Meeting called to order at 6:30 p.m. by NDCAP Chair Sean Mullin.

NDCAP MEMBERS PRESENT:

- Pat Ciaramella, Representative of Old Colony Planning Council
- H. Joseph Coughlin, Member from Plymouth Nuclear Matters Committee
- Pine duBois, Speaker of the House Appointee
- John G. Flores, Appointee of Governor Baker
- John Giarusso, Massachusetts Emergency Management Agency
- Jacqueline Horigan, Executive Office of Housing and Economic Development
- David Johnston, Department of Environmental Protection
- Joseph Lynch, Representative of Pilgrim Nuclear Power Station
- John T. Mahoney, Representative of the Town of Plymouth
- Sean Mullin, Minority Leader of the Senate Appointee (Chair)
- David C. Nichols, Governor Baker Appointee
- John Ohrenberger, Representative of Pilgrim Nuclear Power Station
- Kevin O’Reilly, Speaker of the House Appointee (Vice-Chair)
- Jack Priest, Department of Public Health, Radiological Control Program
- Richard Rothstein, Representative of the Town of Plymouth
- Rick Sherman, Representative of UWUA Local 369
- Senator Dan Wolf, President of the Senate Appointee

NDCAP MEMBERS NOT PRESENT:

- Jessica Casey, President of the Senate Appointee
- John Chapman, Executive Office of Housing and Economic Development
- Richard Grassie, Minority Leader of the House Appointee
- Robert Hayden, Department of Public Utilities
- Robert Jones, Executive Office of Health and Human Services
- Kurt Schwartz, Massachusetts Emergency Management Agency

INTRODUCTION:

Chair Mullin noted that not all members of the Panel received the November minutes, proposed deferring the discussion of them until the next meeting, and called for a motion to do so, which passed by unanimous vote of the members present.

Chair Mullin stated that Pilgrim would cease operating in 135 days and noted that the focus of the upcoming meetings should be to hear updates from Holtec and Entergy with regard to the Panel’s recommendations. Examples of topics includes the millirem reduction from 25 to 10. Mr. Lynch stated

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1 Designee of Secretary Beaton (EEA)
2 Designee of Angela O’Connor (DPU)
3 Designee of Secretary Sudders (Executive Office of Health and Human Services)
that Entergy would be able to do this. Mr. Coughlin supported Chair Mullin’s proposal. Ms. duBois noted that the Panel has not received updates on all topics that it has requested updates on, including the historic site assessment. Chair Mullin also noted that the Panel should consider its 2019 annual report as a topic.

Chair Mullin stated that the Town of Plymouth has been actively speaking with interested parties in the Pilgrim decommissioning, stated that he has spoken with the Attorney General’s Office, and noted that the AG intends to intervene in the license transfer proceeding. He also stated that the AG is working with the interagency working group to obtain best possible terms for the state. He noted that the interagency working group is interested in learning about the Panel’s recommendations that were not included in the annual report. He noted that the southeast MA congressional delegation is on board to advance legislation, and explained that the Panel can help the AG and the interagency working group develop their priorities.

Mr. Mahoney pointed out that three additional members of the Board of Selectmen were in the audience and explained that the Board approved a two-year pilot extension with Entergy totaling $13.5M in payments to Plymouth. Mr. Coughlin asked whether Holtec would honor this agreement post-sale, to which Mr. Mahoney responded that was his understanding. Senator Wolf asked whether the pilot payments would be withdrawn from the trust fund. Mr. Lynch responded that he would look into this. Mr. Nichols stated that the Panel should also hear concerns from other communities near the plant in addition to Plymouth.

Chair Mullin stated that all parties, including elected officials, are on the same page, and that all parties need to speak with one voice in communications with Entergy and Holtec.

**NRC PRESENTATION ON REGULATORY PROCESS DURING LICENSE TRANSFER:**

Chair Mullin introduced presenters Bruce Watson, chief of the reactor decommissioning branch, and Amy Snyder, project manager for Pilgrim, from the NRC. Mr. Watson stated that Ray Powell, Will Smith and Bo Pham from the NRC were also present.

