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and Public Works

Subcommittee on Clean Air, Climate, and
Nuclear Safety

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ISSUES FACING COMMUNITIES WITH DECOMMISSIONING NUCLEAR PLANTS

Friday, May 6, 2022

United States Senate

Committee on Environment and Public Works

Subcommittee on Clean Air, Climate, and Nuclear Safety

Plymouth, Massachusetts.

The committee met, pursuant to notice, at 10:00 a.m. at the 1820 Courtroom, Plymouth Town Hall, 26 Court Street, Plymouth, Massachusetts, the Honorable Edward J. Markey [chairman of the subcommittee] presiding.

Present: Senator Markey.

Also present: Representative Keating.

STATEMENT OF THE HONORABLE EDWARD J. MARKEY, A UNITED STATES
SENATOR FROM THE STATE OF MASSACHUSETTS

Senator Markey. Good morning, everyone. Welcome to the field hearing of the United States Senate Environment and Public Works Subcommittee on Clean Air, Climate and Nuclear Safety. Today's hearing is entitled Issues Facing Communities with Decommissioning Nuclear Power Plants in the United States.

First of all, I want to thank my Ranking Member, Senator Jim Inhofe, and the Committee on Environment and Public Works Chairman Tom Carper, Ranking Member Shelley Moore Capito, for their support in holding this important field hearing. I am grateful for their commitment to the important issue of nuclear plant decommissioning, and for their innate understanding of the power of holding hearings where those affected by federal policy issues can attend and can take part.

As Chair of the Subcommittee, I am grateful to welcome my friend, Bill Keating, who is the Congressman here from Plymouth, and from the South Shore of Massachusetts. Of course, he is the Congressman from America's hometown, Plymouth. So we welcome Congressman Keating to our hearing.

Senator Warren was not able to join us today. However, her staff, Hannah Benson and Liv Teixeira are present, and Senator Warren will be submitting questions to the witnesses for the record.

I want to extend my thanks to the Town of Plymouth for hosing this field hearing today at the Town Hall in the 1820 Courtroom. It is an historic room for an historic hearing. Thank you to the members of the Plymouth Select Board and Board of Health. And thank you to the Plymouth Town staff for their work, including Town Manager Derek Brindisi and Assistant Town Manager Brad Brothers. Derek and Brad entered their roles just days before we told them we were bringing a Senate committee to Plymouth. So Derek, Brad, the entire Plymouth team jumped right into the planning and the preparations, and we thank them so much for all of their great work.

Our deepest thanks to the entire team at Plymouth Area Community Access Television for their masterful preparation and tech work to ensure this hearing is accessible for those in both the real and the virtual worlds.

In addition to State Senator Sue Moran, who is a witness on our second panel today, we are also being joined by the members of the Region-State Legislative Delegation, State Senator Patrick O'Connor, State Representatives Matt Muratore, Kathy LaNatra, Kip Diggs, and Steve Xiarhos, are all here today. We thank you all so much for your interest and concern about this very important issue.

I also want to acknowledge the many members of the Nuclear Decommissioning Citizen Advisory Panel attending today. Thank

you to NDCAP for your work for dedicating your time to this important issue of monitoring and advising on the decommissioning of the Pilgrim Nuclear Power Station.

I also want to thank the many community groups which have for decades worked tirelessly to ensure the community's voice is heard and is listened to throughout the operation, the shutdown, and the decommissioning of the Pilgrim Plant. This of course includes Mary and Jim Lampert from Pilgrim Watch, and Diane Turco of Cape Downwinders.

I also understand that we are joined by leaders from the Duxbury Select Board, the Massachusetts Lobsterman's Association, and the Massachusetts Seafood Collaborative, and our local Laborers, Carpenters, and Ironworker Unions.

Finally, I want to thank the members of the public who are attending the hearing in person in the overflow room and on the livestream. Your concerns and participation is what makes the policy process work.

For decades now, the people of Plymouth and the communities across the Country have looked to the Nuclear Regulatory Commission to be the independent regulator of nuclear safety it was intended to be. However, in many instances, instead of fulfilling its responsibility to protect public health and safety, we find ourselves today with an agency that historically has consistently prioritized industry profits over public

protection. Over the years, communities with decommissioning nuclear power plants have repeatedly called on the commission to be a good regulator and for nuclear companies to be good neighbors. But those calls have gone unanswered.

We have asked the Nuclear Regulatory Commission and the nuclear industry to listen to the residents near San Onofre Nuclear Generating Station, who worry about what an earthquake could do to the 3.6 million pounds of radioactive waste buried underneath that plant, which sits on an active earthquake fault line. We have asked them to listen to communities like Zion, which are struggling to overcome the social and economic burden of indefinitely hosting stranded nuclear waste in Illinois when there is no long-term storage solution in sight.

We have simply asked them to listen to the people that have the most to lose and the least to gain from the decommissioning process. But time and time again, they have failed to do that.

As the local residents at today's hearing remember well, in August of 2019, the Nuclear Regulatory Commission approved the transfer of the Pilgrim Nuclear Power Station license from Entergy Nuclear Operations, Inc. to Holtec International, a ruling made even before it resolved open petitions in the proceeding docket or answered critical questions about safety, security, and funding.

Keeping Holtec's business interests on schedule was a

higher priority than answering public questions. And this blatant disregard for public input isn't unique to Pilgrim. We have seen it play out at other decommissioning power plants across the Country.

For example, in November of 2020, the Nuclear Regulatory Commission approved the transfer of the license for the Indian Point Nuclear Power Plant in New York from Entergy to Holtec without even holding a single public hearing. This is unacceptable. Our communities deserve to have their concerns accounted for.

We may not know exactly how nuclear power plants are put together, taken apart, but we know what it is like to live in fear of a nuclear disaster. We may not all be nuclear physicists, but we know what it feels like to breathe clean air and drink clean water. And we may not be accountants who have memorized every line item in a nuclear plant's budget, but we do know that when spent fuel is stranded at our nuclear plants for decades with no solution for long-term storage, someone is going to be left footing the bill.

The families and the businesses and communities with decommissioning nuclear power plants do not all claim to be nuclear experts. But they do have honest and legitimate concerns about how a decommissioning nuclear power plant affects their health, their safety, their families, their livelihoods,

their local economy. It is well past time that the NRC and the nuclear industry take their input seriously.

As Nuclear Regulatory Commission Chairman Hanson stated in a speech at the Regulatory Information Conference last year, "Public trust is essential for the future of nuclear power and use of nuclear materials. To ensure the public trust, it is necessary that the government act as an independent, impartial regulatory. Additionally, the public should be comfortable in trusting industry to deliver on its promise of developing and operating safe, reliable, and economic nuclear power plants and facilities."

I agree with what Chairman Hanson said about this process. Right now, that trust is hanging by a thread. While I am deeply disappointed in the Nuclear Regulatory Commission and the nuclear industry's failure to meaningfully listen and respond to the concerns of communities with decommissioning nuclear power plants, I did not convene this subcommittee hearing simply to pass blame and point fingers.

Instead, I am hoping that this hearing will serve as an opportunity to identify real and meaningful actions that local communities, State governments, the Nuclear Regulatory Commission and nuclear companies can take to create opportunities for public engagement. Communities around Pilgrim have a worthwhile story to tell about how the current process

has failed them. We hope the Nuclear Regulatory Commission and other communities can benefit from this hard-won expertise.

The proposed decommissioning rule that is currently open for public comment serves as a critical opportunity for the NRC to re-assert itself as an independent, impartial regulator worthy of the public trust. Instead of simply approving this rule, which would allow the NRC and plant operators to cut corners on safety and limit public engagement at the expense of the communities near nuclear plants, I hope the NRC takes this opportunity to improve the rule. By putting a stronger rule in place the NRC can ensure that communities have a seat at the table when it comes to the decommissioning process, better protect the safety and financial health of every community, and live up to Chairman Hanson's goals of securing the public trust.

I look forward to hearing all of the testimony here today, discussing how to create a more meaningful role for our communities in the decommissioning process.

Now I would like to turn to Congressman Keating, to recognize him for an opening statement.

[The prepared statement of Senator Markey follows:]

STATEMENT OF THE HONORABLE BILL KEATING, A UNITED STATES
REPRESENTATIVE IN CONGRESS FROM THE STATE OF MASSACHUSETTS

Representative Keating. Thank you, Senator, and I thank all the people who are here.

Having a field hearing is not an easy task [indiscernible] staff [indiscernible] everyone that was involved in [indiscernible] make today a reality.

I am so pleased that we are here on this important issue. It is an issue that clearly was a prevalent issue long before I came to Congress, about the safety of the nuclear facility at Pilgrim. Clearly during the period of decommissioning it has become a critical issue here in southeastern Massachusetts.

This isn't just about the Town of Plymouth or the Town of Duxbury or neighboring towns in the region. It is about more than that. It is about our important resources and our important industries here. It is about aquaculture. It is about fishing, lobstering. It is about tourism, and it is about the quality of life for people who live in this vicinity.

And it is more than that, even. Because as we gather here today, this committee is going to be looking at the larger view of what we can do in terms of the rules surrounding decommissioning. And more importantly, the roles of community and community voices, officials and residents and groups that are affected by things to have a strong voice in this process,

something I am very concerned isn't the case now.

This remains a top priority for me in this region. But beyond that, with so many new plants being decommissioned in the next few years, particularly the ones by 2025, this is a national issue as well. The decisions and how things transpire here in Pilgrim will undoubtedly affect plants in the entire United States of America.

So we are really at a pivotal time at a very important issue that we have to deal with. This issue shouldn't be decided by corporate profit and loss. It should be decided by public safety and security. And it shouldn't be administered by agencies who say what they can't do but a government that demands what it must do.

The way this can happen is only through transparency and openness. Sadly, I don't believe that has been the case with Holtec to date. There is still time going forward. I look at this hearing as one of the most vital starting points for that dialogue to occur.

So as we yield for the question-and-answer period, I will yield back to the Senator, and thank him for doing the hard work it took to put this hearing together here today.

[The prepared statement of Representative Keating follows:]

Senator Markey. And I thank Congressman Keating for his focus on this issue as well.

I chaired a hearing up in Lawrence after the explosion, the natural gas explosion which clearly identified significant deficiencies in the safety procedures to ensure that that community was not in fact endangered, and there was a clear failure there to anticipate those safety problems. This hearing follows on that so that we can ensure that we get all the questions asked and answered before we run any risk for members of this community.

So we now will turn to our esteemed first panel, on which we will hear from John Lubinski, who serves as the Director of the Nuclear Materials Safety and Safeguards Office at the Nuclear Regulatory Commission. Director Lubinski has a wide range of experience at the NRC, having served in a variety of key roles across the agency for nearly 29 years, and has dedicated his career to ensuring public health and safety in his regulatory capacity.

Director Lubinski began his career at the NRC as a mechanical engineer in May of 1990, serving in a number of high-profile positions. We will now proceed to Mr. Lubinski and his testimony. Then there will be a question-and-answer period that Congressman Keating and I will conduct.

We welcome you, Director Lubinski. Welcome to Plymouth.

We just celebrated the 400th birthday of Plymouth, the incredible role which Plymouth Harbor has played in the history of our Country, which is the reason why we are so concerned. We just want to make sure that everything is done correctly.

So we welcome you, sir. Whenever you are comfortable, please begin.

STATEMENT OF JOHN W. LUBINSKI, DIRECTOR, OFFICE OF NUCLEAR
MATERIAL SAFETY AND SAFEGUARDS, NUCLEAR REGULATORY COMMISSION

Mr. Lubinski. Good morning, Chairman Markey and distinguished members of the subcommittee, and Representative Keating. I also would like to thank the Town of Plymouth for hosting this meeting. I appreciate being here today.

As you stated, I am John Lubinski. I am the Director of the Office of Nuclear Material Safety and Safeguards at the U.S. Nuclear Regulatory Commission. I appreciate the opportunity to testify today to discuss the NRC's role and responsibilities associated with decommissioning.

As an independent safety regulatory, the NRC provides oversight during decommissioning to ensure the safe dismantlement and radiological decontamination of nuclear power reactor sites in a manner that protects public health and safety and the environment. The NRC regulations and inspection programs specify actions that both the NRC and the licensee must take to demonstrate that a nuclear power plant is decommissioned safely, and that there are opportunities for public engagement during key stages of the decommissioning process.

Over the past 25 years, the NRC has gained extensive decommissioning experience and has ensured the safe decommissioning of almost 80 sites, including 11 power reactors. As of today, there are 25 nuclear power reactors at 19 locations

across the Country undergoing decommissioning.

The NRC regulations state that decommissioning must be completed within 60 years of permanent cessation of operations, but do not specify any interim milestones. Of the 25 power reactors currently in decommissioning, 17 are undergoing active dismantlement and decontamination. Eight nuclear power reactors have been placed in a safe, stable condition to allow the radioactive decay of contaminated material until active dismantlement phase begins.

Recently, more retired reactors, including Pilgrim, moved immediately into active decommissioning so that sites could more quickly be cleaned up to levels to permit the release of the property for other uses. For most decommissioned nuclear power reactors, the spent fuel remains in dry storage casks on a concrete pad at the site which is known as an independent spent fuel storage installation. The NRC will continue to inspect these facilities and enforce regulations to protect the stored spent nuclear fuel until it is removed from the site and the storage facility itself has been decommissioned.

The NRC will also continue to independently review the reports that decommissioning licensees submit annually on the status of their decommissioning trust fund to confirm there is adequate funding to complete decommissioning.

Finally, the NRC continually evaluates its regulations and

revises them to improve the regulatory process. There is a rulemaking underway now to update the NRC's decommissioning regulations which were last revised in 1997. The NRC values public involvement in its activities as a cornerstone of maintaining strong, transparent regulations, and the agency recognizes the public's interest in the decommissioning process.

In response to requests, the NRC has extended the public comment period on the proposed decommissioning rule by an additional 15 weeks for a total of 180 days. During the public comment period, which closes on August 30th, the NRC plans six public meetings, including at four locations across the Country, to provide the opportunity for members of the public to provide input. The last of these meetings will be held in Plymouth on Monday, May 9th, at the Hotel 1620 at Plymouth Harbor. This will be a hybrid meeting so that members of the public can either participate in person or virtually if they cannot attend in person.

I want to thank you for the opportunity to speak today on the NRC's role for ensuring that the decommissioning of nuclear power plants is completed safely and is protective of public health and safety and the environment. I am pleased to answer any questions.

[The prepared statement of Mr. Lubinski follows:]

Senator Markey. Thank you, Mr. Lubinski. I will recognize myself for a round of questions, and just begin by again thanking you for your participation.

For years, I have called on the Nuclear Regulatory Commission to do more to respond to the concerns of residents around decommissioning nuclear plants, but time and time again, those calls have been ignored. Prior to the NRC's approval of the proposed decommissioning rule last November, I repeatedly wrote to the Nuclear Regulatory Commission, asking the Commission to make critical changes to improve public and stakeholder participation, establish a comprehensive set of decommissioning and cleanup regulations, and address concerns about the safety and the duration of onsite storage of spent fuel, an issue of specific concern to the residents who live around the Pilgrim plant.

Those suggestions were disregarded. The frustration you hear from stakeholders and residents is the result of that disregard for the requests which had been made. Instead, the proposed rule allows the Nuclear Regulatory Commission and plant operators to cut corners on safety and limit public engagement at the expense of the communities near nuclear plants, communities like Plymouth.

Director Lubinski, is there anything in this proposed rule that strengthens stakeholder involvement in the decommissioning

process?

Mr. Lubinski. Thank you for the question, Senator Markey. Let me start with the proposed rule itself. The fact that we have issued a proposed rule for public comment and are seeking public input, including six public meetings under the Administrative Procedures Act, we are proposed to post proposed rules for public comment.

However, there is not a timeframe that says we need to go to 180 days. We felt it was important to extend that comment period so that we can engage with members of the public to provide a full understanding of our background of the proposed rule, so that they can provide informed comments. As I noted, we are holding four of those public meetings remotely, so that we can have in-person communications with individuals.

