	NUCLEAR DECOMMISSIONING CITIZENS ADVISORY PANEL ("NDCAP") Monday, November 16, 2020 Virtual Meeting Due to Covid-19 Meeting Minutes
Meet	ing called to order at 6:31 pm by NDCAP Chair John Mahoney.
NDCA	AP MEMBERS PRESENT
•	John T. Mahoney, Representative of the Town of Plymouth (Chair)
•	Pine duBois, Speaker of the House Appointee (Vice Chair)
•	Mary Lampert, Senate President Appointee
•	Sean Mullin, Minority Leader of the Senate Appointee
•	Kevin O'Reilly, Speaker of the House Appointee
•	Richard Grassie, Minority Leader of the House Appointee
•	David C. Nichols, Governor Baker Appointee
•	John G. Flores, Governor Baker Appointee
•	David Johnston ¹ , Department of Environmental Protection
•	Robert Jones ² , Executive Office of Health and Human Services
•	Jack Priest, Department of Public Health, Radiation Control Program
•	Samantha Phillips, Massachusetts Emergency Management Agency
•	Susan Whitaker, Executive Office of Housing and Economic Development
•	Robert Hayden ³ , Department of Public Utilities
•	Pat O'Brien, Representative of Pilgrim Nuclear Power Station
•	John Moylan, Pilgrim Nuclear Power Station Site Vice President Richard Rothstein, Representative of the Town of Plymouth
•	Mary Waldron, Old Colony Planning Council
•	Paul D. Smith ⁴ , Representative of UWUA Local 369
NDCA	AP MEMBERS NOT PRESENT
•	None
GUFS	TS IN ATTENDANCE
•	Gerard Martin, Department of Environmental Protection Southeast Regional Office
•	David Howland, Department of Environmental Protection Western Regional Office
•	John Drobinski, ERM
•	Matthew Daly, ERM
•	David Noyes, Representative of Pilgrim Nuclear Power Station
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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)

REVIEW OF MINUTES

Ms. duBois called for a correction on page 3, line 40 of previous minutes regarding specifics around a tower slated for demolition; she clarified that this was a reference to a backup tower. Ms. duBois also referred to page 7, line 15, and proposed changes in wording to reflect the original intent of the announcement regarding the Interim Storage Facility in West Texas.

The draft minutes from the October 19, 2020 NDCAP meeting were approved unanimously with these corrections.

Ms. duBois also clarified with NDCAP members that members were satisfied with a show of hands to indicate votes, rather than a roll call. Members agreed that a show of hand would suffice, provided that no major disagreements exist. Any member can call for a roll call vote in any event.

PROJECT UPDATE FROM HOLTEC

Presentation of Environmental Site Assessment

Mr. Drobinski and Mr. Daly from ERM presented the Environmental Site Assessment (ESA) Work Plan, which was presented as a power point presentation. Mr. Drobinski and Mr. Daly provide a summary of their professional training and prior experience with nuclear decommissioning. Both are licensed site professionals (LSPs) and trained as geologists.

Mr. Drobinski gave an overview of the initial ESA work plan framework that was developed under the Settlement Agreement reached between Holtec and the Commonwealth. Mr. Drobinski explained that site characterization is a dynamic and iterative process. The plan is based on standard (MARSSIM) site assessment protocols. The plan will be reviewed and commented on by Commonwealth agencies, including DEP and DPH. The plan may be refined over time, and the changes will be reported to the Commonwealth. Any releases will be reported pursuant to state and federal requirements, including those under Mass. Gen. L. c. 21E. A report will be prepared summarizing activities and next steps. Supplemental information has already been provided to DEP and DPH to augment the initial work plan. LSPs will be monitoring all activities to ensure compliance with legal requirements.

Mr. Daly provided a high-level overview of the criteria that are part of the initial ESA work plan. The 12 criteria are listed below, and are reviewed in Holtec's power point presentation. As requested by the Commonwealth, additional information will be provided to augment the work plan, including specific sampling plans with regard to both radiological and non-radiological site characterization plans. The site characterization plan essentially starts with the historical site assessment (HSA) and seeks to identify data gaps, and outlines the process needed to fill the data gaps through field work.

