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Vermont Yankee Post-shutdown

Decommissioning Activities Report

Public Meeting

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ORIGINAL

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3	NUCLEAR REGULATORY COMMISSION
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5	OFFICE OF NUCLEAR REACTOR REGULATION
6	+ + + +
7	VERMONT YANKEE POST-SHUTDOWN DECOMMISSIONING
8	ACTIVITIES REPORT PUBLIC MEETING
9	+ + + +
10	THURSDAY,
11	FEBRUARY 19, 2015
12	+ + + +
13	BRATTLEBORO, VERMONT
14	+ + + +
15	The meeting convened in the Quality Inn,
16	1380 Putney Road, at 6:00 p.m.
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1	PRESENT:
2	CHIP CAMERON, Facilitator
3	JOE LYNCH, Entergy
4	BRUCE WATSON, Chief, NMSS
5	DREW PERSINKO, Deputy Director, NMSS
6	DOUG BROADDUS, Chief, NRR
7	MARC FERDAS, Chief, DNMS
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1	PROCEEDINGS
2	6:00 p.m.
3	MR. CAMERON: Good evening, everyone. I
4	want to welcome you to the public meeting tonight, and
5	my name is Chip Cameron, and
6	MR. SACHS: Is there a reason why we don't
7	get a public hearing here?
8	MR. CAMERON: We're going to answer that
9	question, the difference between a public hearing and
10	a public meeting. We will provide that answer for
11	you, because I know that people are interested in
12	that.
13	For your information, we're taking a
14	transcript of the meeting, and that will be your
15	record of what transpired here tonight, and the NRC's
16	record.
17	Just give us a couple of minutes to figure
18	this out, because we want to make sure that all of
19	this is on the transcript, although I'm not sure it's
20	important for me to be on there. Okay, it's not
21	working.
22	You know what? I think I'm just going to
23	go ahead, because I'm not sure that it's critical for
24	me to be on the transcript.
25	Okay, and then hopefully it will be fixed

1 by then, but I just want to welcome you all. subject tonight is NRC Nuclear Regulatory Commission 2 process for the decommissioning of Vermont Yankee, and 3 specifically the NRC and our speaker from Entergy, Joe 4 5 Lynch, are going to talk about something called the post-shutdown decommissioning activities report. 6 7 We're going to try to keep the -- we're 8 going to try to keep the acronyms to a minimum, but one that you will hear tonight is PSDAR, okay. 9 10 We're going to start out with some brief 11 NRC presentations to give you an overview of the decommissioning process, and we also have, 12 13 mentioned, Joe Lynch here from Entergy, who is going 14 to talk about Entergy's PSDAR that they prepared, and 15 then we're going to go out to you for guestions, 16 concerns and recommendations. 17 My role as the facilitator is to try to 18 help you all have a productive meeting tonight, and I 19 wanted to spend just a couple of minutes on meeting 20 process issues, so that you know what to expect 21 tonight. 22 The objectives of the meeting, first of 23 all, the first objective is to give you clear

information on the NRC oversight process and on

Entergy's PSDAR.

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Second objective is 1 to answer questions and to listen to your concerns and your 2 3 recommendations. 4 In terms of format, as I mentioned -- and you're probably going to -- Gary and I usually do a 5 duet, okay, throughout the meeting, and so, you're 6 probably -- you're probably going to hear Gary and --7 MR. SACHS: Clean it up now. Don't give it 8 to our grandchildren. 9 Gary, we're going to ask 10 MR. CAMERON: 11 Gary to try to be courteous throughout the meeting, 12 but you may have of something from that corner. 13 But anyway, format, we're going to have 14 some NRC speakers, Entergy, and then we're going to go 15 on to you, but I'm going to ask you -- ask for your 16 I want to get all the information out to patience. 17 you, before we go to you for questions. 18 So, I would just ask you to please hold 19 your questions and comments, until after all of the 20 speakers are done and --21 MR. SACHS: That's a dumb way to do it, That's a dumb way to do it. I'm not going to 22 Chip. 23 go back and say the guy 40 minutes ago said --MR. CAMERON: Well, Gary, Gary, I'm asking 24 25 you to do that, okay?

I know, my bullshit-o-meter 1 MR. SACHS: works, does yours? 2 MR. CAMERON: So, the duet. At any rate 3 4 MR. SACHS: Chip is here to present my 5 personal --6 I'm going to ask you to 7 MR. CAMERON: follow some ground rules tonight. The first one is to . 8 9 wait until all of the presentations are done, before we go out to you for questions. 10 11 Second one is, I would ask you to be brief 12 in your questions or comments. I'm not going to set a time limit, but a few minutes, and I have a list of 13 14 all the people who signed up to speak and ask a 15 question. You can come down here to talk to the NRC 16 staff, or if you want, I'll bring you the cordless microphone to you in the audience, and if you could 17 18 just stand up and introduce yourself to us and ask 19 your question or make your comment. 20 In terms of the ground rule about being 21 brief, I'm also asking the NRC staff and Entergy to 22 also try to be brief and concise, in answering any questions, so that we give more time to all of you out 23 24 there, and I'm going to go to everybody once, before

we go back to anybody for a second round of comments

and questions.

We're scheduled to go until nine o'clock tonight, and if we need to, to get to our remaining people, we'll go over for a little bit.

The NRC is also asking you to submit written comments on the PSDAR, and they'll explain that, but if you want to come up and give a short summary of your comments for the record tonight, that's fine to do that, and we have Pete Holland here, who is our Court Reporter, and he's going to be taking the transcript, and I would ask you, because we're talking a transcript, and because we want to pay attention to whomever has the floor at the moment, I would ask that only one person speak at a time.

Finally, I would just ask for all of us to extend courtesy to everybody else in the meeting room. You may hear opinions that differ from yourselves, your opinions, but just please respect the person who is giving that, and in a minute, I'm going to introduce Drew Persinko and ask him to introduce the rest of the panel.

But first of all, before we go to that, I wanted to introduce representatives of two elected officials, and one is -- one is Haley Perro from Senator Sander's office, and Tom Berry, who is here

1	from Senator Leahy's office, and I would also ask, is
2	there any other elected officials here, who just want
3	to stand up and introduce themselves, before we go on?
4	Okay, okay, go ahead.
5	MS. O'CONNOR: I'm Kate O'Connor and I'm
6	the Chair of the Vermont Nuclear Decommissioning
7	Citizen's Advisory Panel.
8	MR. CAMERON: Thank you very much, Kate.
9	Any other elected officials?
10	Okay, let me get to you, sir. So, this
11	way, you'll know who is here.
12	MR. TUSINSK: My name is Peter Tusinsk.
13	I'm on the Planning Board with the town of Leyden,
14	well within the ten mile radius.
15	MR. CAMERON: Okay.
16	MR. WARD: John Ward, Gill Select Board,
17	Gill, Massachusetts.
18	MR. CAMERON: Gill, Massachusetts. Thank
19	you.
20	All right, we're going to go to our
21	Panel, and they're going to complete their
22	presentations, and then we're going to go out to you
23	for the rest of the evening, and this is Drew
24	Persinko, Deputy Director of the Division of
25	Decommissioning and I'm going to let you go with full

title, NRC Office of Nuclear Material, Safety and 1 Safequards. 2 So, Drew, I'll turn it over to you now. 3 4 Pete, do we have transcript -- do you have us? Okay, 5 good. MR. PERSINKO: Good evening. Can you all 6 7 hear me? Okay, I too, want to welcome everybody to 8 our meeting tonight. My name is Drew Persinko. 9 I'm Director in the Division 10 the Deputy 11 Decommissioning, Uranium Recovery and Waste Programs within the NRC. 12 The purpose tonight, as Chip said, is to 13 Vermont Yankee 14 discuss the post-shutdown 15 decommissioning activities report, which we're all going to refer to as PSDAR, which was submitted to the 16 NRC by Entergy in December, and we're going to be 17 18 listening to your comments tonight. 19 The PSDAR, the purpose of the PSDAR is to 20 provide a general overview for the public and the NRC, 21 of the licensee's proposed decommissioning activities. 22 This meeting is required by NRC regulations. 23 We originally were going to have this meeting in late January, but we were asked by the 24 Citizen's Advisory Panel to postpone it, which we did. 25

As Chip said, we're going to have a few 1 presentations about the PSDAR 2 brief and our decommissioning program, and then Chip will facilitate 3 comments from you all. 4 The meeting is bring transcribed. There 5 are feedback forms in the room here, and we plan to 6 adjourn around nine o'clock. 7 So, okay, our agenda this evening is that 8 I'm going to give a few introductory remarks. Bruce 9 Watson, to my left, will speak about the requirements 10 of the PSDAR. Doug Broaddus on my right, will speak 11 about the NRC's review of the PSDAR and the licensing 12 status of Vermont Yankee. 13 To his right is Marc Ferdas. Marc is in 14 15 Region I office, and Marc will talk about 16 inspection programs at NRC and in Region I and at Vermont Yankee. 17 18 To my left is Joe Lynch from Entergy. Joe will be speaking about the contents of the Vermont 19 Yankee PSDAR. 20 and as said, then Chip will we 21 facilitate a public comment session and then we'll 22 close the meeting at approximately nine o'clock. begin with 23 So, let me short introduction. 24 It really starts with NRC's mission. It's 25

all about the mission, and the mission is that NRC 1 licenses and regulates the nation's civilian use of 2 radioactive materials, to protect public health and 3 safety, promote the common defense of security and 4 5 protect the environment. This was our mission during operation of 6 7 mission during the facility. Ιt remains our decommissioning, and the decommissioning will be 8 carried out according to our regulations. 9 One of the decommissioning regulations is 10 stands for Code of 11 20. CFR Federal 12 The 10 CFR Part 20, and in 10 CFR Part Regulations. 20 is the definition of decommissioning, and the 13 14 definition is, "To remove facilities safely from 15 service and reduce radioactivity to a level that permits either unrestricted release or restricted 16 17 release." No nuclear power reactor, or any other 18 nuclear site in the U.S. for that matter, has pursued 19 20 restricted release and all have pursued what's known as unrestricted release. 21 22 So, the release --23 MR. SACHS: Are any of them habitable today? 24 25 MR. PERSINKO: So, the release criteria is

1	as follows. For unrestricted
2	MR. SACHS: Are any of those habitable
3	today, sir?
4	MR. PERSINKO: For unrestricted release
5	MR. CAMERON: Gary, Gary, just hold your
6	questions, please.
7	MR. SACHS: It's an honest question. Are
8	any of those
9	MR. CAMERON: It isn't
10	MR. SACHS: sites habitable today, sir?
11	MR. CAMERON: We know it's an honest
12	question. We want to get this
13	MR. SACHS: Answer it.
14	MR. CAMERON: We want to get this
15	MR. SACHS: Please.
16	MR. CAMERON: We will answer it, okay.
17	MR. SACHS: Why wait 30 minutes to get an
18	answer to the question, of whether or not those
19	decommissioned sites are habitable by the general
20	public today.
21	MR. CAMERON: Gary?
22	MR. SACHS: Are they?
23	MR. CAMERON: Gary, I'm going to have to
24	ask you
25	MR. SACHS: That's yes or no, sir.