The rule itself will continue to maintain several opportunities from the standpoint of public engagement during decommissioning. The current regulations do require and put requirements on the NRC, not just licensees, but on the NRC to hold public meetings at the time we received the license termination plan, as well as proposed shutdown activities reports. We seek active input from communities when we receive those reports.

Also, as we continue to receive license amendments from plants during decommissioning, we have opportunities for members

of the public to file for hearing requests. When there is significant interest in those communities, we do hold public meetings on those amendment requests to seek input. We do evaluate the input provided by members of the community before making final decisions.

Senator Markey. Well, I thank the NRC for extending the comment period on the rule to August. We appreciate that. But we are asking about the contents of that rule, the actual additional protections that will be granted for public participation, and the changes that need to be made in order to strengthen the rule.

So right now, under this decommissioning proposed rule, assuming no license transfer happens, is there a requirement that the Nuclear Regulatory Commission must consider and respond to public comments on the decommissioning plant?

Mr. Lubinski. Your question is if there are no transfers of a facility?

Senator Markey. That is correct.

Mr. Lubinski. As I noted earlier, and under decommissioning, licensees are required to provide a post shutdown decommissioning activity report. Under that report, they are required to provide their plans for how they plan to decommission, and the NRC is required to hold a public meeting.

We consider those comments to determine whether or not the

licensees are fully in compliance with our regulations and maintaining safety as part of their process. The licensee is required to provide to us for our approval a license termination plan. As part of that license termination plan, there are opportunities for hearings for members of the public. And we are required to hold public meetings and will consider that information.

So from a public engagement, there are two clear requirements in our regulations that require us to have the public engagement, and to fully assess the comments provided to us during those meetings.

Senator Markey. If the NRC doesn't have to consider and respond to public comments on a plant's decommissioning process, the rulemaking just sets up a show trial. There is already too little input from States and from stakeholders. The rule would actually codify that.

Decommissioning can take 60 years. Perhaps the people of Plymouth and other communities in America never fully understood that, that decommissioning can take 60 years. The remnants of the process might last even beyond then. The Yankee Rowe, a nuclear plant in Rowe, Massachusetts, was declared by the NRC to be done with its decommissioning in 2007. But its spent nuclear fuel is still onsite in Rowe, Massachusetts, because the U.S. Government has for years pursued the false fantasy of Yucca

Mountain in Nevada for nuclear waste disposal. There is a real fear that Pilgrim will be in a similar situation decades from now.

State and local shareholders shouldn't have to sit quietly and accept a decommissioning plan that could determine their safety, security, and economic future for decades to come without having a voice today. They will have to live for decades with the consequences of the decisions being made today. They shouldn't be sidelined to just sit back and watch as a company can run rampant over their reputation and interests and they shouldn't have to fight to get our preeminent national regulator to do its job and actively represent the public interest on what happens to close a nuclear plant.

In the latest version of the proposed decommissioning rule, the NRC would have no ability, none, to approve, change, or deny plants' decommissioning proposals known as post-shutdown decommissioning activity reports. So it is like a glorified filing cabinet. The NRC's only job would be to acknowledge receipt and completion. But that would be the role that the NRC would be playing.

Director Lubinski, is it true that under this rulemaking, that the NRC just checks to make sure that all the necessary parts of the shutdown and decommissioning plan are in the report without having to formally approve the report?

Mr. Lubinski. Thank you, Senator. The current version of the rule still requires licensees to provide their post-shutdown decommissioning activities report. It includes for the licensee the requirements on what to provide to the NRC.

The NRC does review that report. The NRC reviews the report for multiple purposes. One is to understand from a planning purpose what the licensee will be during decommissioning, understanding what oversight activities will be needed during certain phases of decommissioning so we can assure that we are there onsite to see the more risk-significant activities that occur, that we can understand and have resources when they submit license amendments to us to make changes to their plant that are needed to go through decommissioning, understanding the timing when they will be submitting their license termination plan, which is the legally binding requirement that is reviewed by the NRC and must continue to be adhered to by the licensee during decommissioning.

And the time frame for when it will provide its amendment to do the final termination of the license at the site, which again will be subject to NRC review and approval before the site can determine that it can be released for unrestricted release. During that process, it also allows the NRC to continue to perform its oversight functions at the site through having inspectors at the site oversee the activities of the licensee.

So the requirement is still there for licenses to provide the report, and the NRC processes do review the report. If the NRC were to identify in that report any concerns or issues that required NRC action, we could take such action.

One of the requirements also is that the licensee must demonstrate that they are bound from an environmental standpoint by previous environmental impact statements that were performed at the site. If they have determined at that point in that report that they have not been bound, they are required to provide to us what those changes are, and the NRC would review those underneath to determine whether there are any significant environmental impacts.

Senator Markey. Well, but you still don't have to formally approve the plan. You don't have that responsibility.

Mr. Lubinski. The requirement for approval falls under the license termination plan, which becomes the legally binding requirement for which they will do decommissioning.

Senator Markey. I appreciate that. But at that stage, it is like having a mechanic that checks to make sure you have all four tires on a car, and tells you you are good to go without checking to make sure that those tires don't have a hole in them. It is a policy designed for a crash.

If the NRC had to formally approve the decommissioning activities report, would it be considered a major federal action

that would require a new National Environmental Policy Act review?

Mr. Lubinski. If I can go back one step, because you did mention that this is part of the proposed rule. The NRC will be seeking public comment on the post-shutdown activities report. And if interested parties believe it is something we should review, we will consider those comments as part of the proposed comments on the rule.

If in the future the NRC would put a requirement in place for licensees to submit for us for review and approval as part of a license amendment for their site, us to approve the post-shutdown activities report, this would be an action under NEPA that we would have to look at the environmental impacts. Under that review, it would depend on the scope of the activities that are included in that report. Whether or not we would do an environmental assessment if we were to reach a conclusion that there was a finding of no significant impact, we would issue an environmental assessment as part of that review of the license amendment.

If we could not reach a finding of no significant impact, we would perform a supplemental environmental impact statement.

Senator Markey. Has the NRC ever taken action on changing a decommissioning report?

Mr. Lubinski. Excuse me, Senator, if I can ask you to

clarify. When you say report, are you referring to the post-shutdown activities report?

Senator Markey. Has any plant ever been told that it needs a new NEPA review?

Mr. Lubinski. Thank you for the clarification. You are referring to the NEPA review. My understanding at this point, and we can get back to you with a clarifying answer, is that the reports that have come in, and what I mean by that is the license amendments for license termination, as well as the license termination plan reviews, that all of them have had a NEPA review that has resulted in an environmental assessment with a finding of no significant impact.

I am not aware of where we have done a supplemental EIS. But I can get back to you to clarify factually whether or not we have ever done that.

Senator Markey. I would appreciate if you would get back to me. But I think you will find that the answer is in the negative.

Do license termination plans have the same information in detail as a shutdown report?

Mr. Lubinski. The amount of information in the reports are different because they serve different purposes. Under the post-shutdown activities report, we are asking the licensee about their planning for decommissioning, the type of activities

they would be performing, how they would be using their decommissioning trust funds, timing of submissions. The license termination plan provides the details of the criteria that they will use to result in unrestricted release, what activities they will perform to do that. Based on our review and approval, it then becomes a legally binding requirement in addition to the current license that they must meet those items in that license termination plan.

Only after we do a review and make a determination that if the licensee were to follow that plan, they would meet all NRC regulations and safety requirements for license termination would we approve that license amendment.

Senator Markey. Has the NRC ever asked a plant to modify a submitted PSDAR?

Mr. Lubinski. Under the regulations, that is a report that is required to be provided to the NRC. We have asked questions.

Senator Markey. No, I am asking, have you ever asked a plant to submit a modification of their submission?

Mr. Lubinski. I believe we have asked questions of the licensee that has resulted in them submitting changes. We have not required them, to my knowledge, but I can get back to you, to submit a brand-new report.

Senator Markey. You can understand why that doesn't seem, as a result, as a very effective check on how the owner of the

plant would be viewing the NRC rule, if no modification has ever been requested.

If the NRC had to formally approve the decommissioning activities report, would that provide an opportunity, or stakeholders, to challenge the activities outlined in the report through an adjudicatory hearing?

Mr. Lubinski. If the NRC were to put a requirement in place that required the review and approval and a license amendment to be submitted for the incorporation of that report, there would be opportunities for hearing.

Senator Markey. And I agree, it makes more sense to me to conduct an environmental review and give the public, those sitting here today, an opportunity to weigh in before the decommissioning process begins. This would have helped avoid a lot of the problems our communities have experienced with Pilgrim's decommissioning process so far, with the community's alarm over the Holtec plan to dump one million gallons of radioactive water into Cape Cod Bay being just the latest example.

Don't you think that makes more sense, Mr. Lubinski, that the process have the public participation, the public questioning, up front rather than after the fact?

Mr. Lubinski. I believe right now the requirements that we have put in in the proposed rule, as well as the current

regulations, with respect to the post-shutdown decommissioning activity report, are adequate to protect public health and safety. This is the reason that when my staff submitted the report to the Commission for approval, we did not put a requirement for that to be a license amendment.

With that said, we are actively seeking public input to determine what the final decision would be. I believe from a safety standpoint, our oversight and the remainder of our licensing activities do provide adequate protection.

Senator Markey. Well, again, the community does not agree with you. More public participation is needed.

So as you are aware, last December Holtec announced it intended to dump one million gallons of radioactive water from the spent fuel pool, reactor pool, and other areas of the plant, into Cape Cod Bay, claiming it had the green light from the NRC to discharge the water at any time. While the NRC has acknowledged that Holtec's National Pollutant Discharge Elimination System permit will almost certainly need to be amended by the Environmental Protection Agency before the discharge is allowed to account for non-radiological water pollutants, I am concerned that the NRC has failed to engage with all federal agencies that have a stake in the matter.

Our office has spoken with NOAA's Office of National Marine Sanctuaries, which has informed us that under the OCEANS Act,

federal agencies are required to consult with the Office of National Marine Sanctuaries on federal agency actions that may affect any sanctuary resource such as the Stellwagen Bank National Marine Sanctuary. Given that the Stellwagen Bank National Marine Sanctuary encompasses the waters at the mouth of Massachusetts Bay between Cape Ann and Cape Cod Bay, I would contend that the dumping of one million gallons of radioactive water into Cape Cod Bay may affect the Stellwagen Bank National Marine Sanctuary.

Director Lubinski, has the NRC consulted with the Office of National Marine Sanctuaries about Holtec's proposal to release radioactive water into Cape Cod Bay?

Mr. Lubinski. Thank you, Senator. With respect to our coordination with other agencies, we do that under our NEPA process when we look at our environmental impact statements. With respect to Pilgrim, environmental impact statements were performed during operation of the plant, license renewal for the plant, and the NRC also did have a generic environmental impact statement for decommissioning.

We have determined that all of the activities at the plant are within the scope of those documents that were reviewed. As part of those reviews, we do look at marine sanctuaries. We are required to consult with the National Marine Sanctuaries if we identify any impacts that we believe would destroy, cause the

loss of, or injure a sanctuary. It was determined as part of those reviews that that impact would not occur to the sanctuary, and therefore, formal consultation did not occur.

We are in receipt of a letter from National Marine Sanctuaries asking about our decision on that. We will be, we are still evaluating that letter and will be providing a response.

Senator Markey. So the Office of National Marine Sanctuaries sent the Commission on March 14th a letter regarding the issue. You haven't responded to it yet. I would ask you to respond in a very timely fashion, especially since you are going to be having a public hearing up here. Everyone here should know what your response to them is.

So you have had it on your desk, it is sitting there, it needs a response. And the people here deserve that, because one of the issues that people are so concerned about is the economic damage to our vibrant blue economy here in Massachusetts, and on the Cape, the shellfish, the seafood, the tourism industries all depend on clean, healthy water and their reputation for safety to make a living.

Director Lubinski, does the NRC have a responsibility to consider these issues when establishing its standards for the release of radioactive water?

Mr. Lubinski. Thank you, Senator. In response to your

first statement, we will be responding to that letter of March 14th. I can commit to you that we will be doing that.

Senator Markey. You cannot commit to when you will be responding to it, is that what you are saying?

Mr. Lubinski. I do not have a date right now, sir.

Senator Markey. I think the people who are going to be attending the public hearing have a right to know what the answers to those questions are before you have the public hearing. You have had sufficient notice in order to do the work. I would ask that you ensure that your staff at the NRC does the work to guarantee that that material is in the hands of the people from the community of Plymouth.

Mr. Lubinski. If I could ask for clarification, Senator, when you are referring to the public hearing, which public hearing are you referring to?

Senator Markey. That you are going to be having on this issue, Monday May 9th.

Mr. Lubinski. That is not the subject of the meeting we are having on Monday. It is not a hearing. This is a meeting on the decommissioning rule itself. It is not specific to any specific plant.

I will strive to be able to provide Monday a commitment of a date when we will be providing to the letter. And we would not be providing something in a public meeting about a response

to an individual without responding to them first. So we do want to make sure that put something in writing. And we will strive to have a date by Monday of when that response will be issued.

Senator Markey. Well, again, that is the concern which the community has. These are the issues that they are concerned about, the impact on the community, on safety, on the water, on the economy, on the fishing industry. I think obviously the questions that have been raised by the Office of National Marine Sanctuaries is directly relevant to why these hearings are being held. They want the answers to the questions.

NEPA reviews require the consideration of ecological, esthetic, historic, cultural, economic, social, and health effects of federal action. But no NEPA review was required for the decommissioning plan because its approval isn't considered a major federal action. And the new decommissioning rule would not change that.

Director Lubinski, would a new NEPA review for decommissioning mean that the NRC would have to evaluate the effects of decommissioning activities, such as radioactive water dumping, or the cultural and economic well-being of the region?

Mr. Lubinski. Thank you. With respect to the release of water into the Cape Cod Bay, that was something that was looked at during the operation of the plant as well as during license

renewal. Under the NEPA process, it is something that we would look at under the environmental impact statement.

As I mentioned earlier, we did look at the marine sanctuaries as part of those reviews. The requirements that are on Holtec today and previously on Entergy for the release of that material still apply today, would apply to Entergy, applies to Holtec today. They will be required to meet those standards.

We have done a review of that under NEPA, as noted in the EIS and the supplemental EIS that was done for license renewal. So that was accomplished.

If, and I use the word if, if a new requirement was put in place under decommissioning, it would require an amendment to the license. We would do a review and meet our NEPA requirements. Depending on the scope of that, whether or not it would be an environmental assessment, or an environmental impact statement would have to be determined.

Senator Markey. So the concerns obviously are great about the impact which radioactive water could have on the community. The International Atomic Energy Agency is the preeminent global body for promoting the use of nuclear power.

On the subject of releasing radioactive water, the International Atomic Energy Agency writes, "There are also public relations and environmental issues to consider. For example, there are instances where effluent is within the

discharge criteria and may be authorized for release, but discharge may be unacceptable in terms of public relations. The political and environmental aspects need to be considered during the stages of planning and licensing of decommissioning."

Will the Nuclear Regulatory Commission follow the advice of the IAEA and consider the environmental and political implications of allowing Holtec to dump one million gallons of radioactive water into Cape Cod Bay?

Mr. Lubinski. Thank you, Senator. As an independent safety regulator, we have looked at what the impacts would be of radiological safety from release by Holtec of water effluents from the site. We believe that the requirements in place on Holtec today would ensure public health and safety from the release of that material from a radiological standpoint.

With respect to reviews that are done such as on socioeconomic impacts, we do look at those when we perform an environmental impact statement. That would have been looked at during operation as well as license renewal. Because again, it is the same requirement today that they had during operation for the release of that material.

From a public relations standpoint, we do not look at the public relation aspects of such releases.

Senator Markey. Well, the NRC has essentially cut itself off from any ability to mitigate, direct, or understand the

site-specific issues around water discharge. That is a problem. As the decommissioning rule currently stands, NRC gets to wash its hands of any radioactive water and leave our residents to wade through that issue on their own. But that doesn't have to be the case. Under current federal regulations, the NRC could actually set more stringent radiological standards for Pilgrim's water.

