  
35 would be transported by the end of January or early February.

36  
37 Chair Mahoney asked what would happen to the pool and the water after the fuel campaign is  
38 complete in December. John Moylan responded that there are still some components in the pool, so  
39 they will do the GTTC campaign, and this will take until at least Fall 2022. At this point they will make a  
40 decision on what to do with the water. One option is to store the water in a suppression ring. Others  
41 include shipping the water, overboarding, and evaporating.

42  
43 Ms. Lampert commented that the real options are to put the water in Cape Cod Bay or to truck it, and  
44 asked if it were transported, where would it go? And what would be the reason not to truck it? Mr.  
45 Noyes responded that there are vendors who can do the trucking, however the plans for the water have  
46 not been finalized yet.

47

## Approved

1 Chair Mahoney asked for clarification on what types of abatement activities were taking place related to  
2 building demolition. Mr. O'Brien stated that it was primarily asbestos abatement and lead paint. Mr.  
3 O'Brien confirmed these buildings are outside of the nuclear footprint.

4  
5 Chair Mahoney asked about future demolition plans. Mr. O'Brien responded that Holtec will continue  
6 working on outbuildings initially, and will turn to radiological buildings at a later point. Mr. Moylan  
7 stated this could start in 2022, but would primarily be in 2023.

8 Ms. duBois asked Mr. Moylan about the testing procedures for the water in the pool, what the decision  
9 triggers are, and who is involved in this process? Mr. Moylan responded that the water is tested for the  
10 concentration of nucleoids and the chemical constituents of the water, and that this will determine what  
11 the options are for disposition.

### INTERAGENCY WORK GROUP (IWG) REPORT

12  
13  
14  
15 Mr. Pickering presented an update of IWG activities.

16  
17 Mr. Pickering stated that Samantha Phillips is no longer the Director of MEMA. Dawn Brantley is the  
18 Acting Director of MEMA and she has designated John Viveiros, Director of the MEMA Technical Task  
19 Force, as her designee.

20  
21 DEP and DPH continue to work with the Attorney General's Office to formulate a formal response to the  
22 Site Assessment Work Plan. This will be sent to Holtec and NDCAP.

23  
24 Mr. Pickering shared a letter from the Attorney General's Office stating that Holtec is not in compliance  
25 with Paragraph 24 of the Commonwealth Settlement Agreement. The Attorney General's Office has  
26 requested that Holtec comply with the Radioactive Waste Management Plan and submit this to the AG's  
27 office within 14 days, and the study within 30 days of November 22<sup>nd</sup>. Mr. O'Brien commented that  
28 Holtec received the letter and plans to respond, however there were no dates listed in the letter.

29  
30 Mr. Pickering then discussed the follow up on the report about the NPDES permit unauthorized  
31 discharge on November 8<sup>th</sup>, 2021. MassDEP is investigating and will respond accordingly.

32  
33 Mr. Pickering stated that US EPA, DPH, and DEP have been notified by Holtec that they intend to de-  
34 water their reactor and steam-generation systems including the spent fuel pool that contains  
35 radioactive water. These contain approximately 1,000,000 gallons of water. MassDEP and US EPA have  
36 notified Holtec that discharge of contaminated water into the Cape Cod Bay is not authorized by the  
37 NPDES permit. Holtec may submit a formal request to discharge the water. This will be reviewed by US  
38 EPA, DPH, and DEP.

39  
40 Ms. Lampert asked about how tritium can be handled. Mr. Pickering responded that tritium is not listed  
41 in the NPDES permit as being regulated. Mr. Priest stated that tritium is regulated by the NRC.

42  
43 Ms. Cosentino asked to confirm that neither tritium nor other radionuclides are included under the US  
44 EPA and MassDEP list of pollutants and are only regulated by the NRC. Mr. Priest responded that tritium  
45 is a radionuclide, and that radionuclides are under the authority of the NRC.