1	MR. CAMERON: to just
2	MR. SACHS: Sir.
3	MR. CAMERON: to just until let
4	him get let all these people get through their
5	presentations. So, go ahead.
6	MR. PERSINKO: For unrestricted release,
7	the requirements are that the dose be less than or
8	equal to 25 millirem to the average member of the
9	critical group, and considers all pathways for
10	receiving the dose and for a period of performance of
11	1,000 years.
12	I'm not going to through the unrestricted
13	through the restricted release criteria, because
14	that's not what's being pursued by Vermont Yankee.
15	For unrestricted release, I mentioned the
16	criteria being 25 millirem.
17	Well, just to put that in a little
18	perspective here, a millirem is a unit of dose on
19	human beings. Although the criteria says that it's 25
20	millirem, past history has shown by other power
21	reactors that have decommissioned, they have actually
22	decommissioned down to the order of a few millirem, on
23	· the order of two, three, four, five millirems.
24	So, although our criteria says less than
25	or equal to 25 millirem, the fact is that all for

that 1 power reactors have completed the other decommissioning, have completed it to a much less --2 3 to much lower levels. For comparison, what's a millirem? I want 4 to -- just for comparison. 5 You take a ride across the country in an 6 7 airplane, you get about three millirems flying across the country. You get a chest x-ray, you get about 10 8 millirems, and in a normal course of background, just 9 your normal course of business, in a year you get 10 about 300 to 600 millirems. So, that's just for 11 perspective, when we talk about what is a millirem. 12 13 Okay, this slide, it's a very important It shows the roles and the 14 slide, I believe. 15 activities of the licensee on the left, the NRC in the 16 middle and the public on the right, and so, the process -- and it shows the decommissioning process in 17 18 a flow chart form. 19 So, on the left you see, there is initial notification and fuel removal. 20 21 So, the initial process starts off with a 22 certification of cessation of operations by the licensee, Entergy, and then a certification of fuel 23 removal from the reactor, which has been done. 24 25 The next is the submittal of the PSDAR.

You see there, it says 'decommissioning report' on the 1 That's the PSDAR. left. 2 So, it's submittal of the PSDAR and a 3 4 public meeting, and you can see in the middle column, the NRC role, its review of the PSDAR and public 5 meeting. 6 So, where we are right now on this flow 7 chart is in the middle column where it says 'public 8 meeting'. That's where we are in the decommissioning 9 process right now. 10 I want to note that the NRC does not 11 approve the PSDAR, but we do review it to ensure that 12 our regulations are being met, and Bruce and Doug will 13 speak more about that, when they speak. 14 If you go down the left-hand side some 15 16 more, you'll see the next -- after 90 days, the -- we wait, by regulation, we're to wait 90 days and after 17 18 90 days, if we don't -- if we do not comment on it or after 90 days is up, the licensee can begin major 19 decommissioning, during which time the NRC will be 20 21 doing inspections. The NRC will be performing 22 inspections during decommissioning. About two years out before the license 23 termination, another plan is submitted to the NRC. 24 It's called the License Termination Plan, and we often 25

refer to that as the LTP. 1 It's submitted to NRC and it describes the 2 remaining decommissioning activities, the plans for 3 performing radiation surveys of the site, and it 4 provides a site-specific -- an updated site-specific 5 cost estimate. 6 The NRC does review and approve the -- we 7 do review and approve the LTP, if it's acceptable. 8 9 of the license termination plan Approval 10 licensing action, and thus, there is an opportunity for a hearing at that point. 11 12 At this point, let me just clarify a bit 13 here. 14 You know, I've been to a couple meetings 15 up here and people refer to this as a hearing. At the NRC, we would call -- this is a 16 meeting. This is a public meeting, a meeting open to 17 18 the public. 19 When we use the term 'hearing' at the NRC, 20 we're referring to a legal adjudicatory hearing with 21 a Hearing Panel. 22 So, that's why, you know, sometimes people 23 have referred to this as a hearing, but in our 24 vernacular, this is a public meeting.

You can see at that stage, that's an

opportunity for a hearing. So, that's an opportunity 1 for the public, you can see on the right-hand column, 2 3 if the public wishes to, they could submit a hearing request, in order to have the adjudicatory hearing. 4 Further decommissioning and further clean 5 up is done, and eventually, the final status surveys 6 are performed by the licensee. 7 The NRC verifies those surveys to make 8 9 sure that the clean-up levels meeting our regulations 10 have been met, and if they have, we terminate the 11 license. Decommissioning regulations also include 12 13 provisions for protecting the environment. environmental law is the National Environmental Policy 14 15 otherwise known NEPA, and Act. as there are regulations that implements the law, it's 10 CFR Part 16 17 51. 18 At the PSDAR stage, PSDAR includes a 19 discussion -- requirements or regulations require that the PSDAR include a discussion, to show that the 20 environmental impacts associated with site-specific 21 22 decommissioning are bounded by previous environmental impact statements, or if there are significant impacts 23

during decommissioning that have not been previously

in previous EIS's, the licensee must submit a

24

supplement to its environmental report. 1 MR. SACHS: Can you spell Strontium? 2 MR. PERSINKO: At the license termination 3 4 MR. SACHS: Is that the first --5 MR. PERSINKO: At the license termination 6 7 plan, it must include the supplemental environmental 8 report, if any new information or significant 9 environmental changes are discovered, and since that 10 is a --MR. SACHS: Is the Strontium new? 11 12 MR. PERSINKO: If that isn't -- since that 13 is an official licensing action, an environmental 14 assessment must be performed by the NRC. 15 I'm not going to say too much about this 16 slide. This slide just shows the internal 17 bookkeeping, if you will, within the NRC. 18 decommissioning has -- different organizations within 19 the NRC have different responsibilities for 20 decommissioning. 21 At certain points in time, the project management function is transferred from one of our 22 23 offices to another and the inspection programs are transferred from one division to another. 24 25 just internal bookkeeping, if you will, from your

perspective. What you should see is a different name 1 on the letters that are being sent out. 2 It will be a different project manager or 3 a different inspector. But that's how internally, we 4 transfer the project. 5 This slide, I wanted to show -- the 6 7 purpose of this slide, this bar chart is -- I wanted to show that the NRC has a lot of experience in 8 9 performing decommissioning. Since 1997, the NRC has terminated the 10 11 licensees of over -- the licenses over 80 facilities, 12 including power reactors, material sites and research 13 reactors. 14 I chose 1997 for the beginning of this 15 graph because that's when the current power reactor decommissioning process and the release criteria came 16 17 into effect, by rule making. Both went into effect 18 via a change in the NRC regulations, which we call 19 rule making. It went through the normal rule making 20 process, which included public comment and resolution. 21 22 Since 1997, the current process has been used to decommission --23 MR. SACHS: So, I just want to --24 25 MR. PERSINKO: -- seven --

1	MR. SACHS: You guys are NRC staff
2	MR. PERSINKO: has been used
3	MR. SACHS: Right? When you first went to
4	the commission
5	MR. PERSINKO: Has been used
6	MR. SACHS: nobody came
7	MR. PERSINKO: to decommission
8	MR. CAMERON: Gary?
9	MR. PERSINKO: seven power reactors,
10	and including three in New England. Those three in
11	New England are Main Yankee, which shut down in 1996,
12	Connecticut Yankee, which also shut down in 1996,
13	Yankee Rowe, which shut down in 1991, and I put this
14	last slide on here for completeness.
15	Millstone Unit 1 is in decommissioning
16	status. It's in Waterford, Connecticut. It's
17	currently in SAFSTOR, and it shut down in 1995.
18	MR. SACHS: Are there two
19	MR. PERSINKO: That concludes my
20	MR. SACHS: reactors that are open?
21	MR. PERSINKO: That concludes my
22	presentation. With that, I'm going to turn it over to
23	Bruce Watson, who will talk about the PSDAR
24	requirements.
25	MR. WATSON: Thank you, Drew, and thank

1 you all, for joining us tonight and taking time out to be here. 2 Our risk -- our performance based risk 3 4 informed regulations went into place in 1997. The two 5 key ones are Part 20 and Part 50. Part 50 deals 6 specifically with the decommissioning 7 reactors. 8 Another important regulation in effect is 9 the one of independent spent fuel storage, known as ISFSI's. 10 11 Like I said, these went into effect in 12 1997. We have 18 years of implementing experience, and we have completed the decommissioning on seven 13 power reactors to date, and numerous other facilities. 14 15 MR. SACHS: Can we play baseball there? MR. WATSON: Entergy provided a draft of 16 the PSDAR in October for public review. It submitted 17 the PSDAR to us formally on December 19th, and in 18 19 December 23rd, the PSDAR was available in ADAMS for 20 everyone to see. 21 December 29th, Vermont Yankee permanently 22 ceased operations and on January 12th, Entergy certified that VOI permanently ceased operations and 23 the reactor was completely defueled. 24 25 This means that the fuel cannot be put

back in the reactor, nor can the plant be operated 1 2 again. If they wanted to operate again, they'd have 3 to apply for an operating license. 4 We issued the public notice for the PSDAR for this public meeting and made it available for 5 6 everyone to be aware of. Next slide. 7 There are three decommissioning options in 8 quidance, which the DECON, is immediate our 9 dismantling of equipment and structures. In other words, the plant is promptly removed or decontaminated 10 to allow radiological release. We currently have five 11 12 plants in DECON. · The other option is SAFSTOR. The plant is 13 placed in a safe condition -- stable condition and 14 maintained and in that state until it's decommissioned 15 to permit radiological release. We currently have 14 16 plants, including Yankee -- excuse me, Vermont Yankee 17 18 in that status today. ENTOMB was also an option, but that is not 19 We have no plans to plan or we have no 20 available. 21 regulations to allow ENTOMB. One of the key futures of the regulations 22 is that radiological decommissioning must be completed 23 24 in 60 years. Now, part of Vermont activities is that 25