Director Lubinski, is the NRC looking at using this authority as a result of the specific economic and ecological concerns raised by local stakeholders?

Mr. Lubinski. Currently today, the NRC, through its licensing process and regulations, has requirements on Holtec at the Pilgrim site that govern the release of the material. They are required to meet those requirements. They have a radiological environmental monitoring program that would determine, based on a release, what the dose would be to members of the public for that release. They must meet the NRC regulations for that dose criteria.

We have NRC inspectors that review these programs on an annual basis to ensure that licensees are meeting those requirements. We believe the current requirements are sufficient to protect public health and safety. As part of the proposed rule on decommissioning, we have not proposed changes to any of those effluent releases. At this time, with respect

to Holtec's operation of Pilgrim, we have not identified any issues that will lead us to believe we need to put more stringent standards in place.

Senator Markey. The reason it is an important issue is that the proposal will allow for three times as much water released in one year as Pilgrim has ever released in the past. The old conditions, as a result, are not the same. When you talk about public relations, what you are talking about is the economy of Plymouth. You are talking about the culture of Plymouth, how people view Plymouth, how people view the water of Plymouth, how people interact with this community, whether or not that becomes associated with how this community is viewed.

So it is a critical issue, because this is an historic community with an underlying economy and culture which has to be protected.

I will just conclude this phase of my questioning and just make a motion to submit testimony. I have testimony from the Massachusetts Lobsterman's Association, local residents and realtors, and local elected officials, detailing those concerns. I ask unanimous consent that this written testimony be submitted for the record. Without objection, so ordered, so that the public comments will be included in the hearing record and submitted to the NRC as part of their consideration.

[The referenced information follows:]

Senator Markey. I am going to stop my questioning at this point in time and recognize Congressman Keating, who has been a real leader on this issue of the discharge of radioactive water into Plymouth Harbor.

Representative Keating. Thank you, Senator. Thank you, Director Lubinski.

I am not sure of the Senate rules in this regard, but oftentimes in our House hearings, if time does not permit and there is the ability to ask questions in writing after, I would do that. If that is the case, Director, could you give your assent to answering those questions? I have had community people ask me certain issues that the time doesn't allow all of them to be asked. But if that could be done as part of this hearing, and get an answer, would I have your agreement on that?

Mr. Lubinski. Thank you for the request. I will defer to Chairman Markey as far as protocol. We will, my understanding is, receive questions for the record after the hearing, and we will of course respond to those. As you said, Senator protocol, I will defer to him. With respect to Representative Keating, if you have specific questions that you would like to submit to the NRC, either related to this hearing or separately, we will of course respond to you with those questions.

Representative Keating. Thank you.

Senator Markey. The Senate Committee will be accepting

questions from Chairman Carper, Ranking Member Capito, and Senator Inhofe and other members who have a concern on this, including answers to any of the questions which Congressman Keating will be posing to the NRC for written response.

Representative Keating. Thank you, Mr. Chairman.

I have been listening, as I think everyone has been here, to the colloquy back and forth with you and the Senator. It just strikes me as, it is a process where you are all dressed up with nowhere to go. That is what it sounds like to me. It sounds like, if the word is, well, it is formal, well, make sure you have the tux and the bow tie on, then you give the okay. That is what I heard.

But I want to dig down a little bit, and just be clear. I think people here after listening to all that want to really get this question answered. Will the new decommissioning rule address the ability of the licensee to discharge a million gallons of radioactive effluent from the spent fuel pool into Cape Cod Bay? Will the new proposed rule address that ability in any way that doesn't exist now?

Mr. Lubinski. Currently there are requirements --

Representative Keating. No, I am asking about the new rule. Will that be doing anything else in that specific regard than exists now?

Mr. Lubinski. If I can, it is making no changes to the

current requirements. There are current requirements that govern that.

Representative Keating. That is all I wanted to know. I wanted to know about the new rule going forward in that regard.

Again, to this process, it is so unilateral. It is just by definition, just the example that was given in terms of marine sanctuaries. So the NRC will look at it, if they identify something that they think is an issue, then they will reach out and contact the agency, an agency that is on the ground or in the water in this instance, that knows more specifically about the impact, not only from their own experience, but from their ability dealing with community groups.

So does the NRC have the practice. Because you are not prohibited from going further. I understand that. So I don't understand the adherence to rules when you are allowed to go further, where you have expertise there, not only in terms of the science, but all that community work that those groups do dealing with their issues that would be relevant to what you are looking at.

This concept, I was hoping in the new rules that there would be some kind of change in that regard. But it isn't there. Specifically, in terms of your testimony here today, I was struck with this concern, that it sounds to me that you are looking at this change to dump a million gallons of effluent

into Cape Cod Bay, radioactive materials, the same way that you have looked at in the past the discharge in other years, with a commissioned nuclear facility doing one-third less of that dumping.

So is that accurate? Did I get that right, that the way you are viewing this going forward is the way you, with the same criteria that you looked at in the past? It sounded that way to me.

Mr. Lubinski. If I can clarify one of the statements that you made, and I believe Senator Markey made as well, with respect to the volume of water, the NRC does not regulate based on the volume of water. We regulate based on the dose to the members of the public as a result of the release. So many things are taken into consideration, it is the volume of the water, the level of contamination of the water from radioactive material, the different ecological --

Representative Keating. My time is limited, excuse any interruption. But this is what we do in Congress when we have to get some quick answers. So I apologize for that.

But is the review of Cape Cod Bay a little different than other places? You know the map, with the arm and the bay and how that is all included in there. This is just me as a layman. There is a Woods Hole scientist that was particularly concerned with the fact that the construction, the topography there, that

it is not a free flow into the ocean, that it is bounded in part by that.

So when you are looking at these rules, did you particularly look at the construction of Cape Cod Bay itself, and the fact that you are not just dumping it straight into the ocean?

Mr. Lubinski. We look at it from the dose standpoint, what the dose would be, and it does take into account how the distribution of the water would go into the bay. It looks at the volume, it looks at the concentration.

Representative Keating. Could I see those studies, that you particularly looked at Cape Cod and did that? Do you have that available?

Mr. Lubinski. I do not have information available with specific studies with Cape Cod.

Representative Keating. Was it done? How many doses do people get?

Mr. Lubinski. The licensees are required to demonstrate under their radiological and environmental monitoring program.

Representative Keating. Here is the point. The licensees are required to do that. I think you should be required to do it. That is where the weakness in this process occurs, frankly. That is something you should be looking at, not just, well, the licensees are required. If they miss something and you miss

something because of the unilateral way it is being done, then it is missed.

Mr. Lubinski. We review those programs before they implement them. We also look at them through oversight programs.

Representative Keating. I want to shift gears a bit, Mr. Chairman, just for a minute.

I want to just take your experience in this regard and see what we can learn from it, what I can learn from it. You are involved, your agency was involved in the process that surrounded Vermont Yankee Power, correct?

Mr. Lubinski. Excuse me, could you say that again? I didn't hear you.

Representative Keating. The decommissioning around Vermont Yankee Power?

Mr. Lubinski. Yes.

Representative Keating. So in that instance, could you describe the process, that was trucked away. That is a situation where the radioactive material was trucked away. That received approval. Can you tell us how that is feasible and how that has worked and why that is an option, an alternative that you gave, you went along with the licensee, in dealing with that? Could you describe the feasibility and how that can work here?

Mr. Lubinski. Again, there were multiple options for disposition of material during decommissioning.

Representative Keating. That is not what I am asking about.

Mr. Lubinski. And they could, at this point right now, a licensee could take volumes of material, I will say ship them away, it could be in trucks, it could be in tank cars on the railroads, taking them to sites. Licensees could use evaporation at the site to evaporate the water and dispose of the material.

As long as the regulations are met from the standpoint of the public dose limits and they meet our disposal requirements, they can do that.

Representative Keating. I would term that a very viable alternative.

Mr. Lubinski. It is one viable alternative.

Representative Keating. But it is a viable alternative?

Mr. Lubinski. It is a viable alternative.

Representative Keating. And with Vermont Yankee, how is that going?

Mr. Lubinski. I do not have information on why they made that decision. Part of that was a business decision they made on doing it that way versus other options. That was up to them.

It is our job to make sure whatever they are doing is safe.

Representative Keating. I am interrupting just to make a point. That was up to them. That is the whole point of this hearing.

Mr. Lubinski. As long as they meet our regulatory standards, which they did. We will only allow Holtec to release material as long as they are meeting our standards.

Representative Keating. I want to tell you this. The reason you are seeing so many community people here today, the reason we are here, we don't agree with, it is up to them. That is what this is all about today. This is what it has been about before. I am telling you this, it is going to be what it is about going forward.

With that, Mr. Chairman, I am going to yield back. I know our time is gone. I thank you.

Senator Markey. No, it is fine, and if you have additional questions, you can be recognized for that purpose.

Again, I just want to continue with you, Mr. Lubinski, so that we can put some of these other critical issues that people really do care about here in Plymouth, but also across the Country. Without a viable solution for the long-term storage of nuclear waste, it is clear that spent fuel will remain in dry casks at independent spent fuel storage installations for longer than originally anticipated. Those casks, exposed to the elements for decades, could decay and potentially release

additional radioactivity, jeopardizing workers and the environment.

Director Lubinski, does the NRC require spent fuel storage site licenses to have formal plans in place for how it will deal with any dry casks that are damaged or leaking?

Mr. Lubinski. Thank you, Senator. With respect to the dry cask storage, as you mentioned, at an independent spent fuel storage installation, that is governed by our regulations. The certificate holders refer them who design the casks, has their plans in place that they provide to us for review and approval. Once we approve those, the licensee at the site must meet those requirements.

As part of aging management, we do require licensees to identify what we call aging management programs that will inspect, meaning the licensee will inspect the canisters for any potential damage. If it is identified, it is up to the licensee to repair or mitigate such damage moving forward, so that they can continue to ensure that it meets our regulatory standards.

Senator Markey. How often are individual dry casks with radioactive material at the Pilgrim plant fuel storage installation site being monitored and inspected? How frequently does that happen?

Mr. Lubinski. Inspections by the licensees, there are different types of inspections they do. For example, they do

need to monitor to make sure that the vents around the canisters are kept open, so that they get adequate ventilation. That is done periodically, based on the conditions. Because again, it is a static site, so it would depend on if there is snow in the area, leaves blowing around, any debris, that would be the time they would implement that. Plus they have periodic times to do that.

The aging management requirements would be part of the certificate of compliance. Our understanding is that the certificate of compliance that they are using at Holtec, or that Holtec is using at Pilgrim, we are reviewing their aging management program at this time. They have proposed that they would review one cask every five years to do a detailed inspection to determine if there is damage.

If there were damage identified or any repairs needed, they would have to expand that review. But if there was no damage, it would be once every five years. We have not approved that yet. We are still in the process of reviewing that aging management program. Because it is a certificate of compliance, it requires rulemaking. And the proposed rule will be issued in August of this year with our final decision on that aging management program.

Senator Markey. Well, I don't think that is going to be acceptable to the people here in Plymouth. Holtec is proposing

to inspect one spent fuel canister every five years. That is once every five years, to look at one canister to see if it is leaking. I don't think that the people in Plymouth are going to feel very confident that there isn't a leaking canister, that there isn't danger lurking in the community because the company, Holtec, is seeking to have the NRC give them permission not to inspect much more thoroughly, much more frequently, to ensure that this very dangerous material is not in fact leaking and exposing the community to that risk.

I know I wouldn't trust checking one of them every five years. I know that the people here don't trust them, either. So Holtec I am sure is going to say, well, we are the expert, and you don't have to worry. But the people of Plymouth don't trust the experts anymore. They want to ensure that there is in fact an ongoing, careful, meticulous monitoring of these dry casks so that this dangerous radioactive material does not leak into the community.

Finally, on the emergency planning zone issues, I am deeply troubled that the proposed decommissioning rule would essentially codify the process of regulating by exemption where the NRC just takes regulations off the plants as they become less applicable, rather than creating a new framework to specifically reflect the changing needs of a decommissioned nuclear rule.

That means other communities could go through situations like the one we saw for Pilgrim, which was granted exemptions from key NRC regulations on seismic testing, cybersecurity, offsite emergency planning. We are in a period of great tension with the Russians right now. We are constantly being warned about cyberattacks that could occur in our Country. We know that nuclear facilities would be near the top of the list of those kinds of facilities that could potentially be attacked.

So the offsite emergency planning exemption means that a plant can cut its emergency preparedness procedures, including for public notification of problems on the site while spent nuclear fuel is still sitting in pools and before it is even put into dry cask storage. So before we even get the minimum level of safe storage, plant operators can already walk away from their responsibilities for the community's safety. FEMA's own recommendations urge communities to maintain radiological emergency planning capabilities until all fuel is in dry casks.

Director Lubinski, if our first responders want to follow FEMA guidance and stay prepared for radiological emergencies, would the proposed decommissioning rule put the financial and training burdens for decommissioning solely on the communities and not on the company?

Mr. Lubinski. The new proposed rule, if I can go back, the new proposed rule does include changes to emergency planning

zones, as you said, when fuel is still in the spent fuel pool. But only after which time that we determine that the likelihood of any type of accident that would result in an offsite dose above the Environmental Protection Agency's protective action guidelines would not be exceeded.

So it is a graded, risk-based approach based on that type of event being highly unlikely. Therefore, that was the basis for putting it into the proposed rule. As we noted earlier, the proposed rule is out for comment and we are actively seeking comments on that requirement.

So from the standpoint of it is approved, and if licensees go forward, there would not be a requirement of the licensee, and communities could if they chose to continue to implement such activities. But it would not be a requirement of the licensee.

Senator Markey. Yes. So obviously, the communities are concerned by that. Because an exemption the NRC has allowed to Holtec in the transfer of the license allows Holtec to stop paying for emergency planning to area towns. For example, the Town of Marshfield is going to lose \$450,000 a year. We actually have the director of emergency planning, Artie Shaw, and town manager, Michael Maresco here. We are going to accept their testimony later.

But from my perspective, again, the proposed rule is

pennywise for nuclear plants and operators, but pound-foolish for communities which have already been largely ignored. I urge the Commission to reconsider and strengthen it instead, just to make sure that in the event of an emergency, and it may determine that it is a low level of risk for the people who live here, their perception is going to be any risk is one that they don't want to run, and they are going to need that in, as a result, a way of evacuating if necessary.

So I would just give that to you as well, Mr. Lubinski, for your return back to Washington and the NRC, that emergency planning is absolutely essential.

Let me turn again to Congressman Keating and ask if he has any additional questions.

Representative Keating. Thank you, Mr. Chairman.

When it comes to the limits of the NRC, one of the things that is always a concern is the fact that so often you are getting notified afterwards. So the damage is already done. Then it may be brought to the NRC's attention that way.

That whole concept of how this is done, as long as, for instance, the discharge in this instance is below the EPA and NRC limits, Holtec doesn't have to even alert you of that, is that correct?

Mr. Lubinski. When you say it is done, and we get notified afterwards --

Representative Keating. They are saying it is below the limits, they don't have to alert you.

Mr. Lubinski. They do have to, before the fact, not after the fact, they do have to get prior approval of the exact methodology that they are going to use to ensure they are meeting the limits.

Representative Keating. There is no oversight about what is getting discharged. They are saying, this is the method, this is the approval, but then they discharge. If it goes over afterwards, then they come back to you.

Mr. Lubinski. Our approval of that process provides reasonable assurance that it will be below the limits. If it is above the limits, yes, it would be after the fact.

Representative Keating. Yes.

Mr. Lubinski. Our process of a prior approval --

[Simultaneous conversations.]

Representative Keating. They don't have to give you information about boron or heavy metals or everything in this mixture. There is a potential of mixture. We are just talking about one impact on the radioactive side. There are other things of concern and frankly, they are of great concern, and I am glad they are, with the Department of Environmental Protection that really, as well as at the State level. The EPA at the federal level, Department of Environmental Protection at

the other, because of these potential mixtures that are being introduced into the water.

