

1                                   **NUCLEAR DECOMMISSIONING CITIZENS ADVISORY PANEL (“NDCAP”)**  
2                                   **Monday, March 29, 2021**  
3                                   **Virtual Meeting Due to Covid-19**  
4                                   **Approved Meeting Minutes**  
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6 Meeting called to order at 6:30 pm by NDCAP Chair John Mahoney.  
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8 **NDCAP MEMBERS PRESENT:**  
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- 10           • John T. Mahoney, Representative of the Town of Plymouth (Chair)
- 11           • Pine duBois, Speaker of the House Appointee (Vice Chair)
- 12           • Pat O’Brien, Representative of Pilgrim Nuclear Power Station
- 13           • Mary Lampert, Senate President Appointee
- 14           • Richard Rothstein, Plymouth Board of Selectmen
- 15           • Paul D. Smith<sup>1</sup>, Representative of UWUA Local 369
- 16           • John Moylan, Pilgrim Nuclear Power Station Site Vice President
- 17           • John G. Flores, Governor Baker Appointee
- 18           • Robert Jones<sup>2</sup>, Executive Office of Health and Human Services
- 19           • Mary Waldron, Old Colony Planning Council
- 20           • Robert Hayden<sup>3</sup>, Department of Public Utilities
- 21           • David C. Nichols, Governor Baker Appointee
- 22           • Jack Priest, Department of Public Health, Radiation Control Program
- 23           • David Johnston<sup>4</sup>, Department of Environmental Protection
- 24           • Samantha Phillips, Massachusetts Emergency Management Agency

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26 **GUESTS IN ATTENDANCE**  
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- 28           • Gerard Martin, Deputy Regional Director, Bureau of Waste Site Cleanup (Southeast Region)  
29           Department of Environmental Protection
- 30           • Seth Pickering, Deputy Regional Director, Bureau of Air and Waste (Southeast Region),  
31           Department of Environmental Protection
- 32           • Dave Noyes, Compliance Manager, CDI
- 33           • Matt Daly, ERM
- 34           • John Drobinski, ERM
- 35           • John McKirgan, Chief of the Storage and Transportation Licensing Branch for the Nuclear  
36           Regulatory Commission (NRC)
- 37           • Neil Sheehan, Public Affairs Officer, NRC

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<sup>1</sup> Designee of Richard Sherman (Representative of UWUA Local 369)

<sup>2</sup> Designee of Secretary Sudders (Executive Office of Health and Human Services)

<sup>3</sup> Designee of Matthew Nelson (DPU)

<sup>4</sup> Designee of Secretary Theoharides (EEA)

1 **Panel Members Absent**

- 2 • Sean Mullin, Appointed by Senate Minority Leader
- 3 • Kevin O'Reilly, Appointed by Speaker of the House
- 4 • Richard Grassie, Appointed by House Minority Leader
- 5 • Amy Naples, Appointed by Senate President
- 6 • Richard Quintal, Representing Plymouth Selectboard
- 7 • Susan Whitaker, Representing Executive Office of Housing and Economic Development

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9 **REVIEW OF PREVIOUS MINUTES**

10 Ms. DuBois noted that board member Robert Hayden was not listed as being present in the 2/22  
11 minutes and that member Richard Quintal (Plymouth Select Board Appointee) was not listed as absent.  
12 Mr. O'Brien noted that Mr. Noyes was listed under the wrong heading.

13 Ms. DuBois noted a few minor typos and corrected Line 4, pg. 12 of the 2/22 minutes, changing  
14 erroneously recorded "LSE" to "LSP" (Licensed Site Professional).

15 Mary Waldron motioned to accept minutes as edited. Mr. Priest seconded.

16 **HOLTEC UPDATE**

17 (Reactor segmentation) Mr. O'Brien began his update of Holtec's progress by explaining that the steam  
18 separator segmentation had been completed since the last meeting. Mr. O'Brien went through several  
19 demolition-related item updates, including the rigging loft (completed) and the outbuilding tank  
20 demolition. Components of the outbuilding area are slated for demolition in April or later in Q2. Mr.  
21 O'Brien then gave an outline of the waste shipping and staging timeline, highlighting the upcoming fuel  
22 campaign, which will begin in May. All waste containers are scheduled to be on the fuel pad by January  
23 2022. Finally, Mr. O'Brien noted the annual upcoming NRC submittal.