they do have the settlement agreement, which takes 1 into account, information from the -- input from the 2 3 state and the stakeholders, and also, the 4 encourages that we have -- that the licensee or the state form a Citizen's Advisory Panel, which has been 5 done, and that's to continue to solicit input on the 6 7 decommissioning. Next slide. The content of the PSDAR is outlined in 8 5082, and in req -- and the details can be found in 9 10 Regulatory Guide 1.185. It must include a description and schedule 11 for the planned decommissioning activities. It must 12 include a site-specific cost estimate, including the 13 cost of managing the radiated fuel. 14 15 It also must include a discussion that for concluding that the 16 provides the means environmental associated with the 17 impact 18 decommissioning activities will be an appropriately issued -- appropriately 19 bounded by the 20 environment impact statement or assessment. MR. SACHS: Can you go into how that 21 interacts with Entergy's statement this week? They're 22 out of here in 60 years, sir. 23 MR. WATSON: The post-shutdown activities 24

process

is

that

NRC

the

report,

part

of

the

1	regulations that require a public meeting be held.
2	So, we're here tonight to hear your comments.
3	We will make the PSDAR available for
4	public comment, and there is the ADAMS number in our
5	publically available document system.
6	One thing I do want to note is that we do
7	not approve the PSDAR. It is a report, like I said,
8	on the description of the activities
9	MR. SACHS: Why can't the other licensees
10	
11	MR. WATSON: the cost estimates and
12	also on the environmental impacts of the
13	decommissioning.
14	I want to point out that the
15	decommissioning, with the restrictions of the time
16	tables that are outlined in the 90 day requirement and
17	other things, that decommissioning can be started
18	under the current license.
19	So, this is not a Federal action in the
20	respect that it's not a license actions in the license
21	amendment or an exemption. It's merely a report to
22	us, which we will gauge its content on and make sure
23	it meets our requirements.
24	MR. SACHS: Do you guys know how to
25	decommission Fukushima?
I	

1 MR. WATSON: So, given that, I will turn 2 it over to Doug Broaddus. 3 All right, thank you, MR. BROADDUS: 4 So, I'm the Branch Chief in the Office of 5 Nuclear Reactor Regulation, as Drew indicated before. I have responsibility for the project 6 7 management oversight of the Vermont Yankee for now, 8 while it was operating, as well as now, that it's in the transition from decommissioning to -- or from 9 10 operating to decommissioning. Part of that oversight is for the review 11 post-shutdown decommissioning 12 of activities report, and I'll be talking about that. 13 14 As Bruce indicated, there is specific 15 requirements associated with the post-shutdown 16 decommissioning activities report, and those 17 requirements are called out in our regulations, as indicated in the slide. 18 19 We also have a regulatory guide that -- it 20 describes that the information that we expect to be in 21 the post-shutdown decommissioning activities report, 22 as well. 23 So, when we receive the report, we farm it out to other technical reviewers that have expertise 24 25 in the specific areas that are required to be in the report.

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So, I wanted to talk a little bit about the types of evaluation criteria that we have for that.

As Bruce indicated, we don't approve the report, but we do review it to ensure that it contains all the required information by our regulations. that's the key -- the first key activity.

We'll also look at the technical approach -- the approach that the licensee has described, which option they're planning to use to go forward, and to determine whether or not the approach that they've described is feasible, given the technology that -the technologies and the approach that they are planning to use.

The next key area is can it be completed within the time frame specified, and in this case, Entergy's plan indicates that they're going to SAFSTOR, and therefore, that they will be conducting the decommissioning activities over the 60 period.

So, is their plan feasible in -- and have they adequately described that to determine -- for us to be able to determine whether it can actually be conducted during that time frame.

So, the -- the next area is -- I'll call

it -- is the cost, and I'll talk about a little bit 1 more in the next slide. So, I won't get to that yet. 2 3 But the final thing is, you know, is it in 4 compliance with our regulations, and primarily, does it -- does that PSDAR -- are there any activities that 5 would potentially endanger the public health and 6 safety? Obviously, if that were the case, we would 7 not allow them to go continue to move forward with the 8 plan from that standpoint. 9 So, it needs to be -- needs to demonstrate 10 that it's protecting the health and safety. 11 Protected action guidelines 12 MR. SACHS: 13 are the current ones or the ones that got adjusted up 20 times after Fukushima? 14 15 MR. BROADDUS: So, as was mentioned before about the -- the cost estimate. 16 the post-shutdown 17 So. along with 18 decommissioning activities report, the licensee is 19 also required submit а site-specific to 20 decommissioning process. This is an estimate of the entire cost from start to finish, for the entire 60 21 22 year period. So, what we look at from that standpoint 23 is, are those costs -- are they -- have they -- has 24 25 the plan that they've laid out in the cost estimates

1 that they have, does that provide reasonable assurance to us that they're going to be able to complete the 2 3 decommissioning activities with the money that they 4 have available to them in the decommissioning trust. 5 I know that's an area of significant interest to folks today -- tonight. So, really what 6 we want to look at there is to look at the techniques 7 that they're using, have they -- are the estimates --8 are they based on realistic types of activities that 9 they would be conducting? 10 Have they identified all the areas that 11 12 thev need to address, as part of their decommissioning, and properly accounted for those 13 14 costs? 15 We also look at -- we understand that there could be changes that occur over that period of 16 the decommissioning period. So, do they have the 17 mechanism to adjust their -- both their cost estimates 18 as they're going forward with it, and to account for 19 if they have any funding shortages or -- how would 20 they adjust the funding, to ensure that they're going 21 to be able to complete the activities, if those 22 changes occur? 23 There is also continuous oversight of 24 those -- of the costs, as well. The licensee is 25

required to submit to us annually, a report of the 1 costs that they -- what they have spent, how much 2 3 money they have left in -- and how that comports with 4 the plans that they've submitted to us previously. 5 So, we'll look at that and make sure that they're staying on track, and obviously, is there is 6 7 anything that -- any deviations from that, we would have some questions or we would suspect that they 8 would address those changes within that. 9 In addition, if they make any significant 10 changes even throughout the year, they wouldn't --11 they would be required to report those changes to us, 12 as well. 13 As Drew mentioned before, part of our 14 review is also from an environmental perspective, and 15 he indicated before that part of what they need to 16 look at is how does their -- how do the environmental 17 impacts comport with other prior environmental impact 18 19 statements that have been performed. There are two key environmental impact 20 21 statements that would -- that would be applicable 22 here. 23 The first is the site-specific environmental impact statement that was performed for 24 25 the plant when it was originally licensed.

1	So, the activities would have to still be
2	within that original environmental analysis that was
3	performed at that time.
4	MR. SACHS: So, if there was Tritium on
5	site
6	MR. BROADDUS: And that is
7	MR. SACHS: is that in the
8	MR. BROADDUS: The NRC developed a a
9	number of years back, a generic environmental impact
10	statement on decommissioning, specifically for
11	decommissioning of nuclear facilities.
12	MR. SACHS: And that's what you're going
13	to use here?
14	MR. BROADDUS: This is
15	MR. SACHS: Even though there's a
16	preschool across the street?
17	MR. BROADDUS: This specific report was
18	specifically, they addressed three different options
19	for decommissioning, that Bruce mentioned earlier, the
20	types that they could go into, and the and the
21	typical types of impacts that would be expected of
22	those types of activities.
23	So, the licensee would have
24	MR. SACHS: Stakeholders want to be sure
25	

1	MR. BROADDUS: to ensure that they
2	would
3	MR. SACHS: with the decommissioning
4	MR. BROADDUS: The licensee would have to
5	ensure that they have addressed those environment
6	impacts and determine whether or not they're within
7	the those initial or previous environmental
8	reports.
9	MR. SACHS: We'd like the NRC not to
10	MR. BROADDUS: We will also continue to
11	assess the environment impacts throughout our
12	inspection program and see if there is any new changes
13	or any new environmental impacts that occur throughout
14	the process.
15	All right, finally, as we as Drew
16	mentioned earlier, we're here tonight to solicit
17	comments on the PSDAR.
18	Our review will consider those comments.
19	We'll look at those comments and we'll determine if
20	there is any any adjustments or any additional
21	information that is needed.
22	We would expect as well, that the licensee
23	would also be able you know, we would make those
24	available to the licensee, to make sure that they have
25	those and they they would have the opportunity to

see those public comments, as well.

As we go through our review, we may ask for additional information and we will -- we'll complete our review, once we have all the information and we're able to make the determination that the -- what they've submitted is in compliance with our regulations and provides all the information that is required.

So, we don't -- as we mentioned before, we don't approve it, but if it's -- if we need additional information to be able to complete our understanding of what they're going to be doing and understanding that they're -- of how they're going to proceed, we'll ask for that information and expect to get that as part of the responses.

Once we're done, we will notify the licensee that we don't have any -- don't require any additional information, and we'll also address, you know, the -- do a summary of the public comments as well, and we'll make sure that those are available to the public.