Mr. Watson stated that he would discuss the Pilgrim PSDAR and license transfer process. He noted that the decommissioning regulations have been in place for 21 years, and they have decommissioned 10 nuclear plants for unrestricted use. He noted that the remaining dry fuel storage at these plants is the responsibility of the federal government.

Next, he explained the steps involved in decommissioning, and described the two approaches to decommissioning, which include SAFSTOR and DECON. SAFSTOR is a mothball state for a plant after all nuclear radiological materials are removed, but the structures remain standing. DECON is an active decommissioning state. He stated that currently there are 15 plants in SAFSTOR and 6 in DECON nationwide.

Next he stated that NRC received the Pilgrim license transfer application on November 16, 2018, and both Holtec and Entergy submitted applications separately. He noted that Holtec proposed DECON and Entergy proposed SAFSTOR. The Holtec application is contingent on the license transfer and sale.

He stated that license transfers are common in the industry but that sales are more rare. Recently, the NRC approved the sale of Vermont Yankee, and the sale was completed this month. He noted that the NRC looks at financial qualifications of the proposed buyer. If approved, the NRC will issue an order and
a conforming amendment after the sale is closed. He stated that license transfer reviews typically take one year.

Next he described the PSDAR, which includes plans for post-shutdown activities, a schedule for those activities, and an environmental assessment. He explained that the PSDAR review process and noted that there are content requirements. He stated that it serves as a resource for the NRC’s oversight, and informs the public of the activities. He stated that it is a report, and that it is not approved by the NRC. The NRC will send a request for additional information if a PSDAR is incomplete. He explained that the NRC is required to host a public meeting, and that Pilgrim’s had taken place the previous night. Comments on the Entergy PSDAR are due on March 21, 2019. The license transfer application will have a 30-day comment period. The NRC will publish a summary of the comments received.

**NDCAP MEMBER QUESTION AND ANSWER:**

Mr. Priest asked about the timeline for the PSDAR, specifically when the 12-month clock started. Ms. Snyder replied that the clock started on December 17, 2018, when the NRC sent a letter stating that the NRC received the document for review, and that review is expected to be complete in December 2019. Mr. Priest asked how much time elapsed between the LTA review and conforming letter during the Vermont Yankee License transfer proceeding. Mr. Watson replied that it took roughly 18 months because of financial issues with the application. Ms. Snyder noted that the NRC estimated that it needs 12 months to review the license transfer application but stated that the NRC will try to complete it in 7 months.

Vice Chair O’Reilly asked what types of financial obligations the NRC looks for in its review. Mr. Watson replied that the review includes the amount of money in the fund and the spent fuel management plan and a determination that the funds are adequate to complete decommissioning. The NRC is also looking at Holtec’s capabilities to be a licensee. Mr. Watson noted that this is a new company, and that the review includes a review of a new licensee to take over a license.

Chair Mullin noted that Holtec has created an LLC with no assets other than the decommissioning fund, and stated that the Panel would provide Mr. Watson with written questions. Chair Mullin explained that Entergy and Holtec will not disclose the warranty period of the casks. Chair Mullin explained that the casks could develop problems, and may lack the funds to repair damaged casks. Mr. Watson explained that any costs associated with the casks are the responsibility of the licensee. He also explained that the NRC will monitor the spent fuel management plan and cost estimate.

Senator Wolf noted that the NRC sees a connection between financial qualifications and safety. He noted that financial experts believe that the fund may be insufficient to complete decommissioning. Mr. Watson responded that the licensee is responsible for ensuring the safety of the fuel. Senator Wolf asked why the NRC would not choose a licensee with more assets. Mr. Watson responded that the NRC reviews the application before it. He noted that the NRC continuously monitors a licensee’s expenditures. Ms. Snyder explained that the NRC has authority to monitor the decommissioning cost estimate and to direct a licensee to add money from the trust fund if the fund is inadequate.

Mr. Priest noted that the NRC monitors the spend down rate annually, and asked what would happen if there is a gap in the spend down rate showing that the fund will run out of money prior to the completion of decommissioning. Mr. Watson replied that the NRC could issue an order to add money to the fund or take action to ensure that funds remain adequate to complete decommissioning on schedule.
Chair Mullin noted that there is no income coming during decommissioning other than interest on the fund. Mr. Watson responded that the licensee would have a parent company, could use bonds, and will have funds coming through DOE litigation. Chair Mullin also asked how much money is transferred between the seller and buyer, noting that Plymouth would like to receive the land at Pilgrim as a gift from Holtec. Ms. Snyder responded that the NRC makes information available to the public, but that some is confidential and not publicly available. Mr. Watson noted that the NRC is not part of the sale, only the license transfer.