24 Mr. Drobinski provided an update of site characterization. ERM has reviewed and commented on the  
25 Phase I report and is waiting for the final version.

26 Ms. Lampert asked if ERM's comments are available to the public. Mr. O'Brien clarified that they are  
27 internal. Ms. Lampert expressed concern that the public will not have an opportunity to comment.

28 Mr. Johnston responded to Ms. Lampert, clarifying that under the settlement agreement Massachusetts  
29 must approve a final work plan, and once the state submits its comments to Holtec, a 30 day period  
30 begins for Holtec to respond. While there is not a public comment period written into the process, the  
31 public will have access to the state's comments and can send their feedback to NDCAP, he explained.  
32 Mr. Johnston suggested public comments be sent to the NDCAP Chair and Co-Chair and then forwarded  
33 on to him.

34 Mr. Nichols asked Mr. O'Brien for a trust fund update to give a sense of actual vs expected expenses,  
35 noting updates on the subject could be provided more frequently.

36 Mr. O'Brien said he had heard internally that Holtec is on budget, but he had not seen the relevant  
37 document and could not answer definitively. Mr. Noyes noted that if there is a deviation from the  
38 PSDAR, Holtec is required to make it public, separate from the annual update.

1 Ms. duBois asked Mr. O'Brien to explain at a future meeting how dosimeters in the cask area are being  
2 handled. Mr. O'Brien said he would.

3 **IWG UPDATE**

4 Mr. Johnston gave an overview of the IWG schedule and process, explaining that they are including  
5 members from the Massachusetts DEP Bureau of Air and Waste for demolition work and asbestos  
6 abatement. Mr. Johnston explained that he and his team have been going out every two weeks and  
7 most recently looked at work done on the reactor building and the "fitness for duty" building (Holtec  
8 typically refers to this structure as an "access authorization" building in its slides), looking at the  
9 structural integrity of the roof and providing technical assistance on what should be in the  
10 nontraditional work plan for that abatement. Mr. Johnston explained that this type of work would  
11 continue as long as demolitions continue.

12 Mr. Martin continued the IWG update and explained his inspections and what his team is doing to  
13 determine whether groundwater has been impacted by hazardous material.

14 Ms. duBois asked Mr. Martin for further details about the well drilling process. Mr. Martin explained  
15 that it was a "screening approach," and not a traditional well drilling process: a pipe with a slotted  
16 screen is pushed into the ground.

17 Ms. duBois asked how deep the wells are, and whether they are of even depth. Mr. Martin responded  
18 that they are creating shallow wells at the water table, because they are currently trying to identify  
19 whether 33 specific locations are potential source areas. Wells are not exactly even and are drilled to  
20 depth of the water table in each location, and thus are not necessarily of even depth.

21 Ms. duBois asked if there has been any interaction between tidal influences and the groundwater levels  
22 DEP is trying to study. Mr. Martin responded that it is too early in the process to answer this question,  
23 but noted there are tidal fluctuations that affect the groundwater. Mr. Daly clarified the process and  
24 answered the question about tidal influences in further detail.

25 Ms. Lampert and Mr. Martin discussed the effect of buildings on groundwater flow. Mr. Smith and Mr.  
26 Daly discussed tidal cycles and groundwater flow further. Mr. Smith noted that there was also the  
27 potential for oil and hazardous waste (as opposed to radioactive material) to be present at the site. Mr.  
28 Martin responded that they are detecting some metals and other compounds above reportable  
29 concentrations, but there are outstanding questions regarding the samples, which contain significant  
30 amounts of silt.