So there is Clean Water Act concerns with that as well. But it is this type of reliance on the corporation itself, without that kind of oversight, unless, I just gave you examples, the damage is done and then you are looking back at it. It is what you said before about the fact, well, when it come to the company, it is all up to them. Well, if it is all up to them, it would be profit and losses, not public safety and security. That is the problem.

I was hoping in these new rules there would be a greater avenue with the NRC to do that. It doesn't appear that is being done. We will have the opportunity in the next panel to deal with things that perhaps can be done at the EPA or at the State level with DEP.

So I am finished with my questioning, Mr. Chairman, and I yield back.

Senator Markey. I thank you, Congressman.

I will finish up with you, Mr. Lubinski, and thank you for coming up for this hearing. The concerns which we have, obviously, I can summarize for you. I think we need that the NRC accept the fact that post-shutdown decommissioning activity reports should be approved by the NRC in order to ensure that there is support for community and stakeholder involvement,

accuracy and environmental review. But there should actually be a vote by the NRC accepting the report and not just accepting it and putting it into a filing cabinet.

Secondly, that the NRC commit to coordinating with other agencies and assessing the water dumping issue. NOAA's National Marine Sanctuaries Office, EPA, Massachusetts Department of Environmental Policy, we need to have better coordination.

And finally, maintaining requirements for emergency response and preparedness at least until all fuel is out of the spent fuel pool and put into dry casks. That is not the case right now.

So I wanted to summarize that for you, tell you what the concerns are going to be as we are moving forward to make sure that we get all of the answers and the protections which the community is expecting. We thank you again, Mr. Lubinski, for being here. We will be submitting questions in writing to you. We would ask for a timely response to those questions. And we thank you very much.

Mr. Lubinski. Thank you, Mr. Chairman, and thank you, Representative Keating.

Senator Markey. Thank you, sir.

Now we will move to the second panel. We will be hearing from Dr. Kris Singh, the founder, president and CEO of Holtec International, which he established in 1986 and has nurtured its

steady rise into a multinational company with its business footprint in 18 countries on five continents.

After that we are going to hear from Geoff Fettus, the senior attorney for the Natural Resource Defense Council's Nuclear Climate and Clean Energy Program. Mr. Fettus both litigates and testifies before Congress for the NRDC, where he focuses primarily on issues relating to the beginning and end of the nuclear fuel cycle, including issues associated with uranium mining and the disposal of radioactive waste.

Following Mr. Fettus, we will hear from Massachusetts State Senator Sue Moran, who represents Plymouth and Barnstable District. Senator Moran serves as the Senate Chair of the Joint Committee on Consumer Protection and Professional Licensure.

We know that each of them has valuable testimony to provide to us because they have lived in and worked on these issues. We welcome you up, if you could please come up and sit behind your name cards, then we can begin this second panel.

So we are all now in the advanced use of Zoom, and we understand how it can transform our lives, including public hearings on issues of great concern. Dr. Singh is joining us in that fashion. We thank you so much for testifying here today.

Whenever you are comfortable, Dr. Singh, please proceed with your statement.

STATEMENT OF KRIS SINGH, PH.D., PRESIDENT AND CEO, HOLTEC
INTERNATIONAL

Mr. Singh. Thank you, Mr. Chairman, thank you, Senator Markey, and the members of the government legislative branch for participating, to hold this meeting, this hearing.

I personally appreciate the opportunity to provide accurate information to help people make their decisions. I think a meeting like this, a hearing like this is extremely valuable in that respect.

Let me first categorically state that decommissioning is not our preferred business. We decommission because plants, after they are operated for a long period of time, they need to be decommissioned. They need to be decommissioned, and there has to be a renewal. We will build a new plant if the community so wants, or we will convert it into condominiums or what have you.

It will be always, we always look to do it in the minimum time. Sixty years is permitted under federal regulations, but we try to do it as fast as possible. Actually at the current time, Pilgrim is way ahead of this decommissioning schedule that we had initially proposed, thanks to the high quality of workers we have, most of them drawn from the local community, our management team, we are doing much better than what we had projected.

I am also delighted to tell you that there have been no personal safety incidents. We have been an excellent steward of the environment, and I will talk about the water discharge very shortly. We have minimized those to people.

Our performance at Pilgrim would rank at A plus if you look at all the metrics performance. And I don't intend to be defensive here, I just want to give you the facts. You can always compare them with the data across the world for the industry.

Let me first address the issue of consultation before the ownership transferred. In the case of Pilgrim, there were extensive discussions with the State of Massachusetts. I even spoke to the Governor, I met with the Attorney General. There were many, many discussions with the two parties. It did not happen, the transfer of ownership did not happen in the dead of the night. As a matter of fact, we have serious financial obligations if we don't perform as contracted. The decommissioning work is contracted with us from [indiscernible].

Pilgrim fuel has been taken out of the pool. Every fuel assembly is now out of the pool, Senator, and is in dry storage. So the emergency plan that you said, it should not be terminated, should not be diminished, until the fuel is out of the pool, that has already occurred. By the way, it has occurred, it beat the world record this time. We transferred

fuel faster than it had ever been done before out of the pool to the pad.

Why do we consider it important? The health and safety. A fuel pool will obviously start as structurally robust, it is a robust structure, but not nearly as robust as a cask. A cask you can take a missile, hit it with, and you will not have a leak. Actually, Sandia analyzed that, how a cask will survive and prevent any release of contamination if it were hit by a crashing aircraft.

So we wanted to make sure that the fuel got out of the pool as rapidly as possible, as safely as possible. I am pleased to tell you that we have successfully done that for the people of Plymouth and vicinity.

I should also tell you that San Onofre, eight years ago, when they decided to add onsite storage capacity at San Onofre Southern Cal Edison, selected our below-the-ground storage technology because of the ungodly high earthquakes that they can experience. As you correctly mentioned, they have fault lines there that can create significant earthquakes.

We have designed it for an earthquake level, and the facility operations would love to show it to you, the facility in operation, and it has been qualified and agreed to, both by California Public Service Commission and the NRC, that it will withstand earthquakes which have never been experienced in

recorded history of this planet. That is how rugged and robust the cask system at San Onofre is that we installed in the 2014 to 2018 timeframe.

Indian Point, likewise, I should just correct the record, Indian Point went through extensive negotiations and discussions with the State of New York representing the public and also local NGOs like River Keepers. They engaged with us, they wanted to know how we will do the work and what kind of responsibility we will undertake. We satisfied them all, only then they would do the deal with [indiscernible]. So there may be a higher level of control, I don't know. I am sure we can conceive of other additional constraints in these transactions.

But if you will look at the record of these plants, as we did at Oyster Creek, [indiscernible] Oyster Creek is further along than Pilgrim. We have done Pilgrim substantially, gotten all radioactive fissile material out of the plant into its pad. As you said earlier, we have done these things. And Indian Point, by the way, is substantially on the way to decommissioning also, way, way ahead of schedule.

So I think we have lived up to our commitments to the State governments, to other stakeholders, and frankly to ourselves. We have an obligation to perform decommissioning to the highest levels of standards of safety and environmental protection, preventing spread of contamination. We have never had any

spread of contamination at any of our sites.

And of course, the last, most important item, to provide a pathway to get fuel out of the plant, out of the State, to a more hospitable place. That is, we are unique in that respect. We have been working with the people in the State of New Mexico, southeast New Mexico, where fuel can be taken from Plymouth, fuel can be taken from all the plants in the Country and aggregated at one consolidated interim storage facility, which was the stated wish of the Department of Energy from some ten years ago.

We have done that. We expect to get the license from the NRC. It is not a regulatory problem. It is not a technical problem. It is a problem of political will. The Congress has to ask DOE and provide them with the funding so the fuel can be transported offsite. The technology is available. The technology that we are licensing with the NRC in New Mexico is so radiation efficient that you can hold a barbecue on top of that facility and not get radiation [indiscernible].

So we have done technically what needs to be done. Now it is the time of our leadership, political leadership, people, folks as you, to get the government to give us the way so we can get the fuel out to New Mexico. The idea of consent is the very language in the law, public consent. The people of New Mexico, in the community 80 percent are in favor of this facility there.

All ducks are in a row.

But if we don't do, you have the power, Senator, to ensure that this happens. We don't. We in the private industry, when we open our mouth, people think we are looking for profit.

So how do we deal with the problem? Take a look at our record, please, and you will see that we have always had public interest first and foremost in our minds. We are spending money on decommissioning Pilgrim on a fast schedule so the facility becomes available for redeployment, and the township can get new tax revenue base. That is why we are doing it, that is the main benefit to the community. We get rid of all contamination from the site and we are successfully doing it.

But then this spent fuel will remain there unless we are given the permission and the means from the government to move it out of State. So I call upon you and all the other Senators to get together on this issue and show the national will to get the fuel out of places where it doesn't belong. The spent fuel should not be sitting in Plymouth for the next 60 or whatever years. Take it to a consolidated interim storage facility. There the air is dry, there is no [indiscernible] in the air, the temperature is right for the fuel. It will live there, it can live there, it won't live there, but it can live there for a million years without springing a leak.

We do the work. But we cannot, we can make all technically

everything possible. But we don't control the levers of policy.

So if you hear frustration in my voice, yes, the fuel doesn't have to be stranded. Fuel can be spent to a proper place where it will be safely stored below the ground for as long as necessary until a repository becomes available or the fuel is reprocessed to produce more energy. I personally believe that the fuel has an enormous amount of energy that can be used later and produce clean electricity.

But then if that is not the government policy down the road, we will build a repository. But it is there. It is there and safe. If you put fuel in New Mexico today, in southeast New Mexico, in 20 years you will see no evidence of corrosion. Because there is no actuating condition at the site to create corrosion. It is a perfect site. But that is about how far we can go.

We are not going to sit for 60 years in decommissioning. We are going to have Pilgrim decommissioned in 12 to 15 years. It will be done. But the fuel, moving the fuel, sir, it is up to you and your colleagues.

I will address the issue of water discharge. I just want to make sure everybody realizes it is not an operating plant. When Pilgrim was operating, there was a whole lot more discharge into the bay on a continuous basis.

You asked a question about had anybody done the analysis.

It so happens that Pilgrim plant had hired Holtec about 20 years ago to do that particular evaluation. I am sure we have a report in our files that studied the situation in the bay. A concept I will leave with you before I will take questions and answers, in engineering, in science, the operative concept is factor of safety. You design it to a factor of safety always more than one. The extent of safety in a particular operation, the metric is the factor of safety.

An airplane that we fly is designed with a factor of safety of two under the worst storm, postulated storm that we have to fly into which has a factor of safety of two, an aircraft. The water discharge has a limit from EPA and the NRC and then there is the actual [indiscernible]. The observation at Pilgrim has shown that we have a factor of safety of 200, not two, for radiation and discharge from the processed water in the plant. By definition, it is not contaminated water. It is processed water, and it does not meet the threshold of contamination.

NRC standards, the factor of safety is 800. There is nothing, sir, that we live around, our houses, our office buildings, and all, of anywhere that kind of factors of safety designed to. So I would not say, I wouldn't call the water contaminated, and I would say just lumping it, because it is coming out of a nuclear plant it is a potential hazard to people is not based on science. Of all places, New England is the

birthplace of science and technology in this Country. You have the best institutions. So I would think that you would subscribe to the notion of a factor of safety far more than other people would in other countries where science is not necessary that well developed.

I will stop right there and I will be glad to take questions. Thank you.

[The prepared statement of Mr. Singh follows:]

Senator Markey. Thank you, Dr. Singh.

Now let's turn to the other witnesses, then we will come back to you, Dr. Singh. We will begin again with Geoff Fettus, who is Senior Attorney for the Natural Resources Defense Council's Nuclear, Climate, and Energy program. Welcome, sir.

STATEMENT OF GEOFFREY H. FETTUS, SENIOR ATTORNEY FOR NUCLEAR,
CLIMATE, AND CLEAN ENERGY PROGRAMS, NATURAL RESOURCES DEFENSE
COUNCIL

Mr. Fettus. Thanks to all who have invited me here. Thank you, Senator Markey, Chair, the Ranking Members, Representative Keating, the other distinguished members in the room. We have already had a long morning, so I will be concise and quick so we can get to the questions.

Unfortunately, decommissioning should be a straightforward, methodical and not particularly controversial process. That is not where we are. The largest issues facing communities right now, and especially Plymouth right here as we have heard this morning, is the lack of a clear set of strong and protective guidelines that are implemented by a strong and clear regulatory. Any final rule that is going to be done by the NRC, and thank you for extending the deadline, but that is the least you can do right now, is going to be in place for decades and affect the cleanup of communities and the associated workforces of more than 60 sites across the Country.

Whether the shutdown of reactors happens in the next 5 years, 10 years, 20 years, it is going to happen. This rule is probably the last good effort to get it right.

Many of the challenges that we have talked about this morning and that I have listened to here in Massachusetts could

have been avoided with an improved set of regulatory requirements. Let's not revisit those harms and struggles on other communities as this process unfolds across the Country.

The proposed rule in its current form is inadequate. It should be withdrawn and reissued in much stronger form along the lines of what Senator Markey has outlined here today. But let me be precise about three key issues, or actually four now. I have added since the morning has gone on for a bit.

Number one, the NRC needs to require a decommissioning plan prior to the shutdown that allows for a full environmental review of the necessary cleanup and with the associated hearing rights that allows the agency to fully inhabit its role as a regulator. Honestly, just stepping away from my prepared remarks, it is an extraordinary abdication of regulatory oversight for the NRC.

Let me be clear. They actually, it is just as you said, Senator, it is a postal clerk's job to accept what is called the PSDAR of the decommissioning plant. There is nothing that they can require from it, less, more, different. Every site, whether it is Zion in Illinois or Plymouth in Massachusetts or Diablo in a few years in California is going to have different needs.

Industries, I am glad the Lobstermen are here today, I am glad the State Senator is here today. Every place is going to have its own idiosyncrasies and needs that have to be taken into

account. Right now, the decommissioning plan that goes forward, the NRC literally has no regulatory role other than to mark that it received it. It is an extraordinary abdication and really unprecedented in NRC's view of the Federal Government, because we work across all kinds of issues, as both of you know.

Next, it is crucial to require the industrial cleanup and decommissioning process take place as soon as practical after a reactor shuts down, and with the retention and distinct advantages of the skilled and existing workforce. I am pleased that Dr. Singh is talking about doing so at the sites where Holtec is working. Using that existing labor workforce is so important because they know where all the problems are, where there aren't problems, the idiosyncrasies of each plant. Waiting decades to move on that cleanup harms communities and the larger State interests while also losing the significant advantage of that workforce.

Finally, in our written statement that we have submitted for the record, we briefly discuss the constructive prescriptions that were laid out by NRC Commissioner Baran that would ensure the adequate funds and resources are available when necessary for the cleanup. One of the things I want to stress is Commissioner Baran suggested departing from the generic surety formula, the generic financial assurance formula, so you can actually look at the community beforehand. By the way, this

is also part of the hearing rights that should happen beforehand, that you can make sure that you are meeting all the needs of that community.

Last thing I want to touch on because it got brought up here is the issue of nuclear waste, and the nuclear waste that will be here in Plymouth or that will be here on the south shore for years to come. Hopefully, we can move it.

But I want to say something really positively, not just because I am sitting in front of him right now. But Senator Markey has introduced legislation that would actually take the first constructive step on nuclear waste in decades. Last fall, Senator Markey in the Senate, and Representative Keating, your colleague Congressman Levin from California, who has SONGS in his district, they both introduced the Nuclear Waste Task Force that would actually get to the real questions left on the table by President Obama's Blue Ribbon Commission on Nuclear Waste. Specifically, the Nuclear Waste Task Force, and I hope, Representative Keating, we can depend on your support for this bill, in getting it into law.