As Bruce mentioned before, the licensee can't begin major decommissioning until after 90 days, after they've received -- we've received the PSDAR and so, what we're -- in that 90 day period now, and we're

conducting our review at this point. 1 All right, so, with that, I'm going to 2 3 turn it over to Marc. 4 MR. FERDAS: Thanks, Doug. All right, my name is Marc Ferdas. I'm from our Regional Office, as 5 My group has responsibility for the 6 Bruce said. sites 7 oversight program, for that are in decommissioning --8 MR. SACHS: And how many have you done so 9 far? 10 MR. FERDAS: -- as well as sites that are 11 -- that have dry cask storage. 12 Before I kind of go into the details of 13 that, I'd like to just briefly mention how Vermont 14 Yankee finished its operating history from last year. 15 They finished the assessment period with 16 all green performance indicators and any findings that 17 18 were issued to them, as all green, meaning that they were -- they continue to be in the licensee response 19 column, the NRC's action matrix. 20 If you have any questions concerning prior 21 performance, Sarah Rich is here. She's the Acting 22 Senior Resident Inspector, who will be more than happy 23 to talk to you after the meeting about that. 24 So, I just wanted to point out how the 25

1	station did finish out the final period of operations.
2	With that, moving forward the way the
3	oversight program works, we continue to perform
4	oversight.
5	MR. SACHS: How often?
6	MR. FERDAS: We continue to monitor
7	MR. SACHS: How frequently?
8	MR. FERDAS: monitor
9	MR. SACHS: You do?
10	MR. FERDAS: activities at this site.
11	MR. SACHS: You're getting rid of one
12	inspector. How many will be there, sir?
13	MR. CAMERON: Gary, Gary. I'm going to
14	have to ask you to be courteous, so that people can
15	hear what is being said up here.
16	MR. SACHS: I'm just trying to
17	MR. CAMERON: You decide
18	MR. SACHS: see what goes
19	MR. CAMERON: You signed up, like
20	everybody else, and you're going to get your turn,
21	okay?
22	But so far, I think people are getting the
23	message. We're trying to ignore your outbursts
24	MR. SACHS: Three times
25	MR. CAMERON: and I don't want to have
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1	you escorted out
2	MR. SACHS: That doesn't work this state,
3	sir.
4	MR. CAMERON: because okay
5	MR. SACHS: That's not legal.
6	MR. CAMERON: because I know that
7	you're passionately concerned about this and you have
8	good questions, but you're going to have to just
9	MR. SACHS: You're disturbing
10	MR. CAMERON: be courteous.
11	MR. SACHS: the speaker. Let him just
12	
13	MR. CAMERON: Courtesy, okay.
14	MR. FERDAS: Okay, all right, thank you.
15	I just want to reiterate that the oversight and
16	monitoring occurs for the entire period of the
17	decommissioning process, and that includes as the
18	plant is shutdown, as it transitions to SAFSTOR, as
19	Vermont Yankee has planned, and also continues, as
20	long as there is spent fuel at the site.
21	Our focus continues to be safety and
22	security, as it was for the operating plants.
23	It's mentioned here on the slide, if you
24	are interested, you can go ahead and read about what
25	the oversight process or program entails. There is

really two documents I would point you to.

One, the first one referenced there deals

one, the first one referenced there deals with our decommissioning process oversight and then the second one deals with our dry cask storage inspection process.

Our oversight program really focuses on three main objectives. One is spent fuel being safely stored, being in the spent fuel pool or in dry cask storage.

Decommission activities are being conducted in a manner that ensures safety and security to the public workers and the environment, and then finally, that site operations and license termination activities are performed in accordance with Federal regulations and license commitments.

On this slide it kind of just gives you a quick summary of the type of things that we look at over the entire decommissioning process. We are -- our inspections are conducted by qualified inspectors that go through rigorous training programs. It's a combination of the Resident Inspector that is currently at the site, our Regional Inspectors from our Regional Office.

We also go to our headquarters technical experts, if needed for certain areas, as well as, we

have contractors available to perform independent 1 surveys or other analysis that may be needed for us. 2 At the completion of every inspection that 3 4 we do, there is a publically available inspection That can be found in our electronic docket 5 system, you've heard to it referred to today as ADAMS. 6 7 That's through our web-page. You can find all inspection reports that are issued. 8 Just -- I just wanted to guickly go over 9 where -- what the oversight status is for Vermont 10 11 Yankee, so, everyone has a current idea of what's 12 going on there. 13 Currently, we consider Vermont Yankee in the post-operations transition phase, meaning that 14 15 they're transitioning the plant to a long-term safe 16 storage, as their PSDAR lists. 17 Currently, there is major no 18 decommissioning activities being performed, as was 19 briefly mentioned, because they are within the 90 day period, but there are no immediate plans for any major 20 decommissioning work, and that is outlined in the 21 Vermont Yankee PSDAR. 22 They are developing plans and seeking the 23 necessary approvals to construct a second dry cask 24 storage pad. This will allow them to remove all spent 25

1	fuel that's currently in their spent fuel pool, and
2	this would be in addition to the
3	MR. SACHS: Will this be collected
4	MR. FERDAS: the casks that they
5	already have
6	MR. SACHS: Casks we have or do not
7	MR. FERDAS: onsite that have the
8	dry cask storage
9	MR. SACHS: they were not regulated
10	tested will these be done correctly, sir?
11	MR. FERDAS: And then finally, what I just
12	want to reiterate again is that, you know, the
13	oversight activities are being performed. They will
14	be performed in the immediate future, but also, the
15	long-term future, as well, and as I said, our program
16	is well-defined and it is available for the public to
17	review to review and to get more of the details.
18	So, Drew, I'll turn it back to you now.
19	Okay, we have one more slide. Thank you.
20 .	One area, this kind of is some of the main
21	reference documents, not only from what I've talked
22	about, but what the other speakers have talked about,
23	that are good documents to review. All of these are
24	available in our public webpage.
25	So the other thing I would encourage

1	people to take a look at is the You-Tube video that
2	has been put together, that talks kind of, a lot of
3	what was talked about today, but discussed in the
4	decommissioning process.
5	MR. PERSINKO: Thanks, Marc. That
6	concludes the NRC's presentations.
7	At this point, I'll ask Mr. Joe Lynch from
8	Entergy to present the contents of the PSDAR that was
9	submitted to the NRC.
10	MR. LYNCH: Thank you, Drew. My name is
11	Joseph Lynch. I'm the Government Affairs Manger
12	MR. SACHS: The dude with the cavalry.
13	MR. LYNCH: I'd like to
14	MR. SACHS: Shit, that's great.
15	MR. LYNCH: thank
16	MR. SACHS: What other plans have you got?
17	MR. LYNCH: the NRC for the opportunity
18	to
19	MR. SACHS: Entergy's great that way.
20	MR. LYNCH: provide an overview of the
21	
22	MR. SACHS: You lied to us. How about
23	MR. LYNCH: PSDAR process.
24	MR. SACHS: you, sir? The last time,
25	they were lying to us. Here he is, telling us how
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1	great he is.
2	MR. LYNCH: I'd like to start with
3	MR. SACHS: I'd like to see
4	MR. LYNCH: a brief overview of some of
5	the recent milestones that we accomplished as we
6	headed up to the point where we've issued our PSDAR.
7	As many of you know, we ceased power
8	operations on December 29th, 2014.
9	MR. SACHS: At least you guys are honest
10	about something.
11	MR. LYNCH: After 633 day run of
12	continuous safe power operations
13	MR. SACHS: God dammit, are you guys safe.
14	MR. LYNCH: On January 12th of 2015, we
15	completed the defueling of the reactor, moving all the
16	fuel from the reactor, to the spent fuel pool.
17	MR. SACHS: How many rems did the workers
18	get?
19	MR. LYNCH: And on that same day, we
20	provided certification to the NRC, as Drew mentioned,
21	both indicating that we were ceasing operation of the
22	facility, as well that we certified that fuel had been
23	removed from the reactor.
24	As Marc recently mentioned, we entered
25	into the new oversight process that's that for

42 decommissioning inspection program, exiting from the reactor oversight process, and really, the most important message to all of you regarding our future is our commitment to our employees, to the public and to safety, and when I mean safety, I mean nuclear safety, environmental safety, the security of the people around the site, of the robust security force that we have and our commitment to doing this project correctly and transparently. Leading up to the shutdown, Vermont Yankee announced in August of 2013, the intention to shutdown the facility at the end of 2104, and what's significant about that is, we formed

immediately, a decommissioning planning organization to start the process of leading up to where we are right now.

So, in essence, we've been working on the draft of the PSDAR for about 16 months and we were in a very good position to issue the PSDAR at the end of 2014.

This was consistent with the settlement agreement that we had reached with the State of Vermont, which would provide that information in advance of its submittal.

Included in that settlement agreement were

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a number of initiatives to help the economic benefit 1 of both the Windham County area, with an economic 2 development fund, a total of \$10 million was going to 3 be provided for economic benefit over a five-year 4 period. 5 We also provided \$5.2 million to the Clean 6 7 Energy Development Fund and we started payment to a \$25 million site restoration fund, in which the first 8 \$10 million has been provided to that particular fund. 9 With all of that, we were issued a 10 certificate of public good by the Vermont Public 11 12 Service Department on March 28th, allowing us to operate through the end of 2014. 13 The last significant milestone that we 14 15 accomplished prior to issuing the PSDAR for NRC review was the issuance of a site assessment study. 16 We believe this is a first of a kind 17 developed in part, 18 that was to 19 information to key stakeholders, state agencies and the public, in advance of us submitting our PSDAR. 20 It included a draft PSDAR, about 60 days 21 before we submitted the final one, to allow people to 22 23 take a look at what it contained. It also gave a summary of our decommissioning cost estimate, and it 24 provided two historic site assessments, one for all of 25

the radiological events that occurred at the site that were note-worthy and would be part of decommissioning, as well as the non-radiological events that occurred at the site, and these are two living documents that will be updated, as we go forward with decommissioning.

The finally, we did issue our PSDAR on

The finally, we did issue our PSDAR on December 19th, and we provided that on our website Vydecommissioning.com, for everyone's review and to ready people for this opportunity to provide comments to the NRC.

Our transition from operating to decommissioning and the SAFSTOR plan that we have also involves reductions in our staffing. So, right up to the end of 2014, we're about 550 staff. We've reduced that staffing down to about 316 going forward. That occurred on January 19th.

Our dedication at that point was to our employees, and we're happy to report that all, but a very small amount, less than six of our employees found employment either within Entergy or within the industry or in their area of expertise, and that was a very important focus for us as a company.

We'll be going through another staff reduction --

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MR. SACHS:

What happened to Mr. Romero?

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MR. LYNCH: -- at the mid-point of 2016, where we expect to go from our current staffing level of about 315 to 320, to about 127, as we transition to the point where we'll be putting fuel from wet to dry, and then finally, as we transition into the full SAFSTOR organization, we expect that organization to be about 57 to 75 people, the majority being security, overseeing the safe and continuous view of this site.

As far as our PSDAR is concerned, we wrote that using the guidance provided by the NRC. being 10 CFR 50.82, as well as Reg Guide that the NRC has issued, the same Req Guide they'll be using to review the PSDAR Reg Guide 1185 Revision 1.

We also reviewed a number of PSDAR's that were submitted by other sites that were either in decommissioning or in previous the process decommissioning, to make sure that we are getting operating experience and experience from other plants that were in this particular position, and we put together this experienced team that included our own folks from our decommissioning planning organization, as well as the TLG Services, which is an industryknown decommissioning estimating organization, who also had expertise in writing PSDAR's.

The content follows very closely, the Reg Guide and it has a description of the planned decommissioning activities. It goes through a very detailed schedule of decommissioning. It provided the detailed decommissioning cost estimate and talks about the environmental impacts and how we comply with them.

As mentioned by the NRC, this is a living document. So, any major changes to our plans for decommissioning would inspire us to revise the PSDAR, as part of those regulations.