Senator Wolf asked what the NRC considers to be a reasonable profit, and noted that there is a need for transparency. He stated that the Panel deserves to know what the profit is and whether there is a cap on how much profit Holtec could make, because those funds should be returned to the ratepayers who paid into the fund. Mr. Watson responded that the NRC does not regulate commerce in the state, and that the state should be asking those questions about the sale.

Mr. Rothstein asked whether the NRC has different regulations for DECON versus SAFSTOR. Mr. Watson responded that the radiation protection programs are the same for both, but that licensees are expected to follow the ALARA (as low as reasonably achievable) principle. Mr. Rothstein also asked about radiation levels during DECON, and what were the implications by a reduction in the EPZ. Mr. Watson responded that a licensee is required to request an exemption for a reduction in the EPZ based on risk. He explained that the NRC reviews plans to ensure that they are compliant with NRC regulations and have a rigorous environmental protection program that keeps doses within safety limits.

Mr. Nichols asked how the inspection schedule will change during decommissioning. Mr. Watson responded that one resident inspector will be onsite for about 6 months during defueling. After defueling, inspectors are onsite frequently, particularly during higher risk activities. He noted that inspections ramp up again toward the end of decommissioning, when a licensee is nearing license termination. He noted that inspections may be monthly or quarterly during more routine aspects of decommissioning.

Mr. Mahoney asked which site has been in SAFSTOR the longest. Mr. Watson responded that Millstone 1 has been in SAFSTOR for about 20 years, and that it is within the security footprint of the operating Millstone reactors. Mr. Watson explained that Millstone has not decommissioned because it may be more efficient to decommission it after the operating reactors cease operations.

Mr. Coughlin asked whether the NRC reviews the proposed location of the new ISFSI and how the dry casks will be moved there. Mr. Watson responded that the NRC will inspect the new ISFSI to ensure that it, along with the new roads needed to transport the casks, are constructed to standards. Mr. Coughlin also asked whether the new NRC regulations would have an impact on the Pilgrim decommissioning. Mr. Watson responded that the change from handling an EPZ change request from an exemption to a regulation may be implicated. Mr. Coughlin noted the possible elimination of exemption requests to increase efficiency, and asked how public safety would be lessened by those changes. Mr. Watson responded that the inspection process would ensure public safety.

Ms. duBois noted that the NRC does not seem to take into account sea level rise in its assessment of possible effects at Pilgrim, and explained that sea level rise should be taken into considered in evaluating the Pilgrim PSDARs. Mr. Watson responded that the NEPA process deals with impacts associated with plant operations and the decommissioning, but do not address the longer term issue of
rising sea levels. Bo Pham of the NRC noted that the EIS process documents the impact of the plant on
the environment, and not the impact of the environment on the plant. He also explained that the NRC
issued orders after Fukushima for each licensee to report on the hazards at each plant. Ms. duBois
responded that the NRC should focus more on the future of the site because of the Pilgrim site’s
vulnerability to sea level rise.

Mr. Flores noted that Cape Cod is within a 50-mile radius of Pilgrim. He also noted that Entergy’s
estimate for the cost to decommission Pilgrim through SAFSTOR and Holtec’s estimate for DECON are in
excess of the funds available in the decommissioning fund, and asked how the shortfall would be made
up. Mr. Watson responded that the estimates are likely to take into account future escalation
estimates. He explained that the NRC would review the estimates closely. He also noted that there are
separate funds for fuel management and site restoration. Mr. Flores also expressed concern with the
Holtec LLC arrangement vis a vis liability. Mr. Watson responded that although LLCs can make it more
difficult to obtain funds from a parent company through litigation, it is nevertheless possible.

Mr. Nichols asked whether other LLCs are decommissioning nuclear plants elsewhere. Mr. Watson
responded that he knows of two such examples, but in those cases the license was transferred for the
purpose of decommissioning, but there was not a sale.