31 Mr. Rothstein asked if large storms or harsher winters could affect groundwater flow. Mr. Priest noted  
32 they have been monitoring since 2009 and have a lot of data available to make that assessment,  
33 including severe winter years. Mr. Johnston noted that groundwater moves toward ocean at all tidal  
34 cycles, high or low.

35 Mr. Rothstein asked what will happen to existing ISFSI pads one fuel casks are moved, and Mr. O'Brien  
36 said he would double check and get back to Mr. Rothstein.

37 Ms. duBois asked and Ms. Phillips provided an update on external community meetings, explaining that  
38 the group (five communities, Holtec) met on March 11. The next meeting will focus on content for the  
39 annual exercise in the settlement agreement.

1 Ms. duBois asked if Holtec is changing the way it is responding to fires, noting her ongoing (unrelated)  
2 work related to PFAS hazards and fire cleanup. Ms. Phillips responded that she did not know, but she  
3 would ask the fire marshal. Mr. Johnston noted that there are efforts to get fire foam with PFAS out of  
4 regular use, but the panel could not answer in detail at the moment.

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7 **NRC OVERVIEW**

8 Mr. McKirgan, Chief of the Storage and Transportation Licensing Branch for the Nuclear Regulatory  
9 Commission (NRC) gave an overview of NRC's functions and roles, opening by explaining how NRC is an  
10 independent regulator responsible for safety, security, and environmental protection, but does not set  
11 nuclear policy or promote the nuclear power industry. Mr. McKirgan emphasized that NRC is technical  
12 and safety-based organization and that it is currently conducting two reviews regarding the consolidated  
13 interim storage facility (CISF) applications: A Safety and Environmental Review and an Adjudicatory  
14 Hearing Process.

15 Mr. McKirgan explained the different oversight roles NRC has as it pertains to decommissioning and  
16 explained its chain of command. Mr. McKirgan started discussing the license application for a potential  
17 facility in New Mexico for waste storage. Mr. McKirgan explained that the application is for 40 years to  
18 store up to 500 canisters; However, future plans by Holtec are in development to expand the facility for  
19 up to 10,000 canisters of capacity. Mr. McKirgan also provided an overview of a second proposed  
20 storage facility in west Texas that NRC is reviewing for Holtec.

21 Mr. McKirgan then provided an overview of NRC's decision process for CISF Licensing, showing a flow  
22 chart describing the major steps in the process. Mr. McKirgan explained NRC's regulatory framework,  
23 explaining measures NRC takes to ensure safe reviews. Finally, he explained NRC's environmental review  
24 process, noting that final EISs for both facilities are expected by July 2021. He then provided details  
25 about NRC's adjudicatory hearing process.

26 Mr. McKirgan then explained NRC's spent fuel transportation responsibilities.

27 Mr. Mahoney asked a clarifying question to Mr. McKirgan about NRC's mission statement, asking him to  
28 explain the meaning of the phrase "to promote common defense." Mr. McKirgan noted they receive this  
29 question a lot and explained their role is not to regulate "nuclear defense," which is done by other  
30 agencies. He clarified that this language is included because, while they do not have a defense oversight  
31 role, NRC's activities can't be *inimical* to defense.

32 Mr. Mahoney asked Mr. McKirgan how close the nearest residents were to the facility. Mr. McKirgan  
33 said he did not know, but noted NRC's safety standard is the same for low and high density population  
34 areas.

35 Mr. Mahoney asked, if the proposed facility does end up having 10,000 stored cannisters, as indicated in  
36 its expansion plan (referring to figures on Mr. McKirgan's slides), what percentage of the country's spent  
37 fuel would that account for? Mr. McKirgan said he did not have the exact numbers, though noting the  
38 total national inventory of spent fuel is between 70,000-80,000 metric tons.

1 Mr. Smith noted that both storage facilities being discussed are interim storage facilities, and the federal  
2 government does have to take ultimate ownership of the fuel. Mr. Smith asked if Yucca Mountain is a  
3 candidate for spent fuel once the federal government takes ownership or if the country would have to  
4 rely on interim facilities for the next 50-100 years.