The 12 criteria informing the ESA are as follows:

- a. Site inventory and proposed operable units
- 44 b. Description of proposed assessment activities to address HSA gaps
- c. Proposed schedule for characterization, demolition, on-site management, regarding and
 reseeding
- 47 d. Proposed schedule for completion of site-wide assessment activities
 - e. Proposed list of potential radiological and non-radiological contaminants

- f. Proposed plan for testing and demonstrating compliance with the radiological cleanup standard (Paragraph III 110(d) including submission of confirmatory radiological surveillance and analytics with the Permanent Solution Statement
- g. Proposed plan for initial groundwater sampling of radiological and non-radiological
 contamination including any additional monitoring wells
- 6 h. Proposed plan for initial soil sampling of radiological and non-radiological contamination
- 7 i. Proposed plan for initial sampling or environmental media other than soil and groundwater
- j. Proposed schedule for submitting a plan that complies with the MCP and Mass Solid Waste
 regulations for off-site material used as fill
- 10 k. Proposed schedule for submitting a detailed description of how concrete material will be 11 processed, managed, and removed from the site
- 12 l. A description of a process to characterize below grade structures

Mr. Daly reviewed the criteria above to provide an overview of the supplemental information that will be provided as related to radiological and non-radiological factors.

Using a map and sample table, Mr. Daly provided an overview of how a site characterization plan would be developed to help the panel understand the type and level of detail of data collected, as well as how it is collected.

Mr. Daly also showed a slide to give a more in-depth example of what a site characterization plan may look like (in the "West-Owner Controlled area" near Rocky Hill Road). The slide showed locations of proposed soil/groundwater samples, based on the areas of interest specified in the HSA (including historic wastewater treatment and associated leaching areas).

Ms. duBois asked a clarifying question about how site characterization activities will be coordinated with the ISFSI pad. Mr. Noyes stated that most samples under ISFSI pad were already taken, and are in the process of getting analyzed. Mr. Priest also asked what was analyzed from those samples; this is an issue for further follow-up with DPH and DEP. Mr. Priest specifically asked about the screening criteria used to conduct the sampling.

Mr. Daly provided another sample plan focusing on another area of the site ("South Owner Control Area 1,") to further explain site characterization data collection and the type of analysis that would be conducted. The analysis will follow MARSSIM methodology. Based on radionuclides of concern, soil samples will be collected and analyzed.

Mr. Priest asked if there are plans to do flyovers or drone scans to look over wider areas. He noted that what Mr. Daly explained was industry standard but there is new technology that can reach a wider area.

Ms. Lampert added to the comment that a wider area than that displayed in the example is likely needed, including on the other side of Rocky Hill Road. Ms. Lampert encouraged flyovers so that the characterization is not limited to a few random samples.

Mr. Priest commented that the objective of DPH is to evaluate the sampling plan and statistics, and to develop DPH's own sampling plan where the agency would co-locate with the LSP to do split sampling. DPH has had discussions about selection of the third-party lab, and DPH is satisfied with the entity that was selected. Mr. Priest also stated that every utility is required to do an annual environmental operating report and to take on-site and off-site sampling; the utility splits samples with the state to