The decommissioning schedule that we have developed based on the SAFSTOR plan that we're going to implement at Vermont Yankee has us going from where we are right now, into a preparation period, from essentially when we shutdown at the end of the year, to the midpoint of 2016. We'll be making plans for transition into SAFSTOR.

From the middle of 2016 until the year 2020, we'll be going through the process of moving the fuel from wet storage to dry fuel storage, that will include the installation of a second dry cask fuel storage pad and the loading of 45 additional canisters, and I'll talk a little bit more about that.

Then we enter into a long-term SAFSTOR

period. Right now, we're assuming that to be about 32 1 2 years, which will have the plant laid up in a dormancy 3 state with the fuel all stored onto a dry cask fuel 4 storage. 5 It is our estimate right now, based on information from Department of Energy, that they will 6 be taking fuel and completing that by around 2052, at 7 8 which point, we will then transition to the final part 9 of the dormancy period. 10 The one thing I will note, and I put --11 MR. SACHS: When will this happen? -- the slide is that this is 12 MR. LYNCH: 13 based on the growth of the decommissioning trust fund, at the rate the NRC allows by regulation, which is 14 about two percent per year. 15 If that decommissioning trust fund was to 16 grow at a faster rate, which it has since Entergy 17 18 purchased Vermont Yankee, then we would be moving all 19 dates would be starting these up and we decommissioning and completing decommissioning sooner 20 than these projected dates that's in our plan right 21 22 now. As we make our final preparations for 23 decommissioning, right now, the estimate is that we'll 24 25 start in about 2068 and be complete in about a year

and half. Then we will qo into decommissioning, which would include large component removals for about a year and a half, followed by large system removals, building decontamination and demolition from 2070 to 2073, about two and a half years' worth of work, and then finally, as described, we'll enter into our license termination period. will meet the NRC requirements for unrestricted site use and the 25 millirem per year criteria established for unrestricted use.

Then finally, we'll enter into a site restoration period, which will take us to about 2075 and about 59 years from the shutdown of the facility, and again, all these dates are predicated on the assumption that the growth of the fund will be in accordance with what we're allowed to by regulation, but based on traditional and past performance, we expect that we'll be able to move that up.

Moving onto spent fuel management, which is an important element of the PSDAR.

The current status of our dry fuel storage is that we have 13 canisters loaded and safely stored on the first of what we believe to two independent spent -- I'm sorry, independent spent fuel storage installation pads.

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49 1 We do have an application in for a second pad, that was submitted to the Vermont Public Service 2 Board on June 30th, seeking approval. We expect to 3 4 have that approval next year, at which time, we'll 5 start construction on the second pad. In total, we'll have an additional 6 casks for 58, storing all of the fuel, and again, as 7 8 I mentioned earlier, our plan is to have that complete by the year 2020. 9

> The next slide shows a photograph, and aerial photograph of our independent spent fuel storage installation and the arrows pointing to the existing pad, and then the next slide shows current location of our first pad and then the warehouse that's just to the right of that is the location for the second pad. So, they'll be adjacent to each other, to allow the loading, based on the existing load pad that we have in place.

> SPEAKER: Can you clarify, the round drawing to the lower left, what might be there, a parking lot, where there's a pad? Is that where spent fuel is now currently stored?

> MR. LYNCH: This is the existing pad right This photo is from 2008, and it shows five canisters loaded on the pad.

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So, this is one of two pads. 1 The second 2 pad would be located where this warehouse is right 3 now, and will look very similar to the one that we 4 have installed currently. 5 SPEAKER: How many casks are there now? 6 MR. LYNCH: There is 13. 7 SPEAKER: Now? MR. LYNCH: Thirteen now on that first 8 9 pad. MR. CAMERON: We're going to have to move 10 11 on, and then we'll get to the questions. Go ahead, 12 Joe. MR. LYNCH: Next slide, please. Submitted 13 at the same time as our PSDAR was our irradiated fuel 14 15 management plan. Again, this was submitted in accordance with NRC regulations, and NRC will be 16 conducting their review in accordance with their 17 18 process. 19 This essentially discusses the changes to 20 our program for the management of irradiated or spent 21 fuel. We intend to manage the fuel in accordance with 22 the plan, to move all the fuel from wet to dry. also provide the information about how we're going to 23 24 fund the movement of the fuel and pay for the spent

fuel management going forward, and as I had mentioned

earlier.

Then again, to summarize where we stand with our existing fuel, the spent fuel pool right now contains 2,996 spent fuel assemblies. The 13 canisters I described carry -- contains 884 spent fuel assemblies.

So, right now on site, there is a total of 3,880 spent fuel assemblies, and again, based on the latest information from the DOE, we expect their loading campaign would start in about 2026 for Vermont Yankee, complete by 2052, and this program also further talks about our strategies for managing the fuel and the funding going forward.

The last thing I'll talk about is our detailed Decommissioning Cost Estimate. This was prepared in accordance with NRC guidance, again, by TLG Services, using their cost estimating model, which is used by the majority of the industry, and it also was informed by plan-specific data, walk-downs that we did at the sites and using our design basis to determine the size of the buildings and structures that are on the site.

The decommissioning cost estimate contains specific costs for the three elements of decommissioning, that being the license termination,

spent fuel management, site restoration, and it also 1 breaks down the costs by each period, as we work our 2 3 way through decommissioning. Some of the key estimates -- I'm sorry, 4 of the key assumptions used in the some 5 decommissioning cost estimate is that we'll have the 6 second dry cask fuel storage pad installed in about 7 2017. We'll expect to have all of the off-loading of 8 fuel from wet to dry complete by 2020. 9 Again, the assumption is that DOE would be starting to remove 10 fuel from the site in 2026, completing in 2052. 11 MR. SACHS: Did you put your own --12 Our SAFSTOR period is 52 13 MR. LYNCH: We'll be starting 14 as I mentioned earlier. active D&D or decontamination and dismantlement in 15 16 2068 --MR. SACHS: How about 2021? 17 MR. LYNCH: -- and that will be about six 18 years, and then finally, the time assumed is 1.5 years 19 for site restoration? 20 MR. SACHS: What if you find Strontium? 21 MR. LYNCH: And again, some of the -- the 22 background information is that this is all predicated 23 on following NRC regulations in clean up standards, 24 25 that being the 25 millirem per year --

1	MR. SACHS: And what if the money is not
2	there in 60 years?
3	MR. LYNCH: The current
4	MR. SACHS: That's what will happen,
5	right?
6	MR. LYNCH: cost estimate for the
7	decommissioning of the site is \$1.24 billion. We put
8	that out
9	MR. SACHS: Can you subtract out the
10	MR. LYNCH: in our assessment study
11	MR. SACHS: the two lines of what it
12	leaves
13	MR. LYNCH: That's all we
14	MR. SACHS: so we know how much we're
15	looking for?
16	MR. LYNCH: have in the
17	MR. SACHS: So, you basically subtract out
18	the two lines of credit
19	MR. CAMERON: Gary?
20	MR. SACHS: and I want to know
21	MR. CAMERON: Gary?
22	MR. SACHS: I want to know.
23	MR. CAMERON: Come on.
24	MR. SACHS: I'm serious.
25	MR. CAMERON: Gary, please. I know you

1	want to know, but let's let him finish so
2	MR. SACHS: I'm wondering
3	MR. CAMERON: we can go on to all of
4	the
5	MR. SACHS: the \$1.24 billion minus the
6	two lines of credit
7	MR. CAMERON: Okay.
8	MR. SACHS: of moving the spent fuel
9	leaves us how much are we looking for?
10	MR. CAMERON: Please finish up, Joe.
11	MR. SACHS: Now, that \$1.24 billion
12	MR. CAMERON: Please finish up.
13	SPEAKER: We need to know that.
14	MR. SACHS: Thank you.
15	SPEAKER: We need to know that.
16	MR. SACHS: We do.
17	MR. LYNCH: The \$1.24 billion
18	MR. CAMERON: You will.
19	MR. LYNCH: is made up of those three
20	elements that I mentioned earlier
21	MR. SACHS: What about the lines of
22	credit?
23	MR. LYNCH: Our current estimates are
24	license termination of \$817 million. There is the
25	cost of site restoration at \$57 million and the

management of the spent fuel will be \$368 million. 1 The current balance of the nuclear 2 decommission trust as of the end of 2014 was \$664.5 3 4 million. The next slide just shows a graphic of how 5 the decommissioning costs are broken down, totaling up 6 to the \$1.2 million. 7 I will talk a little bit about the spent 8 fuel management costs. I had mentioned the total cost 9 was \$368 million. That breaks down into two elements, 10 that being the operational costs. This is the year-11 to-year costs of overseeing the spent fuel up to the 12 year 2052, when we assume it's going to be completely 13 removed from the site. 14 MR. SACHS: You expect that? 15 MR. LYNCH: That is \$225 million and then 16 the cost to actually complete the transfer of the fuel 17 from wet to dry, completing in the year 2020, would be 18 at a cost of \$143 million. 19 In order to fund this, Entergy 20 established two lines of credit. They total \$145 21 million and the strategy here is to use this private 22 funding, so that we don't have to take money out of 23 the nuclear decommissioning trust, thus allowing the 24 25 trust --

1	MR. SACHS: God, you guys look good.
2	MR. LYNCH: to remain, and then we
3	would we would
4	MR. SACHS: How nice of you
5	MR. LYNCH: use the opportunity to
6	MR. SACHS: Why are you so nice to us?
7	MR. LYNCH: use this with the
8	Department of Energy, to recoup those costs.
9	In conclusion, our focus as we transition
10	to dormancy and dry cask fuel storage would be
11	continued compliance with our settlement agreement
12	with the State of Vermont. We do have a number of
13	decommissioning preparation activities, including
14	system lay-ups and draining and systems, de-powering
15	certain buildings to cold and dark
16	MR. SACHS: How about cleaning up the
17	Strontium?
18	MR. LYNCH: and we've upgraded our
19	security modifications.
20	We'll also have some select out-buildings
21	that will be removed to shrink the footprint on the
22	site, and get those activities done before we enter
23	into dormancy.
24	MR. SACHS: Aren't you going to put
25	MR. LYNCH: We will have a commitment

