

1 **NUCLEAR DECOMMISSIONING CITIZENS ADVISORY PANEL (“NDCAP”)**
2 **Monday, January 25, 2021**
3 **Virtual Meeting Due to Covid-19**
4 **Meeting Minutes**

5
6 Meeting called to order at 6:31 pm by NDCAP Chair John Mahoney.

7
8 **NDCAP MEMBERS PRESENT**

- 9
- 10 • John T. Mahoney, Representative of the Town of Plymouth (Chair)
 - 11 • Pine duBois, Speaker of the House Appointee (Vice Chair)
 - 12 • Mary Lampert, Senate President Appointee
 - 13 • Kevin O’Reilly, Speaker of the House Appointee
 - 14 • Richard Grassie, Minority Leader of the House Appointee
 - 15 • David Johnston¹, Department of Environmental Protection
 - 16 • Robert Jones², Executive Office of Health and Human Services
 - 17 • Jack Priest, Department of Public Health, Radiation Control Program
 - 18 • Samantha Phillips, Massachusetts Emergency Management Agency
 - 19 • Susan Whitaker, Executive Office of Housing and Economic Development
 - 20 • Robert Hayden³, Department of Public Utilities
 - 21 • Pat O’Brien, Representative of Pilgrim Nuclear Power Station
 - 22 • John Moylan, Pilgrim Nuclear Power Station Site Vice President
 - 23 • Richard Rothstein, Representative of the Town of Plymouth
 - 24 • Mary Waldron, Old Colony Planning Council
 - 25 • Paul D. Smith⁴, Representative of UWUA Local 369
 - 26 • John G. Flores, Governor Baker Appointee

27
28 **NDCAP MEMBERS NOT PRESENT**

- 29 • Sean Mullin, Minority Leader of the Senate Appointee
- 30 • David C. Nichols, Governor Baker Appointee
- 31 • Richard Quintal, Plymouth Selectboard Appointee

32
33 **GUESTS IN ATTENDANCE**

- 34 • Gerard Martin, Department of Environmental Protection Southeast Regional Office
 - 35 • David Noyes, Representative of Pilgrim Nuclear Power Station
 - 36 • Mark Lawson, Representative of Pilgrim Nuclear Power Station
 - 37 • John Drobinski, ERM
 - 38 • Matthew Daly, ERM
- 39

¹ Designee of Secretary Theoharides (EEA)

² Designee of Secretary Sudders (Executive Office of Health and Human Services)

³ Designee of Matthew Nelson (DPU)

⁴ Designee of Richard Sherman (Representative of UWUA Local 369)

Approved Unanimous

REVIEW OF MINUTES

A motion was made to approve the minutes from the November 2020 NDCAP meeting. The motion was seconded, and the minutes were approved by a unanimous vote.

Ms. Lampert asked about two notations in the November 2020 meeting minutes, where items for follow-up were noted. On page 4, line 42, Ms. Lampert had asked whether the warranty for the Holtec dry casks could be voided in certain circumstances. On page 6, line 32, Ms. Diane Turco had asked whether, during an earthquake, the spent fuel pool could sustain any damage.

Mr. Priest made a point of order, stating that the responses to these questions should be part of new meeting minutes, and not inserted into the November 2020 minutes. He suggested that outstanding questions from the public or members of NDCAP could be carried over until a future meeting until the questions are satisfactorily answered. This could be a standard agenda item going forward. Mr. Priest also suggested that the item list the responsible person for answering the question and bringing a response back to the subsequent NDCAP meeting.

There was general agreement to proceed in this fashion.

PROJECT UPDATE FROM HOLTEC

General Update

As presented by Mr. O'Brien, Holtec is now in the site characterization stage, has completed "PA" construction, and is in the middle of reactor vessel internal segmentation. Holtec has been working on steam dryer and steam separator segmentation. Mr. Noyes explained that both are designed to remove moisture from the steam before it exits the reactor vessel on its way to turbine.

Ms. duBois asked whether the "Chevron tubes" in the reactor vessel are made of metal or ceramic. Mr. O'Brien responded that they are made of corrugated metal (steel).

Ms. Lampert asked whether there would be contamination when steam comes out of the core. Mr. Lawson responded that the surface of the vessel does collect a "crud" layer that is hardened with high levels of contamination and radiological levels. He explained that Holtec has segmented 43 "riser" tubes with baskets (about 18 in each basket), and that the tubes will be raised from the water and placed into containers for off-site disposal.