46  
47 MassDEP continues to work with Holtec on response actions related to the Notice of Responsibility  
48 issued in May 2021. Gerard Martin added that Holtec has a year to respond to the Response Action, and

**Approved**

1 if they are not able to complete the Response Actions within the year, they must start taking  
2 Comprehensive Response Actions. This would begin in Spring 2022.

3  
4 MassDEP continues to oversee asbestos abatement related to demolition.

5  
6 MassDEP will provide bullet points listing work performed in 2021 relative to implementation of the  
7 Holtec settlement agreement and the decommissioning activities for the NDCAP annual report. Mr.  
8 Grassie responded that he needs two things: the Site Characterization and the IWG Report.

9  
10 **NRC INSPECTION REPORT, ISFSI INSPECTION, NPDES VIOLATION, OIG AUDIT**

11  
12 NRC staff presented an overview of their role and the results of their recent inspection of Pilgrim via a  
13 slide show presentation.

14  
15 Ms. Bloomer introduced the NRC team. Ms. Snyder provided an overview of recently completed  
16 licensing actions and future licensing requirements at Pilgrim. Mr. Anagnostopoulos presented an  
17 overview of the NRC's Inspection Program and the results to date at the Pilgrim site. The inspection  
18 results included one Severity Level IV Non Cited Violation from a January 2021 inspection for a Type A  
19 package that was sent for disposal using the paperwork for another, similar package. This violation had  
20 low safety significance.

21  
22 Ms. Lampert commented that she had requested the slides to be sent in advance, however she did not  
23 receive them. Ms. Lampert requested that NRC provide slides to the Commission and the public in  
24 advance of future presentations.

25  
26 Mr. Priest asked when the NRC's next scheduled module inspection for effluents would occur. Mr.  
27 Anagnostopoulos replied that he had completed an effluent inspection in the 3<sup>rd</sup> quarter and that  
28 effluent inspections occur on an annual basis. Therefore, the next effluent test would take place in 2022,  
29 and the timing will be dependent on plant activities.

30  
31 Ms. duBois asked Mr. Anagnostopoulos to clarify what "special nuclear materials" are. Mr.  
32 Anagnostopoulos responded that "special nuclear materials" generally refers to fissile materials, which  
33 could be used for nefarious purposes. Therefore, enriched uranium would be considered a special  
34 nuclear material. Ms. duBois followed up to ask for additional information on how much of this exists at  
35 Pilgrim. Mr. Anagnostopoulos responded that the NRC regulations are intended to prevent the possible  
36 use of these materials for nefarious purposes. Mr. Priest also offered to provide additional information  
37 to Ms. duBois if requested.

38  
39 Ms. Cosentino asked whether there is enriched uranium outside of the amounts found in the spent fuel.  
40 Mr. Anagnostopoulos responded that yes, there are very small amounts used in things like nuclear  
41 detectors.

42  
43 Mr. Rothstein asked if any new federal environmental regulations are passed, would the Pilgrim plans  
44 need to account for these new regulations. Ms. Snyder responded that new regulations will typically  
45 specify if and how they apply to ongoing projects. Mr. Rothstein also asked for clarification on the  
46 differences between an ISFSI Emergency Response Plan and the Emergency Plan for an operating  
47 nuclear plant. Ms. Snyder responded with clarification on how the Emergency Response Plan is modified  
48 as elements of the plant are decommissioned. Ms. Bloomer summarized that the significant differences

## Approved

1 are that there are no sirens, no 10-mile radius, and no stockpiling of potassium iodine. Mr. Rothstein  
2 asked if NRC could summarize what they would be looking for in an ISFSI Emergency Plan. Ms. Snyder  
3 explained some of the changes in personnel responsibilities in an ISFSI Emergency Plan.