What it would do is it would create a task force, it wouldn't change the law yet. But it would create a task force that would examine placing nuclear waste under bedrock environmental laws, removing the exemptions from the Atomic Energy Act. That sounds law reviewy and esoteric. It is not.

What it would do is it would allow EPA and the States to set meaningful standards, that is if the task force recommends this. If other people think you want to keep trying to bribe Nevada, or actually let me be clear about something Dr. Singh said that I don't believe is entirely accurate, the State of New Mexico has not consented to receive a consolidated interim storage site in the Nation's nuclear waste. In fact, they have done precisely the opposite.

I have, and I can submit for the record a letter from the Governor of New Mexico that I believe would be not going out of bounds to say she ferociously objects to the receipt of the entire of the Nation's nuclear waste. I can also recommend you go talk to your colleagues from the New Mexico delegation about just this issue. New Mexico has not consented, nor has the entire region around southeast New Mexico. I can also submit for the record environmental justice groups that would like to probably weigh in on this matter.

But in contrast to that, Senator Markey's Nuclear Waste Task Force would set up a process where we can hash out what consent really means. NRDC believes that bedrock environmental laws can allow for a process where a State can say no, or more importantly yes, but on what terms and how much.

So much of this can be addressed. There is a way forward on nuclear waste. Senator Markey is actually trying to put us

on that way forward, rather than just do the same stuff we have done over the past 60 years and failed repeatedly.

With that, I would be happy to take questions.

[The prepared statement of Mr. Fettus follows:]

Senator Markey. Thank you, Mr. Fettus, very much.

Now we will hear from Senator Moran.

STATEMENT OF THE HONORABLE SUSAN L. MORAN, MASSACHUSETTS STATE
SENATOR, PLYMOUTH AND BARNSTABLE DISTRICT

Senator Moran. Thank you for this unprecedented, almost, field hearing, Chair Markey. I really appreciate your recognition of the gravamen of this moment for Plymouth. I want to thank Congressman Keating for being here, and thank Senator Warren, committee members, members of both Plymouth Barnstable and the Cape delegations, the residents and the Town of Plymouth, which is represented well here today. Thank you all for coming to America's hometown, and the Patuxet Village of the Wampanoag Tribe.

I also want to thank Senator Cyr and Senator Peake for their participation. He is the State Senator representing many of the communities that are impacted by the Holtec Pilgrim Power Plant.

My colleagues, including the entire delegation of Cyr, O'Connor, Peake, Muratore, Fernandes, LaNatra, Cutler, Xiarhos, Diggs, Viera, and Whelan, and I have been working diligent fielding concerns from our constituents. I hope that our concerns will be incorporated into decommissioning practices to protect the long-term health, safety and economic success of the communities we serve.

The way we handle the safe closing of this nuclear power plant will set a precedent for others throughout the Country.

We have a unique opportunity to examine the shortfalls of this situation and set guidelines and expectations for others to follow.

As you know, the nuclear reactor at Pilgrim Nuclear Power Station shut down on May 31st, 2019. That August, Holtec acquired Pilgrim after the Nuclear Regulatory Commission approved the transfer of the plant's license. Shortly thereafter, the Massachusetts Attorney General filed a lawsuit out of concern that funding deficits based on Holtec's decommissioning cost estimate proposal and insufficient funding in the Decommissioning Trust Fund would result in possible health, safety, environmental, and financial risks to the State and residents.

More broadly, the public have ongoing concerns that range from sufficient funding for proper oversight and monitoring of decommissioned facility, Pilgrim's exemption from emergency planning and preparedness requirements, safety and security issues of dry cask storage units, and most recently, alarming statements of Holtec's plan to dump one million gallons of radioactive water into Cape Cod Bay.

Since the license transfer there has been a lack of transparency and opportunity for public input. This lack of communication and disregard for transparency and community involvement leads to a collective feeling of an imminent threat

to residents. Unfortunately, there has been little reassurance. There is a serious incongruency in the oversight of decommissioned power plants, specifically in reference to the proposed dumping of radioactive material into Cape Cod Bay.

Holtec is currently prohibited from discharging water from the site unless it receives an updated National Discharge Elimination System Permit. The updated permit would require EPA oversight of pollutants in the water. However, as defined by the Clean Water Act, the term pollutants does not include radioactive material, including radioactive waste.

Therefore, unless there are additional pollutants to require a denial of the permit, EPA is powerless to intervene even if the levels of radioactive waste are toxic. Oversight may then fall to NRC, which sets radioactive water discharge limits four times higher than the EPA recommends.

Neither of these limits speak directly to the impact of cumulative discharge and their impact on marine life in Cape Cod Bay. We have a situation then where one government agency is pointing to another and in some instances contradicting itself while the residents and advocates who are here today raise alarm.

Any potential risk to the Bay is a risk to public health, the tourism industry, the commercial fishing industry, as you both have mentioned, both of which are represented here today.

The risk is very real. I recently spoke with Robert Ward of Home Port-Plymouth. Mr. Ward has been fishing since he was 13 years old. He learned the craft from his father. Mr. Ward is part of the South Shore fishing industry that generates \$6 million to \$8 million in revenue annually and is part of the chain for a successful and environmentally responsible local economy. They stock local restaurants and purchase ropes and maintenance from hardware stores in town.

Mr. Ward and others in the fishing industry guard the oceans to keep them whale-safe and often make profit sacrifices to maintain aquatic ecosystems. Mr. Ward expressed very clearly to me that there is a fear that dumping radioactive discharge will create a negative perception of local industry, and this will harm an industry made of small businesses working on tight margins.

Mr. Ward is absolutely right. We still have a serious lack of understanding of what is in the potential discharge, the manner of depositing into Cape Cod Bay, and who is responsible for mandating testing. And it should be independent testing.

The concentration of any chemical can be altered depending on season, time that has gone by, amounts released, how the chemicals react in a different environment. That is the Woods Hole scientific information that was just mentioned, thank you, Congressman. In the course of failing to provide this

information, Holtec has allowed fear to spread and compounded the economic impact of their announcement. Frankly, the announcement of dumping material into the Bay demonstrates a callous disregard for the health and livelihoods of our communities and significantly undermines public trust in Holtec's decision-making.

There are few guardrails to protect our communities. This must change. In calls, emails, testimony, and rallies, our constituents are telling us loudly and clearly that they are fearful of what will happen now and for generations to come if we allow Holtec to discharge large volumes of radioactive waste into Cape Cod Bay without greater oversight and better safeguards. We have an obligation to listen and respond.

Many of these subjects are further detailed in written testimony that was submitted by me and other members of the Massachusetts State Legislature representing the South Coast, Cape, and Islands, as well as directly by towns, including one I understand the selectmen have just submitted as well as the board of health previously.

I look forward to answering any questions you may have and continuing to collaborate to ensure the safe closure of this facility. Thank you.

[The prepared statement of Senator Moran follows:]

Senator Markey. Thank you, Senator Moran, very much. Thank you for your incredible leadership on these issues.

Finally, we are going to hear from Mr. Seth Schofield, the Senior Appellate Counsel for the Energy and Environment Bureau of the Massachusetts Attorney General's office, where he provides appellate advice and handles appeals in affirmative and defensive cases in federal and State court. In that capacity, he covers a wide range of federal and State administrative law, constitutional, environmental, energy and nuclear power plant issues.

So we have the State's expert here with us today. We welcome you, sir. Whenever you are ready, please begin.

STATEMENT OF SETH SCHOFIELD, SENIOR APPELLATE COUNSEL,
MASSACHUSETTS ATTORNEY GENERAL'S OFFICE

Mr. Schofield. Senator Markey, Representative Keating, and members of the committee, thank you for holding this important hearing and for the invitation to testify today.

My name is Seth Schofield. I am the senior appellate counsel for the Energy and Environment Bureau in the Massachusetts Attorney General's office.

The decommissioning of a nuclear power plant is complex and expensive. The decommissioning process also poses significant safety, environmental, and economic risks to States, municipalities, and local communities.

Today, I will speak briefly about the Commonwealth's experience with the Pilgrim Nuclear Power Station in Plymouth, Massachusetts, and three fundamental flaws with the Nuclear Regulatory Commission's proposed decommissioning rule. In short, the proposed rule does nothing to mitigate the risks associated with decommissioning nuclear power plants and totally disregards the substantial concerns consistently raised by States, the public, and NGOs.

The Commonwealth has firsthand experience with decommissioning issues. We recently engaged in a lengthy and contentious process to better ensure that the Commonwealth and its residents would be protected from the risks associated with

decommissioning the Pilgrim Nuclear Power plant. In the end, we secured a settlement agreement with Pilgrim's new owner, Holtec, to remedy shortcomings in the NRC's regulatory scheme and to create certainty about the application of important State law requirements.

While we were successful, we received no help from the NRC. Instead, the NRC opposed our efforts and dismissed our concerns. The lengthy agreement covers numerous key issues, but today I will highlight three areas that are critically important to States: financial assurance, site restoration standards, and State agency funding for emergency planning and oversight.

First, the agreement includes a robust set of financial assurance requirements. Under the agreement, Holtec must maintain certain minimum trust fund balances to ensure, among other things, that the Pilgrim site is remediated and restored for unrestricted future use. If that fund dips below those minimum balances, Holtec must replenish the fund with recoveries it obtains from the U.S. Department of Energy.

Second, the agreement requires Holtec to comply with the Commonwealth's radiological and non-radiological cleanup standards. For example, Holtec must comply with the Commonwealth's significantly stricter 10-millirem-per-year residual radioactivity standard and remediate non-radiological contamination to a level that will allow for unrestricted future

use unless doing so is technically infeasible.

Third, the agreement requires Holtec to make annual payments to two State agencies. Those payments are intended to ensure that both agencies have sufficient funds to continue to perform their important public health, safety, and emergency planning oversight responsibilities. Over time, the annual payment amounts step-down as risks decrease.

Turning to the NRC's proposed rule, the draft rule does nothing to improve the process, for states, municipalities, or the public, or to address the significant risks associated with decommissioning nuclear power plants. Instead, the proposed rule makes the process easier for industry and the NRC itself. Today, I will highlight three ways in which the proposed rule falls far short.

First, the rule proposes to maintain a hands-off approach to decommissioning the Nation's aging nuclear power plants. As NRC Commissioner Baran stated, the proposed rule "allows licensees to make virtually all of the major decisions" without NRC approval or meaningful public input. That approach is foreign to other environmental cleanup laws in the United States such as the Superfund process under CERCLA.

If the Commonwealth had been limited to that process, it never could have secured the critical agreement with Holtec that I described earlier. The Commonwealth's inroad was through a

separate process, the license transfer process, that will not be available in all cases across the Country.

Second, the NRC has adopted a risky approach to decommissioning financial assurance. For example, the proposed rule does not address the NRC's routine practice of granting exemptions to licensees to use decommissioning trust funds for non-decommissioning purposes such as spent nuclear fuel costs.

At Pilgrim, for example, the NRC authorized Holtec, a limited liability company with no other assets, to withdraw nearly half of Pilgrim's trust fund for spent fuel management costs without any associated reimbursement requirement. In effect, the NRC authorized Holtec to take millions in Massachusetts ratepayer money as private profit while depriving the trust fund of much-needed money.

And last, the rule proposes to reduce emergency preparedness requirements before all spent nuclear fuel is removed from the spent fuel pool and safely placed in dry cask storage. The NRC's rationale is based on the false premise that ten hours provides "ample time" for all plants in all scenarios to evacuate surrounding populations without the ordinary emergency preparedness requirements in place.

This is a dangerous mistake, and, for that reason, it is opposed by emergency planning professionals, FEMA, and States.

I commend Chairman Markey and this Committee and its staff

for taking on this important matter. Thank you.

[The prepared statement of Mr. Schofield follows:]

Senator Markey. Thank you, Mr. Schofield, very much.

Now we will turn to questions for our witnesses. I will begin with you, Dr. Singh. We are joined today by well-respected labor leaders representing our building trades here in Massachusetts. I understand that there is a labor dispute currently at the facility here in Plymouth.

I want you to guarantee that you are going to be meeting with all the following unions to discuss staffing at this site and decommissioning of the sites around the Country. That is the Ironworkers, the Laborers, the Carpenters, the IBEW, and Operating Engineers. Will you meet with these unions to resolve this issue of staffing here at this plant?

Mr. Singh. Yes, Senator, this is Kris Singh. We are committed to working with the unions. We have national agreements with most of them and we work cooperatively with them to ensure worker health and safety and public health and safety. I assure you that the dialogue, if any union is not already in national agreement, we will continue to work with them to develop appropriate agreements. But we are committed to working with unions at all our sites.

Senator Markey. It is critically important that we resolve these labor issues, these union issues. I thank you for your commitment to doing that work.

As we discussed earlier with Mr. Lubinski, we heard serious

concerns about the impact that the release of the one million gallons of irradiated water could have on the region's fishing, tourism, and real estate industries, whose reputations and operations rely on Cape Cod Bay's reputation for clean and safe water. We definitely have an issue that is central to the community here. Senator Moran, have you heard concerns from your constituents about the risks that dumping this water might have on the local ecosystem and economy?

Senator Moran. Yes, I have. I think all the legislators here have heard concerns. In particular, the Emergency Planning Zone requirements, which are the essential protection and action plan to reduce radiation exposure, shelter, and evacuation strategies, the former fire chief right here in Plymouth, Ed Bradley, had to specifically demand and negotiate continued funding. That funding is lacking in all of the contiguous communities, as well as the communities that had previously been funded.

The result here is that there is a need to divert resources, taxes, time, and emergency preparedness. I think as all of the advocates have reminded us well, over many years, these are potential airborne and ocean-transmissible concerns that could travel far and wide. So that is just one example, Senator. Thank you for the question.

Senator Markey. Thank you.

Dr. Singh, has Holtec looked at the issues that Mr. Fettus just raised, that is the vigorous opposition of the State of New Mexico to the siting of this facility? You are holding out to the residents here in Massachusetts that hope should be how they view these issues, but what we are hearing from Mr. Fettus is that the likelihood of that occurring in the near term at least is very, very slight, given all of the political opposition that exists in New Mexico to house permanently all of the nuclear waste from Plymouth, Massachusetts.

Mr. Singh. Senator, Holtec has spent \$18 million of its own money to license, develop all the systems, to establish the facility in New Mexico. The Governor of New Mexico, the then-Governor, wrote a letter to the DOE Secretary voicing strong support for the project in New Mexico. The local community, as I said earlier, stands 100 percent behind the project. There has been a change in government. The new Governor appears to have a different idea.

But I think that as the public gets educated statewide, I don't think the State of New Mexico people at large are against the project. It is all political. And I think even people, regardless of their political affiliation, when they realize that this facility will emit no, no particulates, it has no environmental impact to speak of, it requires hardly any water, other than the water that people will consume at the site, it

makes no demand on any resources, why would they not support it is beyond me.

Senator Markey. Well, again, as Mr. Fettus --

[Simultaneous conversations.]

Mr. Singh. I just want you to know that I believe, I am a firm believer that ultimately reason and logic prevail, regardless of the political winds at a particular time. We started this project years ago. The Governor was in strong support, so was most of the political establishment, and the public has always been.

Senator Markey. I am going to restate what Mr. Fettus says, which is that this Governor is ferociously objecting to the operations. Is that correct, Mr. Fettus?

Mr. Singh. I respectfully disagree with that. If the Governor had really been so vociferously against it, then the [indiscernible] would have come to her, just like Texas then, the spent fuel facility in their State. New Mexico could have done that, too. But they did not.

So I don't think that opposition is vociferous. I don't think that opposition is obdurate. I think that they are waiting to learn more and then they will make their decision.

Senator Markey. Mr. Fettus?

Mr. Fettus. I would like to respond briefly. Thank you, Senator.

A couple of things. One, the State of Texas, which has, as we all know probably in this room, a Republican Governor and a Republican dominated legislature, has also objected to hosting the Nation's consolidated interim fuel. There is a similar license afoot in Texas which has elicited Red State objection whereas New Mexico, which is now a Blue State with a Democratic Governor, has also significant objections.