1 MR. SACHS: -- more buildings --2 MR. LYNCH: to ongoing our 3 environmental monitoring programs --MR. SACHS: Aren't you guys going to buy 4 5 anymore --6 MR. LYNCH: -- those will not change, even 7 though we've entered into decommissioning, and one of the very key milestones that we expect to be working 8 9 through this year is to work closely with the State of Vermont to negotiate some final site restoration 10 standards, which is one of the elements 11 in settlement agreement that is yet to be completed, but 12 13 it's our intention to complete that this year. Then finally, completion of this. 14 To 15 continue to get information out to the public, 16 expect to have open and transparent communications 17 that through our -- both our contribution to and 18 participation in the nuclear decommissioning citizen's 19 advisory panel, which has met five times since the announcement, and we expect to continue to have a role 20 in that, providing updates on a regular basis. 21 The 22 next meeting is next Thursday, February 26th. We also will continue with our stakeholder 23 both through speaking engagements 24

community involvement. I'm proud to say that last

1	weekend, we were a sponsor for the Harris Hill ski
2	jump event for the 30th year in a row, in Brattleboro,
3	which shows that we've been very serious about our
4	commitment to the community.
5	Finally, we'll be continuing tours of key
6	stakeholders and all the information, including this
7	presentation and any future information having to do
8	with decommissioning will be on our website for public
9	review.
10	MR. SACHS: Thank you. Great job, man.
11	MR. CAMERON: Okay, thank you to the
12	Panel. We're going to go to we're going to go to
13	three officials from the State of Vermont. We're
14	going to start with Chris Recchia, then we're going to
15	go to Bill Irwin and then to Chuck Schwer. Got it?
16	Okay.
17	SPEAKER: How can we sit here for over an
18	hour and please.
19	MR. CAMERON: Okay, we're going to try to
20	get some heat, yes. I apologize. I apologize, Deb,
21	and to all of you. It is cold, okay.
22	So, Chris, do you want to talk from here?
23	MR. RECCHIA: Yes. Hey, thanks, very
24	much, Chip.
25	Chris Recchia, Commissioner of the Public

Service Department. Thank you all, very much for 1 2 coming. If it's any consolation, it was colder 3 4 last month for the meeting. I think -- yes, we'll 5 check on the heat before we come back here. Thanks for coming to Vermont. Welcome to 6 the state that has 45 percent of its electricity now 7 produced by renewable resources. 8 MR. SACHS: Nuclear is not renewable, 9 dear. 10 MR. RECCHIA: We haven't bought any power 11 from the plant for -- since 2012, when we thought it 12 should have shut down, and we're pleased to be moving 13 14 on. That said, you know, we did reach a 15 settlement agreement with Entergy, and it's been 16 successfully implemented to date, including, you know, 17 all of the -- all of the milestones that have been 18 19 requested of both of us in that, and I want to thank Entergy for that work, including the site assessment, 20 which was a unique document that went back to look at 21 all the potential things that are on the site, and 22 23 that need to be factored into decommissioning, or decontamination and dismantlement. 24 But I do note that, you know, there's a 25

60 1 lot that's going to be discovered. I equate this to 2 -- for those of you who bought a house, when you 3 bought your first house, it was, you know, like really 4 exciting to see it the first time, and it all went 5 downhill from there. You went and you went back for another 6 7 visit and you discovered, "Oh, the plumbing is not quite right, the electricity is not quite right. We 8 9 got, you know, some septic issues, " and you know, but you still buy the house and you're happy about it. 10

> Well, you know, we're going to decontaminate a plant here that will discover other things, and I think that's the focus of my main comments, is the concern that the costs are going to be -- are going to become clearer, as we go forward and the picture is not going to get better.

> You know, I have to mention the Strontium-90, one example, even you know, in the last few months, we have determined that that's present, and where it came from and what the ramifications of that are, we don't know yet.

> But let me go to a couple of positive things first, before I got to -- and I just want to say that, you know, Chuck and Bill will follow.

> > We intend to submit written comments and

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I'm not -- I'm not trying to in any way, you know, categorize our comments tonight. I want to give you a favor for them, and we'll go into, you know, written comments, as time goes on.

But I do want to note that, you know, we gave Entergy -- Entergy -- as part of the settlement agreement, Entergy gave us the PSDAR and the settlement -- and the site assessment, 60 days before they filed the PSDAR with you, and we submitted comments to them totaling, I think it was close to 200 comments or questions, and we're waiting for a response from them, and we'll -- we will develop a written response to you guys.

But you know, I want to acknowledge that we are in a different mode now, right? The plant has shut down. It is -- the reactor is defueled and the fuel is in the spent fuel pool.

That said, you know, we are anxious and part of the settlement agreement or Entergy's commitment, I should say, it was not part of the settlement agreement, is to try and move the fuel by 2020.

We appreciate that. We think that's the next milestone here that we need to shoot for. I will say that, you know, our concerns relate to the

emergency protection zone in the interim. It relates to -- our concerns relate to the -- to the nuclear decommissioning trust fund and how it's expended, and that is within your purview as well, or needs to be, and we're going to be focusing on that.

Then you know, really the long-term management of the site. Our goal, or the Governor's goal is to get this site restored for any purpose, as soon as possible, and what that means is, we need a commitment from the Nuclear Regulatory Commission and from Entergy, to spend costs wisely, to grow that fund, as the trustee has been doing, and to make sure that we can do this work as quickly as possible.

So, with that, I guess I will switch over to my colleagues from the other agencies. I just do want to say, it was one more point that I wanted to make, which was particularly, on the expenditures of the funds, and we'll express this more in the comments to you.

I know your focus is on safety and concern with that, but you were the -- you are the stewards of the funding and the determination of when it is okay and able to be fully decontaminated and dismantled, and I do think you need to pay better attention to the fact that we have switched environments here from our

1 regulated utility structure to one where we have merchant facilities that need attention. 2 As a regulator myself, please step up to 3 4 the regulator role and pay attention to this because it's really important for Vermont. So, thank you all 5 very much. 6 Okay, this is Bill Irwin. 7 MR. CAMERON: I'll let him introduce himself, and then we're going 8 to go to Chuck and then we're going to go to Deb Katz, 9 Arnie Gundersen and Leslie Sullivan Sachs. 10 11 MR. IRWIN: Thank you, Chip, and thank you 12 to the NRC for making this meeting available for the 13 work that you're doing and that you're going to do, to ensure the safe decommissioning of the plant. 14 I am the Radiological and Toxicological 15 16 Sciences Chief for the Vermont Department of Health, and I'm also a member of Nuclear Decommissioning 17 18 Citizen's Advisory Panel. I'm going to provide a brief summary of 19 20 our Health Department's written comments, which we 21 will be submitting to you shortly. First of all, we believe that PSDAR is 22 23 written with inadequate detail for the Department of Health to be confident that the public health and the 24 25 environment are protected during any of the phases of decommissioning.

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The PSDAR does not adequately estimate the number and types of personnel onsite to accomplish work, especially wet spent fuel operations, fire protection, monitoring of structure system and component integrity and radiological and environmental monitoring for the Health Department to be certain that public health and safety will be served to the degree needed.

The PSDAR also does not describe the depth breadth radiological environmental and of the monitoring program. Doing so is important because of the volume of radioactive materials generated by plant operations and to be maintained within the structures, systems and components during each phase οf decommissioning.

Nuclear reactors that are in SAFSTOR at multi-unit sites like Millstone 1 and Indian Point 1 are subject to a robust radiological environmental monitoring program for the other operating reactors at the site.

The PSDAR provides no indication that robust radiological environmental monitoring is planned or can be executed at Vermont Yankee.

Radiological emergency preparedness during

decommissioning is also inadequately described in the 1 PSDAR. 2 The basis of emergency planning seems to 3 4 ignore hostile action based scenarios that could destroy key structures storing radioactive materials 5 or result in Zirconium fuel fire. 6 Relative to demolition to three feet below 7 grade, it's clear from records of -- that there are 8 deeper depositions of soil contamination and that 9 demolition more than three feet below grade will be 10 required in numerous places at Vermont Yankee. 11 Significant leakage of reactor condensate 12 radioactive material spills have occurred in the 13 advanced off-gas piping total from piping between the 14 15 AOG building and the radioactive waste building, the radioactive waste building, 16 around condensate storage tank yard and between the reactor 17 radioactive waste in AOG buildings and Connecticut 18 19 River. The PSDAR provides no assurance that the 20 challenges of remediating these radioactive materials 21 are factored into the planning and the funding for the 22 decommissioning of Vermont Yankee. 23 With regard to fire protection systems, 24 there is no evidence provided in the PSDAR that local 25

fire department personnel are fully prepared for onsite firefighting with limited support offered by 2 the staff at Vermont Yankee. 4 There is also no evidence in the PSDAR how offsite responders can manage offsite contamination 5 that might result from fires that consume radioactive 6 7 materials stored onsite. We also believe that radioactive materials 8 onsite are not adequately characterized to make adequate decisions about the effectiveness of the 10 post-shutdown decommissioning activity report.

In particular, a number of events at Vermont Yankee have left significant amounts of land, as well as many structures, systems and components in a radiological condition that has not been fully characterized.

to public votes, Relative the PSDAR describes the 2002 generic environmental statement determination that the assessed range of possible radiological accidents during decommissioning concludes that the risk at spent fuel pools is low and well within the NRC's quantitative health objectives.

That document, written in 2002, published just months after September 11, 2001, certainly could not have anticipated what we learned September 11,

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2001, and these hostile actions, according to the 1 National Academies of Science, could lead to a 2 Zirconium fire in the spent fuel pool or severely 3 4 damage the torus will more than 1.4 million gallons of radioactive water will be stored until decontamination 5 and dismantling. 6 generally, we'll 7 So, see additional 8 comments, more specificity in our written remarks. We find it very helpful that Entergy provided a site 9 10 Hopefully, you'll assessment study. find that valuable too, because it does give much more detail on 11 some of the historical characterization. 12 13 We appreciate the fact that that was negotiated and we also appreciate the fact that 14 15 Entergy has run this plant very safely for the 41 16 years of operation, so far. We hope that it maintains 17 that throughout the decommissioning process, as short 18 as that can be. Thank you. 19 MR. CAMERON: Thank you very much, Bill 20 and this is Chuck. Thank you, everybody, 21 MR. SCHWER: Hi. and thank you, NRC. We appreciate the opportunity to 22 23 comment tonight. 24 My name again is Chuck Schwer. I represent 25 the Agency of Natural Resources. We have a much

1 smaller role in this than the first two speakers, but also, a very important role. 2 mainly 3 We're focused on the non-4 radiological component of risk at Vermont Yankee. So, our agency has independently reviewed 5 I'm going to just share some of our the PSDAR. 6 comments, that will also be provided in writing. 7 8 So, comment one. The SAFSTOR time line 9 delays, and excuse me, the SAFSTOR time line delays important planning and decision making processes, 10 important site characterization and remediation for 11 12 non-radiological contaminates should not be delayed while VY is in SAFSTOR. 13 14 Two, the PSDAR process inadequately 15 assesses the site-specific environmental impacts of Entergy's decommissioning activities necessary to 16 17 facilitate proper planning. 18 The οf environmental range impacts 19 addressed by the PSDAR does not include environmental 20 with non-radiological contaminants impacts 21 generation and storage of non-radiological waste. The PSDAR process lacks adequate 22 Three. 23 review of decontamination activities. There is no requirement for altering decontamination activities in 24 light of associated environmental impacts or for 25

1 otherwise modifying the PSDAR, in light of issues raised during the public comment process. 2 Lastly -- thank you, and lastly, the 3 settlement agreement between Entergy and the State of 4 5 Vermont requires Entergy to review and consider comments provided by the state for inclusion in the б 7 PSDAR. evidence 8 There is no that Entergy considered or incorporated feedback from the state in 9 its comments on the October 2014 site assessment 10 study. 11 Additionally, the state 12 specifically requested additional information, to be able to assess 13 impacts of 14 the environmental decommissioning activities, as outlined in the site assessment study 15 16 and the PSDAR. The state has not received a response 17 to these requests to date. Thank you for this opportunity. Thank 18 19 you. 20 MR. CAMERON: Thank you, Chuck. We're going to go to Deb Katz. Deb, do you want to come 21 down here, and then Arnie Gundersen, Leslie Sullivan 22 23 Sachs. Don't clap yet, because you 24 SPEAKER: 25 don't know what's going to happen.