4  
5 Mr. Lampert asked if the NRC technical reviews are substantive or if they are simply ensuring all of the  
6 elements are present. Ms. Snyder explained the plan review elements and process. Mr. Lampert asked  
7 what information, beyond the information provided by the licensee, does the review process consider?  
8 Ms. Snyder responded that NRC does an independent review of the licensee materials and then  
9 considers if additional analysis is necessary. Mr. Lampert then asked about the security plans and  
10 whether the security area is limited to the fenced ISFSI pad and whether the NRC regulatory review  
11 accounts for the security of the area between the pad and Rocky Hill Road? Mr. Anagnostopoulos  
12 responded that while he is not a security inspector, he does know that the security program does  
13 include a threat assessment. Mr. Lampert asked if a threat assessment would include an assessment of  
14 risk from terrorist attacks on the casks from outside the security area using readily available weapons.  
15 Mr. Anagnostopoulos said he could not speak to this question. Mr. Lampert then stated that he had a  
16 copy of the OIG's audit of the NRC's oversight of decommissioning trust funds, and asked what steps  
17 NRC had taken to address deficiencies raised in the audit. Ms. Bloomer responded that NRC agrees with  
18 the OIG's recommendations to improve processes and NRC is taking steps to make these changes. Mr.  
19 Lampert asked when NRC expected to have all of the improvements in place? Ms. Bloomer said that  
20 several elements were underway, but she would need to look into the full timeline.

21  
22 Ms. duBois relayed the following question from Rosemary Shields; Relative to the ½ inch steel core of  
23 the dry casks, how often are they inspected for leakage? And as the casks age, is there a plan to inspect  
24 them more often? Mr. Anagnostopoulos responded that the ISFSI inspections are conducted by specially  
25 trained inspectors and that he could not speak to the details of their inspection standards. Ms. Shields  
26 second question was what the significance is of a 2027 Termination of License? Does it mean that Holtec  
27 no longer has the license and is free to leave the premises? Ms. Snyder responded that the 2027  
28 Termination of the Part 50 License means that Holtec may seek to release a portion of their license area,  
29 and this will need to be reviewed by NRC. They will still be required to have onsite and offsite insurance  
30 until the spent fuel is removed. The ISFSI itself will also require a plan to be fully decommissioned.

31  
32 Diane Turco, a member of the public, asked whether the NRC is aware that Holtec has already been  
33 charged and found guilty of fraud and bribery in the United States? Mr. Anagnostopoulos responded  
34 that Ms. Bloomer had left the meeting, but that the handling of the Decommissioning Trust Fund would  
35 be a headquarters function. Ms. Turco then asked NRC whether they agreed with the statement that an  
36 elementary school could be built on the site when it was fully decommissioned. Ms. Snyder responded  
37 that NRC could not make a decision at this time because an application has not been submitted and NRC  
38 has not done an evaluation yet. However, if the licensee meets the unrestricted release criteria, then it  
39 would be unrestricted.

40  
41 Ms. Lampert made an objection that she was not able to ask questions of NRC at this time.

## **DISCUSSION ON ROLE OF DOE AND THE SPENT NUCLEAR FUEL STORAGE DILEMMA**

42  
43  
44  
45 Mr. Jackman shared comments about a meeting with DOE staff regarding the possibility of reprocessing  
46 spent nuclear fuel. Mr. Jackman shared his impression that while this technology is still being developed  
47 and researched, it is not currently a viable option for the spent fuel at Pilgrim.

## Approved

1 Chair Mahoney expressed interest in inviting DOE staff to attend a future NDCAP meeting to present this  
2 information.

3  
4 Ms. duBois stated that DOE staff shared that there will be an upcoming opportunity for public comment  
5 on interim nuclear waste storage as an addendum to the 2017 report that was done. Ms. duBois  
6 believes this will be announced via a press release.

7  
8 Ms. Lampert requested more information from DOE on what they are doing in the short-term to  
9 improve safety of on-site storage and the associated federal funding for these programs. Ms. Lampert  
10 emphasized that the priority for the panel is site assessment and safer spent fuel storage. Mr. Jackman  
11 responded that he is open to relaying any specific questions to DOE.