So I would suggest that objection remains bipartisan, just as it has in Nevada.

One thing I would like to quickly address, if I can have your forbearance for a moment, is there is always this reductive language that it is just politics and we have to get past the politics. I really bristle at that, because politics is how we decide things by not having land wars in Europe. Politics is really important because it is how we decide our institutional questions of who gets to decide and on what terms. That is why we are here today, and that is why we so appreciate your doing this.

Senator Markey. And I appreciate that, too, because this is my 45th year in Congress. I have served on the Nuclear Subcommittee for 45 years. No one has ever done this before in Congressional history. I remember back in the middle of the 1980s when the National Academy of Sciences, for example, had a set of recommendations, but yet the decision was political, that

they were going to stick the people in Nevada with the nuclear waste site at Yucca Mountain, even though it had an earthquake vault nearby, even though it had a river nearby. Obviously, the questions that were being raised are still the questions being raised today.

I think that we should operate under the premise for today and for the foreseeable future that this spent fuel will be on location here. As a result, what are we going to do about it? How are we going to handle this issue? It is 45 years that I have been dealing with the issue. My expectation is that it is going to continue for an indefinite period of time.

So I would ask you, Dr. Singh, has Holtec ever conducted an economic and environmental analysis of the impacts of spent fuel pool discharges to the marine environment in Cape Cod Bay?

Mr. Singh. Yes, I would, as I said earlier, we did study the effect of discharge in Cape Cod Bay under a contract with the utility at the time, Boston Edison.

But I would like to answer the first part of your question, Senator, if I may have your forgiveness.

Senator Markey. It was not a question. It was just an observation. The point that I am trying to make is that we should just deal with this as though it is a permanent problem.

Mr. Singh. I see.

Senator Markey. And put permanent solutions and

protections for the people here in place, and maybe there is some day in the future, when the problem does get solved on a permanent basis in another State.

But I prefer just to deal with it as something that is urgent, and now because I had my first meeting on the Pilgrim Plant in 1979. It is now 2022. While I would hope that it could be resolved, I just want to ask you the questions about resolving the issues today, Doctor. So why haven't the relevant marine sanctuary experts and local stakeholders seen the document? Why are they still in the dark?

Mr. Singh. Let me answer the question fulsomely, Senator. But I would like to simply get in the record that I don't think our Country should give up on an interim storage facility. Even Ukraine, threatened by Russia, has not a facility up and running. It is a pity that we cannot get in this Country a storage facility together.

And I should just add one sentence: you cannot, no one can point to a single environmental impact that this facility would have on the host community. It is all emotion, no logic. And whether it is bipartisan or single partisan, the point is, it should be logic based, it should be reason based. And why this Country can't get together and establish a facility beats me. And people in overseas, other countries, wonder what is going on in America.

Senator Markey. And again, people are responding emotionally because they feel they don't have all the information they need. They feel there is a process that has been truncated, that all of the questions that they are asking because of their own families' health and safety have not been answered.

That is what Mr. Schofield and that is what Mr. Fettus are talking about here today. That is what Congressman Keating and I have been asking about, why can't there be a more thorough, inclusive process that answers in a timely fashion but in a way that does not leave a cloud over the answers that are finally given to the public. Because they sit out there saying, I don't think my family is being protected.

So from again, in terms of my question, not having the relevant marine sanctuary experts and local stakeholders see the documents is something that obviously, because of the whole history of nuclear power in our Country just in their minds raises questions about whether or not they are getting the truth, whether they are actually getting all the answers which they want.

So that is why this process is so important. That is why I am here having this hearing so that they can get the answers. And if they don't get the answers today, that they get the answers before there is any dumping of radioactive water into

Cape Cod Bay. They deserve all of the answers to have been answered thoroughly.

So do you understand why the public has questions about Holtec? Can you understand why that is the case, Mr. Singh?

Mr. Singh. I suppose I understand, Senator. But let me answer your question directly first. In the work Holtec has done roughly 20 years ago on water dispersion in the Cape Cod Bay, I think the file is still available and I will share it with any expert that you nominate to look at it. We have done studies on how water diffuses in the Bay over 20 years ago.

The reason it does not raise concern amongst people who are knowledgeable on the subject matter is as I said before, the level of radioactivity is a factor of 800, more than 800 less than what NRC considers admissible. It is below a factor of 200 below what EPA considers acceptable for nuclear plant operations.

It is difficult to stir your engineers and scientists, whether it is a marine biologist or whatever to look at the data and say that [indiscernible]. But of course, in the media, this gets front page as a concern, yes, I think that the image of the community calling the water, which is processed water, contaminated water, if it is said over and over again, it becomes contaminated water in the minds of the people.

So I don't know what we do, because of these challenges, we

basically stopped, we said, okay, we will let the water just sit there, and when we all become science focused, science based, then we will discharge it.

There is of course an alternative. We can ship the water to someplace else where it can be discharge.

But let me ask you this. The amount of water in the world is finite. It is not changing. Taken from one place to another doesn't solve the problem, it really doesn't. We have to make sure the water is clean and meets the limit in the first place. As I said, it meets not by a factor of two or ten, by a factor of hundreds. It is not contaminated water. But we would not discharge it until we have consent from our stakeholders. We would not discharge it because we do not want to upset anyone.

If you will let me close with one comment. In a closing plant, the amount of interaction with the bay is a minute fraction of that which was occurring when the plant was running, when it was operating. We were discharging water, of course, in the bay when the plant was operating. And look at the quantities. Today it is a dead plant. But it hardly has any discharge.

Yet the community welcomed it, supported it. There was no talk of contaminated water in the bay back then when the plant was running. So I really don't get it. Perhaps folks can enlighten me why today there is a new concern about water that

is orders of magnitude below level what could be called contaminated.

Senator Markey. So I think for everyone here today you have just said something very important to them, which is that you said, you will not discharge the water unless you have the consent of the stakeholders. Is that what you just said, Doctor?

Mr. Singh. Yes, I said the stakeholders, and then the State, you know, the State, the NRC, the people who we have, we routinely, with EPA, we consult with to do anything. Because this item has become one of political, taken a political dimension, no, we will not discharge without [indiscernible].

Senator Markey. So when you say stakeholders, do you mean the State of Massachusetts, the Attorney General's office?

Mr. Singh. Yes, your office, Senator. Yes.

Senator Markey. And my office?

Mr. Singh. Any organization, any organized group.

Senator Markey. And the people of Plymouth?

Mr. Singh. We will consult. We participate in NDCAP meetings, as you know, routinely. We try to be as transparent as possible. I really don't understand why people say we keep information. We put information on our website, we publish it routinely, we publish bulletins. You can go on our website and see questions and answers to the decommissioning

[indiscernible]. We are not a closed company.

The people who work for us are residents, your neighbors in Plymouth and surrounding towns. We don't have people from out of State if that many, only a few. It is local people who are doing it, using our records and processing. The workforce is not alien to your community.

I really don't know how, please tell us, how we can improve communications. We are all ears. We want to be the very best neighbor.

Senator Markey. Well, you can hear from the State of Massachusetts, from the Attorney General's office, how concerned they have been about the process, about the need for them to actively intervene in order to get answers. So that leads to a suspicion that something is being hidden, that the information is not being fully transmitted.

I understand that Holtec is looking at other alternatives beyond dumping the water, including evaporation or trucking. But has the company considered storing the radioactive water onsite giving the radioactive isotopes and the water time to decay before the water is disposed of?

Mr. Singh. Yes, there are pros and cons. In any decision you make there are pros and cons. We ship it from the site, we are going to burn diesel fuel. That is an emission in the environment. It will go to another place, but there is a clear,

definite negative that should not be overlooked.

If we let it sit, which we will, if that is what the stakeholders tell us, don't discharge water, I don't like the term dump, because it is not a dump, it is discharging it to the bay with, under prescribed conditions in a controlled way. But if the decision is to leave the facility standing and leave the water there, we will do that.

But our goal, we think the best thing for the community, for the State of Massachusetts, is to get all contamination out of there and reclaim the place so it can be repurposed, it can be redeveloped. That is what we thought would be most agreeable to the local community. But if they want to keep the water there, we will keep the water there.

Senator Markey. So the NRC and Holtec contend that the proposal to dump the one million gallons of radioactive water into Cape Cod Bay is safe. I know that the communities would feel a lot safer if an independent body with fisheries expertise was able to confirm that the types of radionuclides in the water and their concentrations were in fact safe for our region's fish and shellfish.

Dr. Singh, once the spent fuel pool water is ready to be sampled, will Holtec commit to, one, having an independent body with fisheries expertise, such as, and you talked about this incredible expertise that we have in Massachusetts in science,

we have the number one location in the entire world, and it is here on Cape Cod, the Woods Hole Oceanographic Institution, would you agree to have them test and evaluate the sample, and to agree not to release the one million gallons of radioactive water into the bay unless it is confirmed safe for our region's fisheries by Woods Hole Oceanographic?

Mr. Singh. Yes, Senator, the answer is yes. Beyond then, if you have any other expert or scientific organization, not a political organization, yes, we will share with them any information we have. We will give them access to the data at the plant to help comfort the community. Because there has been so much now material in the media that a non-problem in my personal opinion has become a big problem. So we have to, I think your suggestion to have experts review and study is a great suggestion. We will support it wholeheartedly.

Senator Markey. Okay. I think it is very important that Woods Hole Oceanographic Institute be a part of this process. They have the most knowledge about this body of water of any institution in the world. They are right here. So we will be taking you at your word and having them be included in this process.

Let me turn and recognize Congressman Keating.

Representative Keating. Thank you, Mr. Chairman, and thank all our witnesses.

I will say at the outset that it is just a common refrain these days to blame the media, and to say, well, this is the media. I want to, for Dr. Singh's purposes, tell you that everyone in our office, I am not part of the media, Senator Moran is not part of the media, the Attorney General's office is not part of the media, Senator Markey's office is not part of the media.

And the groups here who came together are not part of the media, the local officials, the lobstering community, the fishing community, aquaculture community, the tourism community. They are not part of the media. These are real concerns. It is not manufactured by the media. It is real. I want to say that at the outset.

I want to agree with Senator Moran, too, that our office has had many of the same concerns, and shared those concerns among her office and the group of State legislators and local officials, our colleagues in State government who are here. I am thankful for their presence here today.

I also want to emphasize that the people who are working during this decommissioning, it is not simply a labor issue. It is a safety issue. Those people are necessary for this to be done safely and securely. I urge you not just to discuss with them but to resolve any differences that might be there.

In terms of Mr. Fettus, just for the record, I am a

cosponsor of the Nuclear Waste Task Force bill, just to clear that up as well.

Now, I want to deal with a pretty important issue during this process, and that is one that Holtec has promised that the people in this community, our elected officials, promised a transparent process. Thus far, that is still, generously speaking, a work in progress in that regard. I recall back in November at a meeting of the Commonwealth of Massachusetts Nuclear Decommissioning Citizens Advisory Panel that Holtec repeated several times that the company has not made any definitive plan to dispose of spent fuel pool liquid.

However, just weeks later, when our office contacted the NRC, we learned that Holtec had disclosed to them that it was planning to discharge, or dump, call it what you will, into the bay in the first quarter of October of this year. That raises issues and my concern is ongoing regarding transparency in that regard.

Dr. Singh, January 22nd of this year, Holtec issued a public letter responding to our community concerns about the discharge of spent fuel, the spent fuel coolant pool into Cape Cod Bay. In that letter your company expressed that they had no need to seek additional regulatory clearance from the NRC or any other agency to release the contents of the spent fuel coolant pool.

On March 14th of this year, the Environmental Protection Agency sent a response to that letter, outlining their concerns with the discharge of fluid from the spent fuel cooling pool, which states unequivocally that your company must seek clearance, must, from the EPA for any discharge into Cape Cod Bay from the spent fuel coolant pool.

Has your company responded to the EPA's letter?

Mr. Singh. Congressman Keating, I don't have personal knowledge whether we have answered or not.

Representative Keating. You are the CEO.

[Simultaneous conversations.]

Mr. Singh. Let me answer your question. I will get that information for you. The bigger question that you said is that we have, we are not communicating with your office and other major stakeholders in the process. I will rectify that problem immediately. There is no agenda here to hold back any information. We will fix that. We will fix that.

Representative Keating. If I may, Doctor, if I may, I just was struck by your comment a few moments ago that you communicate routinely with the EPA and other groups. If they sent you that request almost two months ago, and I will give you the answer to my question, I just wanted to confirm if anything happened in the interim, but the answer is no. You have not responded to EPA on this.

Mr. Singh. And if we have not, we will provide a response.
But let me address --

Representative Keating. No, I am asking the questions,
because time is precious and I apologize --

Mr. Singh. I can give you the answer.

[Simultaneous conversations.]

Mr. Singh. If I don't give you the answer, you will have
the misconception.

Representative Keating. You just gave me the answer to my
question.

Mr. Singh. I am trying to tell you, unless the water is
contaminated and it exceeds EPA limits, or NRC's limits,
typically if our process does not require notifying them, then
we would not. Now, being that it has become a high-profile
item, we will start notifying everybody. You tell us who and we
will notify everybody.

Representative Keating. You are going back to my initial
question.

[Simultaneous conversations.]

Representative Keating. Your premise is wrong. You are
saying until it becomes a high-profile item you don't --

Mr. Singh. [Indiscernible.]

Representative Keating. They are requesting from you that
information. And who decides if it is a high-priority item?

Mr. Singh. Please.

Representative Keating. I don't want to be contentious anymore.

Mr. Singh. Hold on --

Representative Keating. I want to get to some points.

Mr. Singh. -- the industry, telling you how it works. If there are laws, we follow the laws.

Representative Keating. I know how your industry works, sir. That is the issue here.

I want to do this. I gave you the answer to that question, I am so pleased, and thank you very much for your cooperation in responding to the EPA's letter. We have been in touch with them. There are concerns. They have concerns, and they certainly are in a position to vent those concerns and to get answers. It is something that the NRC seems limited or unwilling to do in this regard, so I am anxious to get the response from that.

I have another question, if I could.

Mr. Singh. Consider it done.

Representative Keating. Thank you. I like that.

So let's see if we can continue with this. Could you just give us, as the CEO and President, the estimated cost that would be entailed to transporting those wastes, those radioactive materials, from Plymouth by truck, similar to the way it was

done with Vermont Yankee?

Mr. Singh. I don't know where Yankee shipped it.

Representative Keating. Could you just share with us your estimate for what that cost would be if you are considering viable alternatives?

Mr. Singh. We will get you the cost. We will get you the cost. But please understand, to us, that is a poor solution. Burning diesel fuel to take water from Place A to Place B is [indiscernible]

Representative Keating. Sir, by the way, do you have electric vehicles? Are all the vehicles you have in your company electric, by the way?

Mr. Singh. Some are.

Representative Keating. I am glad some are. Well, we are concerned about that with diesel fuel. We are concerned about that.

Mr. Singh. Tanks of electric vehicles don't have environmental baggage. Need to do some more learning.

Representative Keating. Okay. So if you could, you haven't even estimated what the cost of that alternative would be. So that makes me question how viable or how serious you are about looking at these alternatives. Can you understand how I would have that concern?

Mr. Singh. Congressman, you can entertain --

Representative Keating. I am not entertaining.

Mr. Singh. -- your illusions. We have, we have followed the law, we do not ever allow anyone to break the law. We are transparent.

Now, trucking on the face of it is a poor solution in our opinion. But if you think we should give you the cost that will help enlighten this, we will do that. Also, we can locally evaporate the water using electric heaters. That will environmentally damage as well. And do all that when the water purity level is so high, you may or may not know, Admiral Rickover who ran the submarine fleet in the U.S. for a long, long time, he was challenged on this issue. He brought a glass of water to one of the hearings in Congress and drank it, the processed water. That is how good it is.

So it is, any item can be made into a major deal. But in my opinion, it is not a big deal and the scientists that the Senator has proposed should look at the data. I am sure they will corroborate our position.