5 Mr. McKirgan explained that NRC does not create policy for the nation, which is established by the  
6 National Waste Policy Act, and that "the situation with Yucca Mt. is complex." Mr. McKirgan explained  
7 again that that the facilities are temporary, interim facilities.

8 Ms. Lampert asked what happens when a leaking cannister arrives at a site. Mr. McKirgan noted that in  
9 their applications both sites said they would not accept leaking cannisters. Ms. Lambert noted Holtec's  
10 policy is to send back leaking cannisters to the state, which is "patently ridiculous," and would be against  
11 NRC regulations. Ms. Lambert asked if logically, this really means that unless there are dry transfer  
12 systems at the interim site, it would be a "no go." Mr. McKirgan said he could not comment because the  
13 application is still under review.

14 Ms. Lampert asked Mr. McKirgan for clarification about who the liable party is, noting the difficulty in  
15 finding an answer with existing materials. Mr. McKirgan responded by explaining the NRC's oversight  
16 roles.

17 Mr. Nichols asked about casks, noting that to the layman, it seems that the need for fuel to stay in casks  
18 is longer than how long casks will last.

19 Mr. McKirgan explained that leases are for initial 40-year terms, and there is an option for renewal.  
20 When renewals are evaluated there are additional requirements, including an aging management  
21 program that is imposed on the licensee. The purpose of this program is to look for degradation and  
22 potential compromise of safety. NRC will look for precursors for safety issues, applicants must allow for  
23 NRC inspection, and then must take corrective action as needed.

24 Ms. Lampert noted that that technology does not exist to fully ascertain the integrity of casks and there  
25 seems to be several missing pieces related to the duration of waste storage and safety evaluation.

26 Mr. McKirgan noted the situation is complex and encouraged the audience to read public comments and  
27 how they have been addressed by NRC. He noted there is a sampling process involved in ageing  
28 management programs, which must have a scientific basis.

29 Mr. Rothstein said he became aware of double walled cannisters were being used in Russia and recalled  
30 that last year Holtec was asked if there were plans to use double walled cannisters, to which they  
31 answered no. Mr. Rothstein asked if Holtec had approached NRC about getting a double walled  
32 cannister license, and if there is any scenario where NRC could require a company to use such  
33 cannisters.

34 Mr. McKirgan said they had not received an application for double walled cannisters, and that NRC is  
35 only concerned about design insofar as its safety thresholds are passed. He explained that NRC would  
36 not "choose winners and losers" (regarding design) and have established standards and review projects  
37 based on that standard.

38 Mr. Priest and Mr. Smith noted that Mr. McKirgan discussed issues concerning issues outside of the  
39 purview of the state and NDCAP and asked Ms. duBois to not open up questions that do not pertain to

1 scope of the state’s NDCAP oversight, noting that nuclear waste storage is a federal matter. Ms. Lampert  
2 disagreed with this sentiment. Neil Sheehan of NRC offered his input, reiterating the points of Mr. Priest  
3 and Mr. Smith.

4 **PUBLIC COMMENT**

5 Kate Walker, calling in from California (near San Onofre Nuclear Power Plant) flagged alleged safety  
6 issues with Holtec’s stainless steel containers in California, claiming that NRC “has so far refused to  
7 investigate” the problem. Ms. Walker suggested Massachusetts inspect the conditions of Holtec’s  
8 cannisters.

9 Kevin Kamps, a radioactive waste specialist from the nonprofit “Beyond Nuclear,” added details to NRC’s  
10 presentation, noting that several families live within miles of one of the sites, and a family of ranchers  
11 does graze on one of the sites and are opposed to the site. He noted that NRC invokes environmental  
12 justice but in reality he believes it has a poor record of delivering.