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1 2 3	analyze at Hinton State Laboratory so that the samples can be compared. DPH's intention is to conduct sampling under a similar protocol.
4 5 6	Mr. Johnston made clarifying points about sampling, stating that the company is not starting from scratch but rather looking to fill data gaps identified in the HSA.
7 8	Further discussion ensued regarding specific questions about the slides presented and the scope of sampling and analysis being proposed.
9	NA Drahinali was and up the site shows to rive discussion, another in a casin that it is an itemative
10	Mr. Drobinski wrapped up the site characterization discussion, emphasizing again that it is an iterative process and may include additional activities. The company will work with the state to respond to
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12	comments received from DPH and DEP. The amended ESA work plan is anticipated to be completed by
13	May 31, 2021.
14	Ms. Lampert asked whether the NDCAP will continue to receive more detailed reports as the company
15	interacts with the state. Mr. O'Brien confirmed that Holtec will continue to make the LSPs available for
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17	future presentations to the NDCAP.
18	CDI-Holtec Decommissioning Update
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20 21	Mr. O'Brien provided a site cleanup update, showing a detailed timeline of each activity, and provided a
22	power point presentation.
23	power point presentation.
24	Mr. O'Brien showed the timeline of activities. The company has moved on to reactor vessel internal
25	segmentation work. He showed pictures of the tool being used under water. Holtec has taken lessons
26	from work performed at Oyster Creek.
27	nom work performed at dyster creek.
28	Mr. O'Brien went over demolition activities, including the planned main stack removal scheduled for
29	November 18 and the 160' met tower removal which occurred on November 9. The change shack
30	demolition occurred on November 6-8, and the gas bottle storage area removal is scheduled for
31	November 17.
32	NOVEMBEL 17.
33	The company performed a MEMA drill on November 10, 2020 together with the local fire department.
34	Finally, he discussed Holtec's dry cask warranty, which is 25 years from when the system is accepted. As
35	the owner, Holtec is responsible to ensure that cask performance meets NRC regulations.
36	and different in responsible to ensure that easy performance meets the regulations.
37	Mr. Mullin asked if there were any effects of the recent minor earthquake on November 8.
38	The Maint asked in there were any enests of the resent minor earthquake on November of
39	Mr. O'Brien said the shift manager noted a slight movement, but that there was no cause for alarm.
40	Holtec connected with MEMA and DEP on the issue.
41	The state of the s
42	Ms. Lampert asked about whether the warranty could be voided in certain circumstances. Mr. O'Brien
43	stated that he would double-check on this issue.
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45	Ms. duBois asked whether additional questions can be sent to Mr. O'Brien on the ESA work plan, so the

NDCAP can stay up to date with developments. Mr. O'Brien confirmed that this would be workable.

IWG	UPDATE
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David Johnston provided a very brief update, explaining that Holtec will have a final ESA work plan with an implementation schedule based on comments provided by the state. Holtec will have 30 days to respond once final written comments are provided. The implementation schedule will be iterative, but the final ESA work plan will have the intended schedule included.

Regarding met tower and stack demolition activities, MassDEP asbestos expert was on site and will provide the results of the expert's inspection.

Mr. Johnston indicated that information for the annual report will be provided by the IWG by Thanksgiving.

Ms. Phillips provided a MEMA update, stating that the MEMA and Holtec continue to meet with emergency management leaders from the communities as required by the settlement agreement with the Commonwealth. Ms. Phillips noted that the communities were not aware of the updates being provided by Holtec at NDCAP meetings, so this information should be made available going forward. Also, training opportunities and awareness of fire protection plan should be provided to surrounding fire chiefs other than Plymouth. These meetings will continue to convene quarterly, and the same group will participate in desk top exercises and drills going forward.

Ms. duBois asked if the back and forth between the state and Holtec regarding the ESA work plan will be made public. Mr. Johnston confirmed that written comments and responses would be public.

Ms. duBois clarified that the goal would be to keep up with the state, so that the NDCAP does not feel later that questions are not being addressed. Mr. Johnston indicated that there could be some information that Holtec may feel is "business confidential," but any information produced by state agencies would be considered public information. Mr. Johnston stated that the state and Holtec are discussing the best way to make the voluminous information public in the most efficient way, so as to make the process transparent.

Ms. Lampert suggested that a link be provided to the NDCAP website so that the information can be made readily available. Ms. duBois stated that she has been working on this with EEA.

ANNUAL REPORT AND DISCUSSSION

Mr. Mahoney indicated that the current version of the annual report has been circulated to NDCAP members. He indicated that all contributions should be provided shortly.