Representative Keating. Well, there is a room full of people here who aren't drinking the water on that answer. It is much more complex than that, and that is why the EPA is concerned about that, and why it is important to find out if this mixture -- is there anything amusing I am saying, sir? The mixtures that are there, there are concerns, boron and other

heavy metal mixtures. These things should be done in the introductory level, not afterwards. And we should have answers to those things as well as answers to the viable alternatives that exist as well.

We hope we can continue with these questions. At this juncture I will yield back, Mr. Chairman.

Senator Markey. Thank you.

Let me turn to you, Mr. Schofield. You mentioned in your testimony that you worked on a settlement that was released in June of 2020 between the Massachusetts Attorney General's office and Holtec which secured critical environmental, public safety, financial protections for Massachusetts residents. I thank you for your work in defending the interests of Massachusetts residents from potential corporate malfeasance, as well as from neglect of federal agencies.

Mr. Schofield, if Massachusetts did not file suit against Holtec and the NRC's move to transfer the license for Pilgrim from Entergy to Holtec, would the State of Massachusetts have been able to weigh in at all on the decommissioning process?

Mr. Schofield. The Commonwealth would not have been able to weigh in in a meaningful way. We could of course submit written comments on the PSDAR. But as we have heard day, that is really an illusory process. It is not meaningful. The NRC doesn't approve it. There is no opportunity to challenge that

document.

It is frankly hard to even understand what the plan is from the PSDAR because of the lack of detail in the plan. Those plans are based, in addition, on insufficient knowledge going in.

Senator Markey. Just so that people can understand, if Entergy, the owner of the plant, had kept ownership and had begun the decommissioning, the State of Massachusetts would not have been able to intervene. It is only because they are transferring the license from Entergy over to Holtec that gave you a legal avenue, angle to get into this discussion. Is that correct?

Mr. Schofield. That is correct.

Senator Markey. So if there is a decommissioning that is going to be going on around the Country, let's just say Seabrook, where the company keeps ownership of that plant, there is no avenue in for New Hampshire or Massachusetts in terms of how that decommissioning is being conducted. Is that correct?

Mr. Schofield. I don't want to concede --

Senator Markey. I appreciate that. I think it would be difficult, it would be very difficult. Thank you.

Mr. Schofield, what issues were you able to push Holtec to discuss and commit through the settlement that the NRC's rulemaking and agency process failed to ensure was included in

the Pilgrim decommissioning plan?

Mr. Schofield. I think I would like to highlight one today, and that is the financial assurance component of the settlement agreement. I won't go into all of those details today, it is technical, long, there are multiple layers.

But I think the most significant piece of the settlement, at least from the Commonwealth's perspective in terms of ensuring sufficient funds going forward, both for restoration of the plant and also for managing the spent fuel onsite, were the establishment of these minimum balances that Holtec must maintain in the trust fund. The NRC doesn't have a requirement like that.

We have now set in our agreement a minimum fund which is based on input we received from our consultants that that would be a minimum amount necessary to allow the project to go forward if they started to run out.

Senator Markey. So again, you are saying the NRC does not have a minimum balance which the company has to keep in order to make sure that the project is successfully completed. But because of your intervention here in Massachusetts, we are setting a precedent. There is a minimum balance and the funding is there, and it is guaranteed, so that the State, the residents in proximity of the plant, are not left, with the ability to be guaranteed that the process of decommissioning comes to a

successful conclusion. The funding will be there in Massachusetts. But it is not going to be there in the rest of the Country, because the NRC does not require that in the rest of the Country.

Mr. Schofield. It is a much higher risk that they will run into issues. What we have seen over and over again is that the costs of decommissioning power plants significantly exceed the NRC's site-specific cost estimate for these plants. So that, going into this process, made us extremely concerned and hyper-focused on this issue.

The other piece of this that I think is important to note is the exemption process for using spent fuel, the decommissioning trust fund money, for spent fuel costs. Of course, it is very important to have money to pay for the management of the spent fuel onsite. But the NRC is granting exemptions to use decommissioning trust funds, funds that its rules categorically prohibit from being used for spent fuel costs, for spent fuel management costs, which are then recoverable in subsequent lawsuits by the licensees from the DOE.

Senator Markey. Okay, so if I may, because I just want to put this out there so that everyone can understand the great job you did, the Attorney General did in setting this precedent. Because when Holtec bought Pilgrim from Entergy, it bought a

billion-dollar decommissioning trust fund that ratepayers had been paying for decades. The people in this room had been paying for decades into that trust fund to create that billion dollars. And the settlement agreement between your office and Holtec stipulates that the decommissioning trust fund must be at least worth \$193 million once the site is ready for partial release.

Mr. Schofield, what happens if the trust fund runs out of money and neither Holtec Decommissioning International, Mr. Singh, its subsidiaries, nor its parent company have the funds to meet those financial thresholds and they declare bankruptcy? Who is left to foot the bill for the rest of the plant cleanup process?

Mr. Schofield. The Commonwealth's fear has always been that it would be left to the States to pick up the tab and ensure the sites are cleaned up.

Senator Markey. Would you pursue legal action then against the company if that happened?

Mr. Schofield. Of course. We would pursue that action. But in my past, I did much more of this as an enforcement attorney. I have experience trying to pursue companies that have no assets, no property, or are in bankruptcy. It is extremely difficult.

Senator Markey. Mr. Schofield, on the flip side, what

protections are there to ensure that Holtec doesn't cut corners to do the lowest cost decommissioning possible in order to take home as much as possible all the ratepayers' billion-dollar trust fund?

Mr. Schofield. There are two different things. One, we established a framework in the settlement agreement that we believe will help mitigate the risk of that, first by establishing clear guidelines as to what the compliance standards are for the site, and importantly, those compliance standards are to allow for unrestricted future use of the site based on compliance with more restrictive State law standards.

We also have, our State agencies are heavily involved, are partners in this process. They are doing frequent inspections of the site. I know Dr. Singh indicated that the company should be given an A plus and they wouldn't do anything to violate the law, but there actually have been some violations of State law in the process so far. They have not been major issues, but there have been some asbestos issues. There was a water discharge issue and a wastewater issue as well.

So there are issues, but fortunately we have a great team with our State partners, and they are out there monitoring and making sure that to the best of their ability that the public is protected and that the laws are complied with.

Senator Markey. Okay. Good. You are depending on the

monitoring that you are going to be doing. That is why I feel good here, because we are depending upon your great work and the State's great work to keep a financial eye on the plant.

So where is the NRC on this issue of financial responsibility and protecting the ratepayers? And if that doesn't actually turn out to be sufficient, the taxpayers of Massachusetts who would ultimately have to be the guarantor of the safety here at the plant?

Mr. Schofield. I am sorry, Senator, I missed the question.

Senator Markey. What is the role of the NRC?

Mr. Schofield. The role of the NRC should be --

Senator Markey. Should be.

Mr. Schofield. -- to keep a close eye on all of these matters.

Senator Markey. And how good of a job does it do?

Mr. Schofield. It has been our experience that they are not.

Senator Markey. They are not.

Mr. Schofield. To the point where we, the Attorney General's office, for example, has continued to retain an expert on hand, even after the completion of settlement, so that we have additional financial expertise for monitoring the expenses that are going on at the project, to see if, ahead of time, we are trying to see, before the car hits the wall, we want to know

that we are getting close to it. So we are watching that very closely, so that we can try to get ahead of it.

Senator Markey. Okay, so the proposed decommissioning rule doesn't allow the decommissioning trust fund to be used for spent fuel management, despite the initial argument from NRC staff that it should. But it does still allow plants to petition for an exemption and use the trust fund for spent fuel management, which Holtec has already done. If operators get this exemption, they can use the spent fuel to manage spent fuel, get reimbursed for that management from DOE, and walk away with the money.

Mr. Fettus, can you follow up here? Do you agree that these exemptions are dangerous and allow for money to be siphoned off from ratepayer-funded trust funds and into company coffers?

Mr. Fettus. You described it accurately, Senator. It is a problem. There is a prescription in Commissioner Baran's dissenting vote on the draft rule that could address a lot of your concerns. If the NRC withdraws its rule and follows that prescription, many of your concerns and the concerns of the folks here in Plymouth can be alleviated.

Senator Markey. Great.

Dr. Singh, is Holtec planning to sue the Department of Energy for spent fuel management reimbursement, even if it uses

the decommissioning trust fund for spent fuel management?

Mr. Singh. Yes, there is a misconception here. I think your discussion is going on the wrong track. Forgive me for saying this.

The NRC does have a decommissioning cost estimate requirement. At the end of each year, we provide to the NRC which gives all accomplishments that have occurred already and what remains and the estimate to finish the work. And NRC makes an independent evaluation whether the funds are adequate. If the funds were not adequate, then we are required to put money from our company's fund, general funds, into the decommissioning fund.

As a matter of fact, because the market value has come down recently as we all know, we are doing the settlement on Palisades in less than 60 days, there is a likelihood that we will have to add to the fund \$20 billion or more dollars to bring it up to NRC requirements.

So there is a process there. The State of Massachusetts is being more proactive and has placed additional requirements. And we agreed to it. We are, by the way, we are not a limited liability company with no assets. We, our assets are north of \$4 billion.

So we are not a weak counterparty. And we have been profitable in every year of our existence for the past 36 years.

So there is no risk of the company going bankrupt and not finishing the job. We are finishing the job ahead of schedule, as I told you earlier.

Senator Markey. What I have found over the years, Dr. Singh, is that you may be making personal commitments right now, and don't worry about it. But if you are gone, and somebody else takes over and they have gone to a business school with a pretty simple three-point plan about how to max out for your company, they are not bound by anything you are saying right now.

So the reason we need rules, the reason we need protections in place that are guaranteed is not your 36-year track record, but rather what is going to happen 36 years from now, what are the guarantees.

So Mr. Schofield and Mr. Fettus, do you want to talk about that? Mr. Singh said we are on the wrong track with this whole conversation. Do you agree with him?

Mr. Schofield. I don't agree with him. It was interesting what he just said, because I think what he was saying was that the parent organization, what he was saying today was agreeing that they would take responsibility for any future shortfalls.

So that is very interesting and very helpful, if that is accurate. Because the structure is that Holtec International, the parent entity, they do have a lot of finances.

But they are not the licensee at the site. They are not legally responsible for what happens at the site. The entities that are legally responsible for what happens at the site are two LLCs. They are the licensees. And the only asset those licensees have is the trust fund.

Hence, that is a big source of our risk. This is the first time I have heard from Dr. Singh about a commitment from the parent company to essentially guarantee the work of the LLCs. So I appreciate that commitment.

Mr. Singh. I will reiterate, I will reiterate, that Holtec International will stand behind the commitments made by its operating subsidiaries. The damage to us reputationally would be enormous if we walked away from a project without finishing. It is just not money. Our company has enormous goodwill and value, reputational worth in the world marketplace. We cannot afford to for one project maybe costing us a hundred million dollars, we will not walk away. Absolutely not.

I don't think any future CEO of the company, this company has an enormous value as an enterprise that is trusted around the world. We did Chernobyl, you may or may not know. We did Chernobyl Nuclear Plant. And that was considered an impossible job. And we finished it. We turned the key over to the Ukrainian government.

We have too much to lose to fail at any site and not

complete the process. We understand that.

Senator Markey. If you get reimbursed for the cost of spent fuel management, will you commit right now to ensuring that this money is returned to the trust fund and used to support cleanup of the site?

Mr. Singh. You know, cleanup of the site is an undivided responsibility of Holtec. How the books are done I can't tell you. But the decommissioning cost estimate, if the cleanup and fuel costs were in there, and I can't tell you if they were on the books in that level of detail, then it will be returned to the decommissioning trust fund. If it is already factored, then it won't be.

But at the end of the day, each activity has an associated cost, and we must, accounting people that keep track of progress of the project against the accomplishments made. We are under federal law required to report it to the U.S. Government, to the NRC.

So if we are overrunning the charges and we are above the estimate, then yes, I think NRC would ask us to put more money in the fund. And that is the club they have, and I am glad they have the controls. Because it is necessary. It is necessary that the people, the community, are protected. I believe the rules are in place to protect.

You can always make it more strict, like Massachusetts has

done, by requiring us to have I think \$193 million, as you said, and the money must be in the account until we get through the year to a certain point in the decommissioning. We accepted it because it is a non-issue for us. This company will never, never fail to fulfill its contractual obligation. That is a commitment from me, and I am the founder. No matter what happens down the road, we will not ever breach our obligation to the counterparties, in this case the State of Massachusetts, and any other entity.

Senator Markey. And that is very important, because obviously, you have created multiple limited liability companies, subsidiaries that are each responsible for different plants. And the only asset is the taxpayers' account. So it is very important that we have an understanding that the parent company will accept full responsibility.

I don't know, Mr. Schofield, if there is some way we can formalize that. But I think it would be important. As much as I do believe in the sanctity of Senate hearings, to have a legal document that accompanies the verbal assurances from Mr. Singh I think will be very important for the people of Plymouth to hear.

Mr. Singh. If it doesn't [indiscernible] we will provide the guarantee.

Senator Markey. Thank you. That is a very important statement for you to make.

I see Mr. Fettus would like to add something.

Mr. Fettus. The NRC can take a much more firm and clear step by allowing decommissioning trust fund assets, if they are going to be used for spent fuel management, to only do so if there is a projected surplus. And with whatever is used, must be returned into [indiscernible].

[Technical issue.]

Mr. Fettus. I would memorialize this forthwith, good luck, Seth. And if decommissioning, and the NRC can make a very positive and constructive step in a new draft rule that would allow decommissioning trust funds, if they are to be used for spent fuel management, only if there is a projected surplus. And whenever and whatever is used is returned to the fund within an allotted time.

That would clarify the rules that would put in place and alleviate the concerns that Senator Markey is making so clear today.

Senator Markey. Mr. Schofield?

Mr. Schofield. I would like to add one thing. I think what Mr. Fettus just described is, it is an extremely simple fix. That really would fix this issue, if the NRC is going to grant an exemption, or if they are going to promulgate a rule that allows decommissioning trust funds to be used for spent fuel management costs, if there is a surplus, as Mr. Fettus

said, that they simply require the recoveries to be returned to the trust fund and not put into the pockets of the private company.

Those are ratepayer funds that were put there to clean up the power plant. They should not be, they should not be able to divert the money in that way.

Senator Markey. Please, Mr. Singh.

Mr. Singh. I would like to make a comment, please.

We forget, we as a company go take the risks. Not no one else stepped up to decommission Pilgrim. Entergy executed a bid tender, and at the end of the day we were the only ones left standing to take on the liabilities and do it. When we do it, our liability is to finish the job for the money. And if we run into any problems, we don't have Uncle Sam to help us. We have to do it with our own resources.

And yes, if the fuel project is done, we submit it to DOE, we expect DOE to pay for it. That fund is available to us for running our business. It is, if we run over, the same business, same parent that I told you earlier, provides the money to the fund to finish it. So it is a logical, simple way. If you say, tell companies if you have a profit, you get [indiscernible] and if you have a loss, sorry, Charlie, it is your problem, it won't work. That is not American way.

So right now, the way it is set up makes perfect sense. No

one has defaulted in doing decommissioning projects. We have done so many of them, as John Lubinski told you. No one. So why fix something that isn't broken?

Senator Markey. I think we are ready for Mr. Schofield and Mr. Fettus to figure out how to formalize this and set a precedent that the NRC will be following. I think that is going to be a big change that we can move forward with and say to the NRC, this is where we should be. Mr. Schofield, I see you leaning in to say something.

Mr. Schofield. I think in terms of the DOE recoveries, it makes total sense. It is what we have memorialized in our settlement agreement, essentially, is that if they do hit those minimum balances, they have to reimburse the fund with the recoveries from DOE.

So we actually struck somewhat of a middle ground in negotiations where they don't have to put all the recoveries back in, which is our preferred outcome. But they do have to put them back in if they dip below the minimum.

Senator Markey. It makes total sense, but we are talking about the Nuclear Regulatory Commission. That is why we have to make sure that we put common sense into the regulatory framework in order to protect the ratepayers, but also the safety and well-being of the citizens of Plymouth.