12  
13 Ms. Cosentino asked a question about the schedule for inspection of the storage canisters. Who can  
14 walk us through what happens when casks start to leak? She stated that it is likely to happen before the  
15 canisters leave the site, and that she is not aware of any technology for transfer or repair of leaking  
16 containers. Mr. O'Brien stated that experts on this topic had presented before the panel in the past and  
17 he could ask if they are willing to come back. Ms. Cosentino expressed interest in getting a more  
18 definitive explanation of what would happen in the event of a cask leak.

19  
20 Mr. Jackman commented that his colleague Ben Thomas from Senator Markey's office was on the call,  
21 and that Senator Markey's office would also help to engage with DOE to answer questions, including  
22 questions about cask technology. Mr. Thomas then introduced himself and reaffirmed his willingness to  
23 work with Congressman Keating's office to seek out information from DOE for the panel.

24

### **PREP FOR ANNUAL REPORT**

25

26  
27 Mr. Grassie announced that he has a draft of the NDCAP Annual Report that is formatted. The draft  
28 includes summaries of all meeting minutes except for the September and November meetings. Mr.  
29 Grassie stated that he would follow up with Mr. Pickering regarding additional information for the  
30 report. Mr. Grassie said the draft would be complete with Mr. Pickering's input, but that he is open to  
31 additional input from the panel.

32

33 Ms. duBois reminded the panel that the report is due to the Governor and the Legislature by December  
34 31<sup>st</sup>.

35

### **PANEL AND PUBLIC COMMENTS AND QUESTIONS**

36

37  
38 Ms. Lampert made a motion to return to monthly meetings beginning in 2022, with both virtual and in-  
39 person options. Ms. Lampert explained that she believes the every-other-month meeting schedule is an  
40 impediment to public involvement. The motion is seconded by Ms. Cosentino.

41

42 Mr. Grassie asked to confirm that the Vermont NDCAP meets on a quarterly basis.

43

44 Chair Mahoney expressed disagreement with the notion that monthly meetings would increase public  
45 involvement. Ms. Lampert expressed that when NDCAP had monthly meetings in the first year, the  
46 meetings tended to be quite full. Chair Mahoney responded that this was likely a result of the novelty of  
47 the meetings and the significant developments in the first year.

48

**Approved**

1 Mr. Pickering requested that voting on the motion be postponed until the next NDCAP meeting to  
2 ensure he could discuss with EEA colleagues before voting.

3  
4 Ms. Lampert withdrew her motion and Ms. Cosentino withdrew her second. Chair Mahoney stated this  
5 would be an agenda item for the next meeting.

6  
7 Ms. Lampert made a second motion to adjust the meeting time to three hours. Ms. Lampert explained  
8 that the current meetings are too short to allow for public comment and sometimes panel comments as  
9 well. Chair Mahoney asked if Ms. Lampert would like to include this topic in the agenda for the next  
10 meeting. Ms. Lampert agreed.

11  
12 Ms. Lampert requested a third motion that there be two periods for public comment in the meeting;  
13 one in the middle and one at the end.

14  
15 There were follow-up comments made by a member of the public and Ms. duBois that are inaudible on  
16 the meeting recording.

17  
18 **WRAP UP AND ADJOURNMENT**

19  
20 A motion to adjourn was made and seconded. The motion passed unanimously.

21  
22 The meeting adjourned at about 8:45 pm.

23  
24 **MATERIALS PRESENTED AT MEETING**

25  
26 Audit of the NRC's Oversight of the Adequacy of Decommissioning Trust Funds

27  
28 HOLTEC Decommissioning International, LLC, Pilgrim Nuclear Power Station – NRC Inspection Report No.  
29 05000293/2021002

30  
31 Pilgrim Nuclear Power Station – NRC Independent Spent Fuel Storage Security Inspection Report No.  
32 07201044/2021401

33  
34 Pilgrim Event Notification 11-9-2021

35  
36 U.S. NWTRB Releases Report on Commercial High Burnup Spent Nuclear Fuel Performance During  
37 Extended Storage and Transmission

38  
39 Six Overarching Recommendations for How to Move the Nation's Nuclear Waste Management Program  
40 Forward