Ms. duBois indicated that the report timeframe is September 1, 2019 to September 1, 2020, so the HSA work plan will not be in the scope. If others have suggestions, they should send them soon and then a new draft will be sent out soon. Ms. duBois is waiting for input from IWG, Holtec and the Town of Plymouth.

Ms. duBois asked if anyone had any concerns about what was previously sent out. No concerns were raised. Some members suggested that a preview of 2021 activities be included.

Mr. Johnston commented that it may not be the role of NDCAP to discuss pending legislation. Mr. Mullin recommended the legislative issues raised at the last NDCAP meeting be discussed during old business instead.

Ms. duBois reiterated that a new version will be circulated shortly, and then it will be submitted to the Governor.

Ms. duBois stated that the issue of where and how to store waste has been an ongoing discussion. Ms. duBois would like the Governor to understand what a big issue spent fuel is in MA and wants to invite the Governor to an NDCAP meeting and ask him to deploy his experience to bring together "the best and the brightest" to figure out how to deal with the waste.

PUBLIC COMMENTS AND QUESTIONS

Mr. Mahoney introduced Nolan O'Brien from Senator Markey's office.

Mr. O'Brien is the Senator's regional director for the South Shore, Cape and the Islands. He indicated that he would be happy to make sure Senator Markey is part of future conversations, especially about federal legislation. Ms. duBois requested that Senator Markey join a future NDCAP meeting, and Mr. O'Brien agreed to request the Senator's attendance in 2021.

Mr. Nichols commented that February may be a better time to invite the Governor, so the January meeting can be used to prepare. Mr. Mahoney stated that the NDCAP would need to consider the plan more carefully, but that this discussion could occur in January.

 Diane Turco commented that it would be a good idea to invite the Governor. She indicated that Sandwich was the 13th community to pass a nonbinding resolution on Pilgrim, calling for spent fuel to be stored in better canisters. All of these petitions will be sent to the Governor. Ms. Turco also referenced a recent letter from Texas Governor Gregg Abbott opposing centralized interim storage in his state. New Mexico is also opposing storage.

Ms. Turco asked if during an earthquake the spent fuel pool could sustain any damage. Patrick O'Brien said he will confirm but the pool was designed for the largest earthquake.

Ms. Turco inquired several more times about the possible condition of the fuel pool after an earthquake. She commented that earthquake risk may be greater than previously understood.

Ms. duBois stated that public action should focus on working with MEMA to continue the work that Ms. Phillips described.

 James Lampert indicated that he was disappointed with the original ERM report and had previously provided comments. He urged NDCAP to find a way to make all information publicly accessible that can be made available legally, so that there are further opportunities for the public to provide comments that may be useful to the company and the state. Mr. Lampert stated that the level of commentary would be better if the public had more time to respond.

Mr. Lampert asked a clarifying question about "the boneyard"—the waste area referenced earlier by
Mr. O'Brien—asking if it was the same site where chemical waste had also been dumped decades ago.

1	Mr. O'Brien confirmed that this is the same area. Mr. Lampert looks forward to receiving information
2	that would enable the public to provide comments on a final plan that will be approved by the state.
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4	OLD BUSINESS
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6	Mr. Mullin provided an update on legislative activity. He stated that the legislative delegation approved
7	of NDCAP's proposal that was passed at a prior meeting. He anticipates that the proposal will be
8	advanced through the legislature in the next few months.
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10	Mr. Mahoney asked if there were any further comments before adjourning for two months. None were
11	raised.
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13	WRAP UP AND ADJOURNMENT
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15	Mr. Mahoney asked for a motion to adjourn. Motion was made and seconded, and passed unanimously.
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17	The meeting adjourned at 8:28 pm.
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19	MATERIALS PRESENTED AT MEETING
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21	Pilgrim NDCAP Update 11-16-20
22	Pilgrim Characterization and ESA Work Plan Update 11-16-20