Class A waste will be shipped by flat-bed truck to Texas in U.S. DOT-approved shipping containers. Notification is required with state and local communities as needed. Four Class A waste boxes left the site last week, and Holtec will continue to ship in Q1/Q2 of 2021. Holtec is creating a staging area for Class B/C waste; the waste boxes will remain in the staging area until shipping.

Mr. Priest explained that Class A refers to the least radioactive waste, and Class C is the most radioactive. Class A waste is placed into shipping containers readily, while shield blocks are used for Class B/C waste.

Approved Unanimous

1 Mr. Priest further explained that there is robust shielding of the staging area, and that Holtec is
2 providing monitoring of the fence line to ensure that, when waste is moved, there is no exposure
3 beyond the fence line while the waste is temporarily held awaiting transport.
4

5 Mr. Moylan stated that “Greater than Class C” (GTCC) waste will go onto the ISFSFI pad in “non-fuel”
6 containers that are similar to the spent fuel canisters.
7

8 Further discussion followed among NDCAP members regarding the distinctions between Class A/B/C and
9 GTCC waste. Mr. Johnston clarified that the level of radiological concern increases from Class A to Class
10 C. GTCC waste will stay on the ISFSI pad along with spent fuel. There is no disposal of GTCC waste
11 planned at this time.
12

13 Mr. O’Brien continued that construction of the new ISFSI pad is complete, and that the vehicle barrier
14 system has also been constructed. Thirty-four fuel casks will be loaded beginning in the spring.
15

16 As required by the settlement agreement, Holtec is working on an enhanced planting proposal around
17 the vehicle barrier. It is working with MassDEP to finalize plans to remove 12 soil absorption systems to
18 make room for the enhanced plantings.
19

20 Mr. Lawson provided an update on a notification issue involving one of the holding tanks on site. He
21 stated that Holtec had identified a condition involving a sanitary sewer overflow to the ground level of a
22 settling tank which discharges to the wastewater treatment plant. About 100 gallons were discharged
23 from the time the issue was identified to when actions were taken to stop the leakage. This created a
24 reportable incident, and reporting was completed to U.S. EPA and MassDEP in accordance with the
25 NPDES discharge permit. However, notification was not timely in accordance with regulation.
26

27 Mr. Rothstein asked whether the vehicle barrier was uniform in size. Mr. O’Brien responded that the
28 barrier is 4 feet tall and about 3-4 feet wide.
29

30 Ms. duBois asked whether there was testing performed of the sanitary sewer overflow. Mr. Lawson
31 responded that the overflow was contained within the storm sewer system.
32

33 Mr. Johnston confirmed that this was a SSO (sanitary sewer overflow) incident. It was domestic
34 wastewater en route to the wastewater treatment facility. This flow would normally get treated;
35 however, there was a clog and about 100 gallons made its way outside the sewer system. This is a very
36 small volume relative to other similar incidents. The violation was not the blockage, but the untimely
37 notification. A 24-hour notification was required; here, notification was 1-2 days late.
38

39 Ms. duBois asked about the removal of the soil absorption system. Mr. Johnston explained that the
40 wastewater treatment facility was permitted for flows of up to 38,000 gallons/day. Discharges are sent
41 to a series of distribution boxes (D-boxes), then to infiltration pits for treatment. This system is now
42 substantially oversized for flow from the facility that no longer discharges as much. So, Holtec is giving
43 up a third of existing infiltration capacity to have a more robust vegetative barrier and visual screen
44 from Rocky Hill Road.
45

46 Ms. Lampert asked whether the wall was parallel to Rocky Hill Road. Mr. O’Brien clarified that the wall is
47 about 360 degrees around the site, not just along the road. Mr. Maloney encouraged all members to
48 visit the site to observe the barrier.

Approved Unanimous

1 Mr. O'Brien ended by reviewing planned demolition activities for 2021, including exterior storage tanks,
2 condenser bay, and the hydraulic control unit. Additional buildings will be demolished.

Site Characterization

6 Mr. Lawson provided a status of site characterization work, showing the Phase 1 zone characterization
7 sampling map. He noted that not all "owner-controlled areas" (OCAs) were identified as "non impacted"
8 in the Historical Site Assessment (HSA) conducted by Holtec. These areas were therefore divided into
9 sub-areas to conduct reclassification in accordance with NUREG and Massachusetts Contingency Plan
10 (MCP / M.G.L. c. 21E) regulations.

12 Mr. Lawson indicated that Holtec has worked with the state to provide additional information, holding
13 biweekly meetings with regulatory stakeholders. The site characterization execution for the Phase 1
14 industrial portion was field complete as of Dec 23, 2020, and lab results are expected by Jan 26, 2021.