I will turn it back over to Congressman Keating. I will

say, Dr. Singh, I appreciate your committing to let Woods Hole Oceanographic Institute make a recommendation on whether or not the water is safe. Because I appreciate the understanding that public safety should be backed up by public science. That is in fact Woods Hole Oceanographic in terms of this community. I appreciate the movement that you had made in guaranteeing that this financial commitment is absolutely legally sold.

Let me turn and recognize Congressman Keating.

Representative Keating. Thank you again, Mr. Chairman. The hour is getting late. I think in terms of refocusing on the very important part of this, I would like to give Mr. Fettus the opportunity. You said something earlier that was very important, almost ominous, when you said that this rule is really the last good chance to get it right.

In terms of that, could you amplify on what it is so important and why timing-wise this is, in your view, the last good chance to get it right? Because the other side of that is, we will never get it right unless we do it this way, too. So if you could, and that will be my closing question, Mr. Chairman.

Mr. Fettus. Thank you for the question, Congressman. You are deeply familiar with your years of work with how long it takes to get something serious done in Washington, D.C. that will have impact around the Country. The NRC has last revisited this I think in 1996, Seth, is that about right?

Mr. Schofield. Yes, 1996.

Mr. Fettus. In 1996. It is 2022. That bookends my entire adult professional career. I think it likely that something of this magnitude will take another set of years, if anything, to come up. During that time frame, we may have the retirement of a few reactors, we may have the retirement of dozens, who knows. There is a whole host of questions that go to economics, markets, safety, and a whole bunch of other things that will play into that. And I don't have a crystal ball, and neither do you.

But we have an opportunity with the draft rule after many years of work to get it right and do it right now and set the ground rule going forward for dozens of sites around the Country. What Seth described, what Massachusetts had to do to protect the Commonwealth, was just extraordinary. The fact that they had one avenue in to get traction legally, I speak as a litigating attorney, I do this but I also litigate in courts. What they did should be lauded and it also shouldn't have to have been done. And it was.

We have a chance to rectify that now. Unfortunately, the draft rule doesn't do that. I think it would be a terrible loss with how complicated and serious the questions are. When you run a Congressional office, your staff drinks from a fire hose. Dozens of issues every day dealing with everything from the

quietest issues in your constituencies to the biggest issues of national importance and everything in between.

When you have a chance to do these big things, like a rule that sets the rules of the road for 60 plus sites around the Country in a billion-dollar industry with a lease that lasts for a million years, we should do it right. This is that opportunity. Let's not miss it.

So if it takes a few more months to withdraw the rule and reissue one that is a heck of a lot better, let's do that.

Senator Markey. I thank you for that, Mr. Fettus, and I am going to be organizing, obviously, my Senate colleagues to send that message to the Nuclear Regulatory Commission, that that is how the new rule should be drafted. This hearing has been extremely helpful in establishing what is necessary to happen.

Dr. Singh, back in 1986, I was the chairman in the House of Representatives over the Nuclear Regulatory Commission. Nunzio Palladino, long before your time, was the chairman of the Nuclear Regulatory Commission. We were at the end of a long hearing. And I love long nuclear safety hearings, by the way. I have done hundreds of them.

So at the end of the hearing, Doctor, I said to the chairman of the Nuclear Regulatory Commission, what are the least safe nuclear power plants in the United States? He looked at me, and he said, well, of course, Pilgrim in Massachusetts is

at the top of the list. That was a big moment up here in Massachusetts. It led to a complete revision of how everyone viewed how safe this plant was, and Seabrook was. But this plant then underwent a complete overhaul, change of management and oversight.

That is really why we are having this hearing, Dr. Singh. It is to have the public discussion, ask the questions that the public have posed, and make sure they get the answers. But also to make sure the Nuclear Regulatory Commission takes the actions that are necessary.

So if I may, the NRC granted an exemption to Pilgrim from emergency preparedness and planning requirements in September of 2019, before all Pilgrim's spent fuel was even moved into dry cask storage. Some of the communities around here made agreements, lost hundreds of thousands of dollars in emergency planning and preparedness support, and also Pilgrim no longer had to maintain emergency response capabilities or procedures for public notification.

Dr. Singh, did that exemption allow Holtec to stop providing funds for radiological emergency training for local first responders?

Mr. Singh. Well, the emergency training, we have Holtec Safety International, Security International, they do all that for us. The emergency planning, emergency response, this is

very heavily regulated by the NRC. We follow the regulations.

Our entire structure working with the NRC is based on they set the regulation and we follow them. Wherever possible, we try to exceed what the government requires.

As far as money going to local communities, it is all in our budget, based on how we plan to do the work. It comes under decommissioning budget. And if there is money for the community allocated, that would have been paid.

But it is all based on the project plan, when each activity occurs, when a particular milestone occurs, then a particular expense disappears. This is all detailed accounting. I cannot tell you what we were paying then and what we are paying now, if we are paying at all. It is all based on the safety regulations that the NRC has in place, and we follow them, including making payments to the communities.

I can't tell you any more than that, because I really don't know.

Senator Markey. Mr. Schofield, does creating or authorizing emergency planning exemptions while nuclear waste is still cooling in the pool create an unfunded mandate for communities when the risk and response requirements haven't changed, and the communities near the plants, the fuel is still colling?

Mr. Schofield. [indiscernible] and so is your

characterization, Senator. I think your characterization was perfect. That is how we view this situation as well.

The NRC's position is that it can eliminate the emergency planning requirements that are in place to make sure that communities are prepared for an emergency, and then expect them to be able to perform without them being in place. It doesn't work that way.

Senator Markey. Thank you. I agree with you. It does not, and it is obvious. So we just have to make sure the NRC reflects that in their rulemaking.

Mr. Fettus, we heard from Director Lubinski a little bit more about what the proposed decommissioning rule would do and what it would fail to do to protect the public involvement in the planning process around nuclear decommissioning. Nuclear plant operators have to submit a plan for the decommissioning activities. But under the current rule and the proposed new one, the NRC doesn't verify the substance of those plans, approve those plans or give the public a chance to weigh in.

Mr. Fettus, would you agree that the proposed rule cuts out community engagement from the decommissioning process?

Mr. Fettus. Yes.

Senator Markey. Senator Moran, would you agree that the NRC's decommissioning process would have felt more legitimate to elected officials, community leaders, and concerned residents if

they were able to comment and receive a response from the Nuclear Regulatory Commission at the beginning of the process?

Senator Moran. Very much so. And I agree, and I beseech the NRC to not make this a rubber stamp process, to not listen to the community and file it away like the books behind you in this old courtroom, Senator.

In addition to the new proposed rules, let's use this process to hear from the community and to make effective rule changes that will make a better process going forward and not have frankly corporate arrogance dismiss community concerns as overwrought.

Senator Markey. Thank you. I agree with you, Senator.

Mr. Schofield, how would you compare the NRC's process around planning decommissioning activities to the activities that other agencies undertake for cleanup projects, like EPA and Superfund process, et cetera?

Mr. Schofield. Remarkable. It is really an apples and oranges comparison. For those of you in the room who are familiar with the cleanup process under the Superfund statute, these are major contaminated properties, industrial sites across the Country listed on the National Priority List. EPA oversees that process.

The differences between the EPA processes under CERCLA and the process that the NRC has engaged in under, not engaged in,

under its rules, they are two different worlds. EPA is directly involved in every decision about the cleanup of those properties, whereas the NRC has a completely hands-off approach.

Senator Markey. I know why Superfund is different. I was on the committee in 1980 and 1981 when we drafted Superfund. So I know. The NRC got its authorization just two years before I got elected to Congress. So we are going to try to rectify that level of full accountability.

Mr. Fettus, if the NRC could make one change to its proposed decommissioning rule to better involve communities and integrate their comments into the process, what would it be?

Mr. Fettus. The ability to approve, disapprove, alter, modify, or change the decommissioning plan, have hearing rights associated with it, and supplemental NEPA review, period. That would change everything.

Senator Markey. Bringing people in from the get-go is the whole key to building confidence in the entire set of decisions that are going to be made for every single nuclear power plant in America. My father always said to me, Eddie, try to start out where you are going to be forced to wind up anyway. Because it is prettier that way.

That is all we are really saying here. Let's put a process in place that doesn't necessarily elicit this level of public skepticism because it has been transparent, that we don't need

an attorney general to intervene to get these questions answered.

Just one final question for you, Dr. Singh, and then what I am going to do is ask each of you to give us your final one minute, what you want us to remember from this hearing. Dr. Singh, would you commit to meeting with the Town of Plymouth to negotiate a payment in lieu of taxes agreement to compensate for lost revenue for the town?

Mr. Singh. Unfortunately, I cannot answer the question, because I really don't know what the state of agreement is. We are, we already work with local townships everywhere. We try to maintain a cordial, mutually supportive relationship. We want to be a good neighbor to the township to do the plant.

I would ask our president of HDI to engage with them if there is no settlement yet, to do it in the spirit of goodwill. I should tell you that, for example, keeping the water in the plant, it can be, I said that we will listen to the stakeholders. And we will.

But there is a downside. The downside is that the facilities would not be dismantled as soon as we could dismantle them if we could discharge the water. If that is okay, we will leave it stand. After all, we have 60 years to finish.

There is no such thing as free lunch in life, as you know. You make a decision, it has consequences. Like I heard, they

want, there is a proposal here to put in communities in consultation and approval process in decommissioning plan. Well, if you do that, the result would be that nothing will get decommissioned in anywhere less than 60 years. People would not want to bother with the business. After all, I have a choice not to decommission.

So let's make sure that the laws are reasonable, they serve the ultimate goal of protecting public health and safety, and not go overboard where companies, right now there is a sparsity of companies who want to decommission. There are not that many companies that [indiscernible] will do it. If you make rules more onerous, and we put more processes in place that basically make decommissioning more expensive, it is going to have the effect of these plants hanging around a long time. That I don't think we want.

We want to, our goal, we are really focused on making sure that the township gets an excellent tax base. Because we get the plants decommissioned as rapidly as possible, as safely as possible, of course. As long as we all understand that is our shared goal, we will do fine.

Senator Markey. So we will let that be your closing statement, Dr. Singh. We will give you, Senator Moran, a closing one minute. Then we will to Mr. Fettus, and we will let Mr. Schofield have the final word.

Senator Moran. Thank you, Senator Markey, and to the committee.

The takeaway here is I heard Holtec say they will not dump into Cape Cod Bay. I think we take that and confirm it and write it up and take him at his word. We have it right here today. That has been the benefit of this field hearing. Thank you very much for that.

In the meantime, I think the communities have to be supported in terms of emergency funding. Those are the two issues, and my request for the takeaway here today. This has been incredibly productive.

Senator Markey. Beautiful. Mr. Fettus?

Mr. Fettus. I deeply appreciate the opportunity to be here. My takeaways from this hearing are, the entirety of this hearing record, especially the verbal interchange, should be put into the NRC's rule record, or the administrative record for the draft rule. Because it will provide clarity on the need for meaningful agency oversight, the need for meaningful agency oversight on ensuring that financial resources are there, emergency planning resources are there, and the clarity of where problems can be avoided for the future.

On the issue of nuclear waste, I really want to stress to the people of Plymouth at the hearing today that your delegation, especially with Senator Markey's Nuclear Waste Task

Force bill, is actually doing something more constructive and thoughtful than has been done in decades in Washington, D.C., by actually trying to get to figuring out how we get consent and can go forward with getting to nuclear waste repositories, rather than simply trying to bully a State into taking the entirety of the Nation's nuclear waste. It is never going to work, let's do something thoughtful and constructive.

Thank you.

Senator Markey. Thank you. Mr. Schofield?

Mr. Schofield. Thank you, Senator Markey and Representative Keating again for inviting me here today, and for holding this incredibly important hearing. I would just very quickly say that I think the NRC should withdraw the rule and issue a new draft rule that is consistent with the views Commissioner Baran expressed in his dissent and consistent with those that States have consistently expressed to the NRC for years.

Thank you.

Senator Markey. I thank you, and I thank each of you for your testimony and we will be bringing that message back to Washington, D.C.

Let me recognize Congressman Keating.

Representative Keating. I want to thank you, Mr. Chairman, for having this hearing. There is much that came from it.

Importantly, I hope looking at the rule again from the national perspective that is there. I want to thank Holtec for the commitment to move expeditiously in responding to the EPA. I want to thank them, too, for getting an estimate of what the trucking alternative would be and committing to that.

Most importantly, and I can only speak for myself, I am coming away from this hearing, Mr. Chairman, saying there will not be a million gallons of radioactive water dropped into Cape Cod. I think we can with a commitment that one of the alternatives and vaporization, if we want that instead of dumping it there, it is okay. So as far as I am concerned, we are not dumping any water, any radioactive water in Cape Cod. I want to thank Mr. Singh for his commitment to doing that.

Senator Markey. I am going to give you, Mr. Singh, I will give you one final concluding statement.

Mr. Singh. Thank you, Senator. I truly appreciate it.

Look, I am not used to verbal acrobatics.

Senator Markey. Excuse me?

Mr. Singh. I said, I am not used to verbal acrobatics. I said we will not dump the contaminated water anywhere. I also said that the water is not contaminated by its definition.

[Simultaneous conversations.]

Mr. Singh. We will not discharge any water in the Cape Cod Bay unless we have major stakeholder concurrence. We will not

do that.

I also said that that will mean that the dismantling of the facility may be delayed. And there are always pros and cons. And if the learned opinion, the scientific opinion that, Senator, you have so kindly agreed to organize, offered to organize, if that holds that indeed the water is contaminated and there should be a restriction on the discharge, then I presume you can be sure we will not discharge it

But if the opinion is otherwise, I hope that the community, the stakeholders will reconsider so we do the right thing for them, not go by empirical concerns that all may not [indiscernible].

Senator Markey. Thank you, Dr. Singh.

While there is no denying that our community has had to deal with several contentious issues with regard to Holtec during Pilgrim's decommissioning process, I can acknowledge that they never before fully decommissioned a nuclear power plant. It is possible these problems may be more of a reflection of its inexperience and not arrogance, that they don't know what they are doing.

Sadly, the Nuclear Regulatory Commission has no such defense. The Commission's proposed decommissioning rule shows it to be a captured agency. Without improvements, I fear that this shows thus far no interest in engaging the public, which

would provide even a semblance of culpability.

Without a stronger regulator, I fear that the only thing that will be emptier than the decommissioning trust fund will be the public's trust in our government. We need to ensure that we have a new rule that we put on the books that has full public participation, full accountability for the companies that are given the responsibility for decommissioning these plants, and that it be transparent in that we do this during the Biden era at the Nuclear Regulatory Commission.

That is the least that we owe to a city, a town, like Plymouth that was the pioneer in allowing for a nuclear power to be constructed in its community. A lot of promises were made, and those promises must be kept. It was told that it was cheap, that it was safe, that it would not pose any risks whatsoever to the community. We have to make sure that all of those promises are kept. We are looking back now 50 years. And we don't want these promises to be unfulfilled for another 50.

That is why we had this hearing here today. And that is why we are going to stay on this case. Because this is where it all begins, this decommissioning, this set of rules at the NRC, is right now considering.

Before we adjourn, I would like to ask unanimous consent to submit for the record a variety of materials including letters and testimony from stakeholders and other materials that relate

to today's hearing. Without objection, so ordered.

[The referenced information follows:]

Senator Markey. Senators will be allowed to submit written questions for the record through the close of business on Friday, May 20th. We will compile those questions, send them to our witnesses, who we will ask to reply by Friday, June 3rd.

We have just had an historic hearing. I am grateful for the discussion, grateful for the commitments that we have received today. We need a restoration of trust, so that we improve the rule and improve community engagement. That is the minimum that we need in order to move forward with confidence for the public trust in our Country.

We thank each and every one of you for being here today. I thank Congressman Keating for all of his great work on this issue.

With that, this hearing is adjourned.

[Whereupon, at 1:29 p.m., the hearing was adjourned.]