Mr. Ciaramella asked whether the PSDARs include cost estimates for each phase of the closing, and
asked if the NRC has best practice costs for those phases. Mr. Watson responded that decommissioning
costs vary wildly based on a wide variety of factors. Ms. Snyder noted that there is documentation on
decommissioning costs based on previous decommissionings that she could provide to the Panel.

**PUBLIC QUESTION AND ANSWER:**

Jim Lampert noted that the Town of Duxbury has financial concerns about the decommissioning, and
asked when the Panel would hear those concerns. He also noted that the new licensee’s only assets will
be the trust fund and the land at Pilgrim and explained that funds recovered from DOE do not go into
the trust fund, but rather go back to Holtec. He also asked how interventions in the license transfer
could affect the review schedule. Mr. Watson responded that an intervention could delay the process,
but could not estimate how long the delay would be.

Henrietta Consentino expressed concern about the NRC’s lack of consideration of environmental effects,
such as sea level rise, on the site. She also noted concerns with the safety of dry cask storage and
Holtec’s finances. She asked the NRC representatives what concerns they have taken away from their
local meetings. Mr. Watson responded that he understands the concerns over Holtec’s finances and
qualifications and explained that the NRC has follow-up work to do on that subject. He also explained
that the NRC will review the license transfer closely and explained that the NRC shares environmental
concerns.

Jim Lampert stated that he has concerns about the PSDAR cost estimate. First he noted that the cash
flow represents a slim profit margin and may be based on inappropriate assumptions, and may include
faulty inflation assumptions. He also expressed skepticism about Holtec’s estimate for spent fuel
removal and the cost assumptions associated with it. He also disagreed with classifications of the
Pilgrim site as clean, and stated that certain environmental documents may omit critical information
about contamination at Pilgrim. He stated that the public will be responsible for any cost overruns.
David Agnew stated that there may not be enough money in the decommissioning fund to complete 
decommissioning, and asked if the NRC could guarantee that the public will not have to pay for any 
overruns. Mr. Watson responded that the licensee is responsible for providing any shortfall in funds in 
excess of those available in the trust fund. He explained that the legal system would also be used to 
obtain these funds, and he noted that the NRC reviews the licensee’s finances on an annual basis.

David Noyes, a long-time Pilgrim employee, thanked the NRC for providing decommissioning 
information. He noted that the licensee and NRC are responsible for seeing through the 
decommissioning. He stated that the NRC regulations have proven effective at decommissioning, and 
that it is therefore unnecessary and unreasonable to impose more stringent requirements, including 
increased radiological standards and donation of land, on the Pilgrim decommissioning. He stated that 
these additional measures do not represent responsible uses of the trust fund, and that any additional 
requirements should have sound scientific bases. Mr. Priest responded that the increased radiological 
standard of 10 millirem has a strong scientific basis.

John Garley asked whether the steel used in the casks can crack in salt water, and asked what the plan is 
if a cask cracks. Mr. Watson responded that a certain type of steel used in casks is susceptible to stress 
corrosion cracking, that the NRC has issued notice of this, and that the NRC is reviewing the longevity of 
the casks. However, he noted that all casks in service are intact. He also stated that casks do not need 
to be underwater to be safe, and that they are safe in dry casks. He stated that the casks are safe, that a 
program is being put into place to monitor degradation of the steel containers in the casks, and that 
there are plans underway to make sure the casks can maintain their integrity if there is a problem. Mr. 
Pham noted that the notice gave possible degradation as an example of something that could happen to 
steel, but that it has not happened, but that degradation has been observed in the piping system but not 
in the casks.

Diane Turco asked if the trust fund pays taxes. Mr. Watson responded that it does pay taxes as part of 
decommissioning. Ms. Turco stated that public and environmental safety are the most important 
priorities. She cited terrorism and sea level rise as issues that need to be addressed in decommissioning.

**WRAP UP AND ADJOURN**

Chair Mullin thanked the NRC representatives for their time, and noted that he would follow up with 
written questions.

Chair Mullin called for a motion to adjourn. It was so moved and seconded.

*Meeting adjourned at approximately 8:45 p.m.*