16 The Phase 1 report is due the first week of March, with a draft report due to the licensed site
17 professional (LSP) by February. The amended ESA work plan is due by May 31 and will incorporate the
18 results of Phase 1 sampling and other conditions identified.

20 Mr. Lawson provided an overview of initial sampling conducted from Oct 6 to Dec 23, 2020. He indicated
21 that there are opportunities for split samples. The process is iterative as samples and surveys of newly
22 exposed areas are added. Mr. Lawson showed a map showing licensed and unlicensed property
23 boundaries. There is a centrally located triangular portion of land that is owned by the Town of
24 Plymouth and is not part of the licensed area.

26 Phase II implementation planning has begun. Holtec is now reviewing sample data and conclusions will
27 be captured in the draft report to be completed by March.

29 Mr. Rothstein asked whether the New Hampshire firm that did the original HSA should be involved at
30 this point. Mr. Lawson stated that there is no requirement for the firm to be further involved. Holtec will
31 rely on the firm for backup information.

33 Ms. Lampert stated that she would like total transparency of the information shared with the state and
34 comments provided. She also asked who determines which samples will be split.

36 Mr. Lawson indicated that Holtec has established a shared drive to allow for review of documents,
37 including site/field plans and other radiological documentation.

39 Mr. Johnston stated that transparency was discussed with Holtec. Even though the state views data on
40 the share drive, it is discussing with Holtec ways to make the information more accessible. He indicated
41 that it is incumbent on Holtec to give more thought on how to make information accessible to the
42 public. The state is committed to coming up with a way to accomplish this.

44 Ms. Lampert asked when the NDCAP and the public can receive reports so they can have input into
45 assessing the supplemental information.

47 Mr. Johnston answered that Holtec will need to work with NDCAP to make information available. Mr.
48 O'Brien stated that anything that is not business sensitive will be made available.

Approved Unanimous

1 Mr. Priest indicated that the analytical data on sampling is not going directly to state agencies but is
2 being made available through Holtec's server. The question to carry over to the next meeting is how
3 Holtec will convert the information that is in the sensitive proprietary server to a format that can be
4 shared with NDCAP. Ms. Lampert clarified that this would also reflect information that the state would
5 like shared with the public.

6
7 Mr. O'Brien confirmed that this is the question to be asked.

8
9 Regarding split samples, Mr. Priest stated that Holtec and DPH are working on an agreement that would
10 lay out the number, volumes, methods of transport, etc, of the samples. It will also address how to
11 cross-index the samples across laboratories so that DPH can do a comparative evaluation. Holtec has
12 provided some samples already to the state radiation laboratory. DPH expects to have the evaluation
13 reviewed and approved by the end of February.

14
15 Mr. Priest confirmed that DPH has the opportunity to select the samples to do split sampling. DPH will
16 collect and do analytical work; when laboratory results come back, it can cross reference the results
17 either to reconcile them with Holtec's evaluation or, if results are different, to do additional sampling.

18
19 Mr. Rothstein asked whether meeting minutes are being taken of Holtec's meetings with the state. Mr.
20 Johnston stated that there are no minutes taken as the meetings are informal in nature.

21
22 Ms. duBois asked about the triangular plot owned by Plymouth and how Holtec can assure the Town
23 that the property is not adversely affected. Mr. Lawson has not had this discussion, but this area is not
24 part of the licensed property; thus, it is currently not part of the sampling plan. Ms. duBois stated that if
25 contamination is discovered in abutting areas, she would try to persuade Holtec to conduct sampling.

26
27 Mr. Priest stated, however, that the owner of the property (the Town) would ordinarily be required to
28 perform sampling. Mr. Johnston stated there are nuances on the non-radiological site as a "causally
29 liable" entity that causes contamination could be deemed a "responsible party" in addition to the
30 property owner.

31
32 Mr. Priest stated that there is a very low probability that the triangular area is an affected area. He
33 suggested that there is no need for NDCAP to spend too much time on this issue before empirical data is
34 received.

35
36 Mr. Priest asked about the dump site along Powder House Road. He indicated that this is part of Phase 2
37 surveillance. Mr. Lawson stated that contamination would be readily identified because background
38 levels are lower. Mr. Priest indicated that DPH will be engaged in this issue.

39
40 Ms. Lampert asked about whether sampling would be done below 6 inches below the surface. If there
41 are large releases that landed on soil, how deep would it have gone? Mr. Lawson answered that it
42 depends on where the contamination landed. He stated that he would like to have a discussion with Ms.
43 Lampert to learn more about historical activities at the site.