13 Jim Lampert raised that the [unnamed] 2012 Blue Ribbon Commission Report outlining Congressional  
14 steps that had to be taken before consolidated storage could become a reality and asked if those steps  
15 had been taken. Mr. Sheehan did not know the answer. Mr. Lampert then noted that the US Nuclear  
16 Waste Technical Review Board issued a report on the transportation of nuclear waste and identified 30  
17 technical issues they said had to be resolved before transportation could be completed. Mr. Lampert  
18 asked if those had been resolved. Mr. Sheehan replied that the US Department of Energy (DOE) is  
19 responsible for the transport of such waste.

20 Mr. Lampert then said he disagreed strongly about previous points that NRC issues discussed at today’s  
21 meeting are outside the purview of NDCAP, noting that the panel is tasked with advising the state on  
22 “issues related to the decommissioning of NPS,” and these topics are thus within NDCAP’s purview. Mr.  
23 Lampert noted that Holtec decided it could not take the financial risk that the casks would fail after 25  
24 years and strongly suggested the state and NDCAP think more carefully about the potential for risk  
25 beyond this horizon.

26 Elaine Dickenson asked what the mitigation plan for the Pilgrim site is in the event of radioactive leak  
27 from cannisters. The panel did not have a clear answer, and Ms. duBois directed NDCAP to discuss  
28 further and potentially provide a more specific answer in the future.

29 Leona Morgan, resident of New Mexico, co-founder of the “Nuclear Issues Study Group,” and a member  
30 of the Navajo Nation called in to explain that her state has been overburdened by the uranium industry  
31 and explained that the group she represents has been opposing Holtec since its inception and noted  
32 opposition from New Mexico public entities and figures [presumably to Holtec’s proposed facility]. Ms.  
33 Morgan strongly encouraged the audience to “take responsibility for the waste that is in your control  
34 right now” and to understand that when waste is removed from Massachusetts it is headed to  
35 overburdened communities that have a history of exploitation from the industry. Ms. Morgan closed by  
36 offering resources to NDCAP to learn more about how these communities may be impacted by waste  
37 from Pilgrim

38 Jan Boudart asked for clarification about DOE’s role in waste transportation. Ms. duBois responded that  
39 the panel cannot answer but may have someone from DOE present to the panel in the future.

1 Ms. Turco reiterated earlier points about waste storage being within the purview of NDCAP and asked  
2 how casks that are welded shut can be inspected. Mr. Sheenhan named some resources and provided  
3 some examples of research that is addressing the integrity of casks.

4 Mr. Rothstein shared thoughts about the state of the panel and its scope of oversight, to wit:

5 “During the past two NDCAP meetings, I sensed a potential “schism” developing between the IWG and  
6 Panel members (including the attending public) as to whether the Panel’s current (and future)  
7 responsibilities should be strictly limited to addressing environmental site assessment, physical plant  
8 demolition, debris removal, and site cleanup and restoration (e.g., Jack Priest’s interpretation of  
9 “decommissioning”) or to include other aspects of nuclear power plant decommissioning that is even  
10 addressed in the PSDAR, namely onsite spent nuclear fuel storage in the pool and dry cask whereby  
11 Holtec’s DTF need to be adequate to ensure financial management of the ISFSI until such time that DOE  
12 takes title and removes the spent fuel to an offsite interim ISFSI or permanent federal repository. My  
13 opinion is that the Panel’s mission and focus per the 2016 State’s enacted legislation (and the PSDAR) is  
14 to still include addressing onsite spent nuclear fuel storage in terms of safety, security, environmental,  
15 and financial (DTF) considerations notwithstanding all spent nuclear fuel will be contained within  
16 the onsite ISFSI by 2022 according to Holtec. What ultimately may or may not happen legislatively in  
17 the coming years at the federal level regarding any interim offsite ISFSI(s) to be built by the private  
18 sector or a permanent federal repository of spent nuclear fuel while likewise an important topic for the  
19 Panel to periodically consider in the scheme of things, the Panel should not get overly distracted and  
20 bogged down on things that are beyond our immediate control and authority (i.e., our elected state and  
21 federal legislative representatives have that responsibility to “do their jobs!”)  
22

23 Mr. Mahoney Made a motion to adjourn. Mr. Nichols seconded. The meeting was adjourned at 8:54.