44
45

Approved Unanimous

INTERAGENCY WORK GROUP (IWG) REPORT

1
2
3 Mr. Johnston stated that there is not much more to add beyond the discussion to date and asked for
4 questions.

5
6 Ms. duBois asked for a clarification of the schedule for a report out of the site assessment. She asked
7 whether the report would contain a “map” of the contamination that was identified and a schedule for
8 remediation.

9
10 Mr. Johnston confirmed this understanding. He stated that agencies will have to approve the report.
11 Holtec’s anticipated timing is March/May. The state will be weighing in and reviewing the report for
12 consistency with the settlement agreement and completeness of the work plan. Depending on the
13 report, if there are no reportable conditions, then the site will not need a lot of work. However, if the
14 assessment finds a reportable condition, then the site will be brought into MCP timelines.

15
16 Mr. Martin provided an overview of the MCP process, stating that there are many options for responses.
17 For certain materials, the owner can take immediate measures to respond. Otherwise, after notification,
18 the owner can classify the site and take comprehensive response actions up to 5 years from notification.

19
20 Ms. duBois asked when it would be appropriate to begin discussion of the report at NDCAP. Mr.
21 Johnston indicated that first, we need to get more data in circulation. After that, the goal is to get a draft
22 report by March. The MCP timeline is usually six years from finding a reportable condition. If there are
23 intricacies, the timeline can be expanded with approval of MassDEP.

24
25 Mr. Martin said there are different notification categories. For greater issues, there is a 72-hour
26 notification. But most issues will run into 120-day notifications. As Holtec is evaluating data, it could
27 determine right away if there is a notification condition. So, MassDEP may receive notifications before
28 the report is completed.

29
30 Mr. Johnston stated the HSA is the jumping-off point for contaminants of concern as it will indicate what
31 is stored on site and the history of releases notified in the past. Holtec will want to look at areas where
32 there is a reasonable likelihood of contaminants being spilled or released. It will then start sampling to
33 look for a suite of chemicals within the same family. There is no fixed list of contaminants of concern,
34 but we have very good idea of what they may be based on the HSA.

35
36 Ms. Phillips provided an update on the email traffic between Mr. O’Brien and Ms. Lampert regarding
37 public safety training. MEMA recommends that quarterly meetings be held with public safety leadership
38 from former EPZ communities. Holtec and MEMA will talk about training opportunities. MEMA can work
39 with Chief Nord who shared the concern about training to ensure that training needs are met. The
40 Pilgrim working group of public safety officials is a good platform for that conversation.

41
42 Ms. Phillips stated that training has been provided over the years, some by Holtec just prior to
43 decommissioning. There are ongoing training needs but also an opportunity for modifying the approach
44 to fit the current situation.

Approved Unanimous

ANNUAL REPORT AND DISCUSSION

1
2
3 Mr. Mahoney stated that the cover letter to the annual report contained a formal invitation to Governor
4 Baker to attend an NDCAP meeting to discuss spent fuel, especially long-term solutions.

5
6 The Governor's Office has responded that he cannot participate but that he will allow the Secretary of
7 Energy and Environmental Affairs Kathleen Theoharides to participate on his behalf. Mr. Mahoney asked
8 what the panel would like to see for a 15-minute appearance this spring.

9
10 Ms. Lampert asked what the purpose of the meeting would be.

11
12 Mr. Mahoney stated that, given that the spent fuel casks may remain in MA in perpetuity, the question
13 is whether there is any action that can be taken at the state level if the federal government abdicates its
14 responsibility. For instance, can there be joint action taken by New England states?

15
16 Ms. Lampert asked whether it would be appropriate to invite Senator Markey's staff or representatives
17 from Vermont or New York.

18
19 Mr. Mahoney responded that the panel could reach out to Senator Markey's staff, but that it would be
20 important for Secretary Theoharides to weigh in.

21
22 Mr. duBois stated that the point is that the NDCAP does not have the expertise or resources to pursue
23 solutions on our own. We want to make sure that the state shapes a solution that draws in more
24 resources of the state. While the federal government does have a role, NDCAP should get more
25 productive and more innovative, and bring in more educational resources.

26
27 Ms. Lampert asked whether NDCAP plans to raise the issue of the integrity of the canisters and
28 monitoring.

29
30 Ms. duBois stated that the intent is to bring focus to this global problem. If we can get more resources
31 to the mission, the panel will be better off. Ms. duBois state there is more to be done besides cleaning
32 up the site.

33
34 Mr. Rothstein stated that Vermont and New York had petitioned the federal government to provide
35 support for host communities. He wondered if MA was involved in the petition.

36
37 Mr. Priest noted that there is another dry fuel storage facility in Rowe. Where NDCAP can be most useful
38 is to make sure the site is cleaned up. He noted that there is a new federal administration and a new
39 NRC commissioner, so it will be instructive to see if these factors will change the federal government's
40 position on dry fuel storage.

41
42 Mr. Johnston stated that the NDCAP should try to make effective use of the 15 minutes allotted for
43 Secretary Theoharides. The panel should give her an indication of what NDCAP hopes to speak about.

44
45 Mr. O'Reilly stated that the panel could reach out to Jimmy Cantwell, who is Senator Markey's chief of
46 staff, to ask for an update on the federal government's position.

Approved Unanimous

1 Mr. Mahoney moved on to discussing the annual report. He acknowledged the efforts of Mr. Grassie
2 and Ms. duBois in preparing the 2020 report. He asked if there is anything that can be done proactively
3 so that this year's report is not left to the end.

4
5 Mr. Grassie indicated that some of the monthly meeting minutes were missing. He noted that the
6 minutes were a helpful aid in preparing the report.

7
8 Ms. duBois asked for volunteers to write the next report.

9

PUBLIC COMMENTS AND QUESTIONS

10

11
12 An individual from the Vineyard Times asked what the firefighting response would look like if a fire were
13 to break out in the canister. The reporter asked what Holtec's role would be in fighting the fire and what
14 the scale of the plume would be.

15

16 Mr. O'Brien stated that he had sent the reporter a set of slides that were used in NY to describe how the
17 Holtec HIGH-STORM 100's are built. They are made of concrete and steel so there is no combustible
18 material. They are built to withstand brush fires around the canister and testing analyzed the effect of
19 external fires including crashing of an F-16 into the canister.

20

21 He stated that the Town of Plymouth is the first responder in the case of a fire inside the reactor
22 building. Holtec's on-site staff would work with the Town for any incident of that nature.

23

24 Diane Turco asked about the vehicle barrier and whether the buildings in the background of the photos
25 shown would be demolished. Mr. O'Brien explained that one of the buildings is the new security
26 building. The other building is the wastewater treatment facility, which at some point will be taken
27 offline and decommissioned. The ISFSI pad is on the other side of the photos shown.

28

29 Ms. Turco continued that the vehicle barrier is not the highest fencing on site and that there are soldier
30 launched weapons that could go over the 4-foot wall and in between shrubbery.

31

32 Mr. O'Brien stated that the casks themselves are a barrier and have been tested to withstand jet planes
33 laden with fuel hitting them. Ms. Turco stated that there is contradictory documentation. She stated
34 that the NRC has not changed security requirements since 2018.

35

36 Mr. James Lampert agreed that there is documentation that throws into question the security assertions
37 made by Holtec. He also agreed with Mr. Priest's suggestion that a list of questions that have been
38 raised and not answered be tracked. Mr. Lampert suggested that the questions be organized in advance
39 of meetings as topics of discussion, and that questions raised between meetings be included.

40

41 Ms. duBois indicated that it would be helpful to get a list together for the next meeting agenda.

42

43 Mr. Lampert also asked about transparency and whether the HSA was posted on the NDCAP website.
44 Ms. duBois said she will work with EEA to update the website, which should be reorganized so that
45 information can be found more easily.

46

47 Mr. Lampert further stated that the settlement agreement provides a specific procedure that Holtec has
48 to follow to submit any information to the Commonwealth, including specifically identifying what is and

Approved Unanimous

1 is not protected from disclosure and providing redacted versions. He stated that any information that
2 has been provided without following this procedure should be considered public.

3
4 Mr. Johnston stated that he largely agrees with Mr. Lampert, but that we may not have to answer the
5 question as to whether information on Holtec’s shared server is public if we can figure out a way to get
6 information out to the public. He noted that Holtec has noted a few items (like specific technologies) as
7 “business confidential” but that other information should be public.

8
9 Ms. duBois asked how this information should be characterized on the website, as it is not helpful to
10 organize information by meeting. It was agreed that the category should be named “Site assessment.”

11
12 Mr. Priest suggested that the NDCAP look at the New York and Vermont websites as examples. Mr.
13 Priest will also discuss with the IWG and EEA.

14
15 **WRAP UP AND ADJOURNMENT**

16
17 Mr. Mahoney asked for a motion to adjourn. Motion was made and seconded and passed unanimously.

18
19 The meeting adjourned at 8:35 pm.

20
21 **MATERIALS PRESENTED AT MEETING**

22
23 Pilgrim NDCAP Update 01-25-2021