SPEAKER: Could you please tell us before 1 2 Deb starts, again, the names of these two gentlemen and the agencies they represent? 3 4 MR. CAMERON: Okay, well, this is Bill 5 Irwin and Bill is Department of Health, and this is Chuck Schwer, Department of Natural Resources. 6 7 SPEAKER: But I can't see them. 8 MR. CAMERON: Okay, and you know Chris You know his -- okay, all right. 9 Recchia. Okay, this is Deb Katz. Deb? 10 I'm Deb 11 MS. KATZ: Katz. I'm the Citizen's Awareness Network. We have about 3,000 12 members in the tri-state community. We were involved 13 in hearings on the decommissioning of Yankee Rowe and 14 15 Connecticut Yankee. We actually sued the NRC and won 16 lawsuit against you guys, for the illegal decommissioning of Yankee Rowe. 17 So, that's the context for having some 18 19 knowledge of issues, and I want to thank the state for the clarity that they provided in their comments. 20 really appreciated it, and I think it's really 21 22 important, and it actually allows me to not go into the weeds, but to try to look at some financial 23 issues, in terms of Entergy being a merchant plan, and 24

how that impacts the issues of clean up.

I want to look at it in the first five years, not in terms of that endless long line that seems to go on forever for clean up, but in terms of the movement of the fuel, which is the most dangerous activity that's going to go on. In fact, one of your NRC representatives I think said, "This is a very risky operation."

In terms of that, the issue of Entergy's financial vulnerability and their wanting to use money from the decommissioning fund to keep the EPZ in fact, in place, in fact, their request to end the EPZ at this point is really troubling to people in this community, because in fact, the movement of that fuel is a very big deal.

There are two elementary schools, basically a stone's throw from the reactor, and the reactor is located in a village, in the middle of it.

This is a site-specific issue, not a generic one, about why the EPZ should stay in place, just as it is a site-specific issue, that during the transferring of the fuel, that that school in Vernon and the one across the river in Hughsdale, should not have elementary students in it, when they're moving the fuel, which is about 400 tons, at this point. Some say got 13 casks on site.

It is unconscionable. It is madness, to think that elementary kids will be in school when they move their fuel, and it is up to you as regulators, to call a halt to that idea.

But all of this revolves around the issues of Entergy's not having the financial where-with-all to clean the site up, because it hasn't paid into the decommissioning fund, and so, there isn't enough money.

Now, there hasn't been enough money at any nuclear site that you've had oversight over. Rowe didn't. Connecticut Yankee didn't, but they had a rate base to go back to, and Entergy has none, and your regulations don't adequate deal with this situation, in terms of keeping this corporation accountable.

Two-million dollars a year to keep the EPZ in place is not a big deal for five years. Hey, guys, that's \$10 million. How come Entergy doesn't have that money, and if they don't have that money, how come the parent corporation that signed a letter saying they would be responsible if Entergy, the limited liability corporation running the reactor, didn't have money, that in fact, the parent corporation would?

adequate

So, why isn't the parent corporation being asked to come up with the money for that? There is a problem in all of this. as if those students need to be moved from the school, that there is a plan that in fact, the corporation pays to help relocate those students during that time, and all of this revolves around the issues that the NRC did not require a fully funded decommissioning fund, to have in place, before the reactor closed, and you guys have done this at every This isn't new to you. site. You talk about the seven reactors that

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you've overseen, and you've failed at every one of them, to have enough money in the fund. Failed. It's all on the rate payers to come up with the money again and again, but we can't. Entergy has no rate base.

So, they're not in a good situation, but I don't understand why their parent corporation isn't being asked to come up with the money, rather than raiding the decommissioning fund for money to keep the EPZ in place, or to move the high level waste or to babysit the high level waste for 50 years they're talking about.

Why should the decommissioning fund go to babysit the waste, when the nuclear industry and the

Federal Government have advocated their responsibility 1 to have a place for the high level waste? 2 unacceptable, 3 Ιt that the 4 decommissioning money be used this way, and there is no reason why the \$7 billion corporation that Entergy 5 is, can't come up with a measly \$6 million a year to 6 babysit the high level waste, and the \$2 million a 7 8 year for five years? Come on, guys, you can do a better job. 9 MR. CAMERON: Okay, thank you. Thank you, 10 Deb. 11 12 going to to Arnie Okay, we're qo 13 Gundersen. MR. GUNDERSEN: Thank you. Yes, hi. 14 I'm Arnie Gundersen from Fairewinds. 15 16 I'm here tonight. We have a Lintilhac 17 grant to analyze the decommissioning plan. So, I put 18 in about 200 hours on the decommissioning plan, in 19 addition to a 40 year career, which included working on subcontracts with decommissioning of Shippenport, 20 and as a radiation -- member of the Radiation Safety 21 Committee at a plant that decommissioned licensee 22 23 facilities around the country. So, I appreciate that you're giving me 24 five minutes to explain 40 years' worth of experience 25

1 || here.

First up, my third year -- third grade teacher is rolling over in her grave. It's SAFSTOR and it rhymes with sap, not safe-store. There is no 'e' there.

Second, there is no bases in physics for 60 years. It's a subsidy to the nuclear industry.

Here in Vermont, we have to -- a windmill has to have a fully funded decommissioning study -- fund, before it starts, and we give Entergy 60 years to clean up.

It's really about the money. It's not about trying to minimize worker exposure. The example is a 60 year SAFSTOR will use about 300 rem in radiation, but when Entergy needed to start Palisades up in three weeks, they dished out 115 rem in three weeks.

So, when the goal is to get a plant up and running, those be damned. Please don't hide behind SAFSTOR, there's no bases in physics.

Second, second is the emergency plan. We should have an emergency plan in place as good as what it was, until the fuel is removed, and you've also allowed the tech specs to be changed, so the fuel pool ventilation is no longer covered under the technical

1 specifications. That is an indication that you just don't believe that an accident can happen. 2 Frankly, we had an accident here. 3 4 be the only one in the room that remembers, but in 2008, the crane brakes broke, as they were lifting the 5 canister with spent fuel in it. 6 7 So, accidents can happen, and in fact, have happened, and I think that needs to be reflected 8 in the emergency plan. 9 I agree with Deb that we've got -- if 10 11 you've got to be moving those canisters, we know the failed in the past, and that's an 12 brakes have indication that they might fail in the future. 13 Do it in the summer when the school is 14 15 This is not rocket science and it's not a lot of Move the fuel when the kids aren't there. 16 money. All of this, by the way, will be in a much 17 longer report that Sarah Rich will be doing and also, 18 19 we will be putting an hour-long presentation that I gave, on the web next week, with more details, and we 20 21 urge you to write to these guys in the next month. 22 The next thing is the AOG building. I said five years ago in 2010, when I was on the Government's 23 oversight committee, that you were going to find 24 cesium and you were going to strontium under the AOG 25

1 building. Guess what? You did. 2 Now, you've got strontium at the well. I'm telling you, I know where it's coming from. 3 4 under the AOG building. 5 We can remove the AOG building now, and save money in the decommissioning fund. We're paying 6 7 -- we're paying by the cubic foot. Most of the horses are still in the barn. Most of the horses are still 8 9 under the AOG building. We can move the AOG building 10 and reduce the ultimate cost of the decommissioning. Now, Entergy has already told us in 60 11 years, they're going to say they're told to sue us, 12 13 "We're out of here," so that if that strontium is run, 14 it's going to be out liability. We have a chance to 15 nip it in the bud. 16 We can close the barn doors, decommission the AOG building right now. 17 That's it for safety. The others are economic. 18 19 The LLC issue, this is a -- you guys think 20 -- we're establishing a precedent here. The plants 21 that you have up there are all utilities. This is an LLC, and there is a big difference, as Deb already 22 23 said. Mr. Watson from the NRC said three weeks 24 25 ago that Entergy is ultimately responsible, but the

fiscal committee, just last week, Entergy said, "We're 1 out of here in 60 years. Sue us." 2 So, to me, there is a big difference here, 3 4 between what the NRC thinks the regulations speak to, and what Entergy thinks the regulations speak to. 5 Next is 10 CFR 50.75. It's a failure. 6 The model that you use for calculating the money that 7 should be available is simplistic and has no basis in 8 9 science. Now, Fairewinds has developed under the 10 11 Lintilhac grant, as spreadsheet that does this. We spent about 10 days, two people working 10 days, to 12 develop a spreadsheet. We're going to make 13 available to the State of Vermont and to the country, 14 15 so that you can do a spreadsheet to track how the money develops in the fund and when it's withdrawn. 16 When I do those numbers, I show we can 17 18 start decommissioning in 2026 and be done in 2032, if 19 ISFSI fund, that the Independent Spent Fuel 20 Storage, is not included. You're allowing Entergy to raid the cookie 21 jar by taking money out of the ISFSI fund and not 22 returning it when they get it back from the Department 23 of Energy. Something is wrong with your model. 24 going to recommend to the state, that they oppose the 25

exemption that Entergy will ask for, when they want to 1 fund, the ISFSI and Vermont, they're 2 raid stakeholders. We have a piece of this pie at the end 3 of the --at the end of this project, if there is any 4 left over, it's half ours and half Entergy's. That's 5 part of the agreement. So, we have a seat at the 6 7 I'm a stakeholder. Finally, the expenditures that are being 8 incurred are being incurred by a company that has --9 10 that has no oversight. You guys aren't giving them financial oversight, and in the State of Vermont, 11 they're not a public utility. Who is overseeing the 12 cookie jar? 13 Your analysis is health and safety, and in 14 15 fact, TLG is a wholly owned subsidiary of Entergy. 16 So, when Entergy couldn't make money when the plant is running, then you can be damn sure 17 they're going to make money on the decommissioning. 18 19 MR. SACHS: Beat that dead horse. 20 MR. GUNDERSEN: So, as Bill Sorrell said, who is watching the cookie jar, and I think because 21 this is an LLC, you've allowed the horse to be out of 22 the barn there, and the door needs to be closed. 23 24 Thanks. Okay, thank you, Arnie. 25 MR. CAMERON:

Leslie? 1 MS. SULLIVAN SACHS: Hello. 2 My name is Leslie Sullivan Sachs. 3 4 SPEAKER: The microphone closer. MS. SULLIVAN SACHS: Thank you. 5 My name is Leslie Sullivan Sachs. I'm a stakeholder in 6 Vermont Yankee decommissioning. I live five miles from 7 Vermont Yankee in Brattleboro, Vermont. I'm a member 8 of the Safe and Green Campaign. 9 This has pretty much been my life for the 10 last four years, a lot shorter than many of you. 11 I will be sending you detailed comments at a later 12 date. 13 But while you are here in front of me, and 14 15 I can look you in the eye, I would like to speak to you from my heart, simply as a human being and a 16 17 resident of a Connecticut River Valley. What we are doing here together is talking 18 19 about what could be a future humanitarian crisis and 20 what's certainly, as I was brought up, is considered unethical act. 21 We are talking about leaving tons and tons 22 and tons and tons and tons and tons of high-23

level radioactive waste in a very tiny village,

perched on the Connecticut River in one of the most

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beautiful places on earth.

When I was two years old, the engineers and the scientists and the policy makers started trying to figure out what to do with this waste. I'm going to be 60 years old in two months. We still don't know.

You want to take 60 years to figure out what to do with this waste? I'm sorry. This is unethical. This is unconscionable.

We're talking about my Connecticut River Valley, where I gave birth to three children, where my best friend has two grandchildren, one born two weeks ago. Those grandchildren are the ones that are going to be living to go to this license termination hearing, when we finally get a real hearing.

I'm not going to be here. Who here is going to be here? You're asking us to trust our Federal Government, the NRC and Entergy to take care of the land and the people and the air and water, that we love.

This is a humanitarian crisis, this nuclear waste. This SAFSTOR is a joke. We know what's under that ground now. We know -- we've known what's been under that ground since 2008 and decades ago when there were leaks, when Entergy didn't even

1 own it. Who knows if Entergy is going to be owing it 2 10 years from now? This is not just rules and regulations to 3 4 hide behind. This is real. This is really happening 5 to these human beings, and to these families and to this water, air and land. 6 7 So, I'm sorry I'm shaking while I'm saying 8 this. But that's how real it is. 9 So, you've got my nice comments 10 they'll be all about the generic environmental impact statements and they'll be all about why Entergy can't 11 12 be trusted and how we need an independent auditors and blah-blah-blah. 13 14 But I stand here before you, and thank you 15 for looking me in the eye, because you're talking 16 about real human beings, real land. It's not just 17 piles of paper. It's not just something I'm supposed 18 to go and search on ADAMS for, if I know the ADAMS 19 number, to read about. Thank you. 20 MR. CAMERON: Thank you, Leslie. We're 21 going to go next to Jim Matteau, Peter Tusinsk and I 22 apologize for mis-pronouncing names, and Chris 23 Campany, and then we'll go to Nancy Braus, Clay 24 Turnbull and Kimberly Medeiros. 25 Do you want to come up here? And this is

1 Jim Matteau, okay. Thank you. My name is Jim 2 MR. MATTEAU: I'm a member of the Vermont 3 4 Decommissioning Citizen's Advisory Panel. I have a question and a comment too, if I 5 might. 6 The first question is on the PSDAR. 7 Ι understand that -- I'll try not to sneeze, excuse me. 8 I understand that it's submitted. Ninety 9 days after the submittal, Entergy can begin the 10 11 activities. NRC reviews it, neither approves nor disapproves it, but may ask for more information if 12 something is missing and needed. 13 14 I'm not questioning Entergy's intent to 15 submit what's needed, and I'm not questioning the 16 NRC's intent here. But it seems possible that at the 17 end of the day, you could be a situation, whether here or somewhere else, when you're simply not getting the 18 information, and if you don't disapprove it and 19 20 they're allowed to begin 90 days after submitting it, 21 your review notwithstanding, it seems reasonable to 22 ask are there any teeth in this at all? 23 What happens if you simply get nothing in return to your questions, but the 90 24 expired, so off they go? What do you do?

1 MR. CAMERON: Doug? 2 MR. BROADDUS: The situation -- I mean, this is -- depends upon specifically, what the issue 3 4 was, but there are a number of different actions that 5 we could take. If we either felt that the information 6 7 wasn't adequate or that it was -- wasn't in compliance 8 with our regulations or wasn't safe to conduct that, 9 and those actions could be anywhere from, like we said 10 originally, asking for information. That would be the 11 first step that we would take. If there -- if we needed to escalate that 12 for some reason, we could do inspections to look at 13 14 what -- get some additional information that way. 15 We could qo onsite and aet the 16 information, if we absolutely needed to. We could 17 then escalate it even further, if needed and again, it 18 depends upon the situation to -- going to -- like 19 something -- an enforcement type of action. We could 20 have a demand for information or even issue them an 21 order, even at that point. 22 So, that -- those are the types of steps 23 that we could take, depending upon the severity of the

situation and what -- whether there was, like I said,

a health and safety issue that needed to be addressed

24

immediately. You know, that would be the higher level 1 of action that we could take. 2 MR. MATTEAU: So, if I understand it, to 3 4 paraphrase that, that you don't review and approve --5 you would review it, but you don't approve the PSDAR, you might disapprove some of the proposed but 6 activities within that, individual activities within 7 the PSDAR, if they don't pass? 8 9 MR. BROADDUS: Yes, we could do that, yes. So, the teeth would be at 10 MR. MATTEAU: 11 that level, not at the -- not at the initial review level, in other words? 12 MR. SACHS: Have you ever done that? 13 MR. CAMERON: And a comment? 14 15 Yes, my comment on, and I MR. MATTEAU: wish, and many times, in -- I've been involved in 16 meetings with -- at the state level, with the Public 17 Service Board and others for some 20 years. 18 I wish that everyone in the audience would 19 20 be polite and courteous, and I'm sorry that we aren't. 21 At the same time, while we're sitting here tonight, Entergy's VY decommissioning Twitter account 22 23 is re-tweeting some very snarky comments from this 24 room, taking slams at the state officials while 25 they're up here speaking --

1	SPEAKER: That's nice.
2	MR. MATTEAU: and I
3	MR. SACHS: Who is doing that?
4	MR. MATTEAU: Just as I am please
5	MR. SACHS: Anybody from Entergy?
6	MR. MATTEAU: Just as I'm asking people in
7	the audience to behave
8	MR. SACHS: Me?
9	MR. MATTEAU: I really would like
10	Entergy to be a little better behaved on the internet.
11	Thank you.
12	MR. CAMERON: Thank you, Jim. Peter?
13	MR. TUSINSK: Yes, my name is Peter
14	Tusinsk, Planning Board Town Leyden. We're not in the
15	State of Vermont. We're just over the border in
16	Massachusetts.
17	The Planning Board has been asking for
18	months now, since the plant has closed, what was the
19	main concerns of its citizens, and the EPZ is one of
20	the main concerns.
21	We're a rural community. Many of us make
22	our living farming. We have livestock, cow, cattle,
23	chickens, pigs and everything else, and we rely on the
24	expertise of those who are running Entergy's Yankee
25	plant here, to inform us of any what would you call

1 them? Hazards? Mistakes? Occurrences that might take place, that might involve an evacuation, that 2 might involve people from our elementary school 3 leaving, and we are well within the 10 mile radius. 4 The entire town is. 5 So, the main concern was that we maintain, 6 7 as others have said, it's only \$10 million I quess, for the five year period, that you would be offloading 8 the fuel from the spent fuel pool, to dry cask 9 10 storage. But also one of the concerns was that on 11 12 the time frame. It seems like we're going to have a 13 60 year waste dump, and we're going to live within 10 miles of it. 14 It was stated by the young woman that 15 16 spoke before me, that we all love this Connecticut 17 River Valley. We don't want to see it degraded with 18 a long-range nuclear waste dump. 19 We've also listened to Mr. Gundersen, who 20 said that the total decommissioning process could take 21 a lot less than 60 years. I would like to impart these ideas to the 22 23 NRC. It's a rare occasion to see you folks, and have you take it seriously, that we live here and we don't 24 25 want that. We want the Government to take the

1	responsibility of long-term waste storage and get the
2	damn thing out of this area, period. Thank you.
3	MR. CAMERON: Okay, thank you, Peter, and
4	Chris, and just pronounce your last name.
5	MR. CAMPANY: Sure. It's Chris Campany,
6	Executive Director Regional Commission. We're the
7	host Region for the plant.
8	I have a question and then a well, a
9	couple of questions.
10	First, the PSDAR makes reference to the
11	generic EIS, and or actually, I think it NRC and
12	Entergy have both referred to being within the bounds
13	of applicable environmental impact statement world.
14	Can you tell us exactly what EIS's, and if
15	not now, some kind of exactly
16	SPEAKER: No, now.
17	MR. CAMPANY: what EIS's are applied
18	the reason not necessarily now is, I want this to be
19	very specific.
20	Is it just a generic NUREG to EIS, or are
21	there other EIS's that we should be looking at, to see
22	what has been done?
23	MR. CAMERON: And Jeff, just introduce
24	yourself to us. This is the NRC environmental expert.
25	MR. RIKHOFF: Good evening, folks. My
1	

1	name is Jeff Rikhoff. I'm an environmental reviewer
2	for the NRC, and I heard you question earlier, I
3	saw a video of the NCAP meeting.
4	The site-specific document that you should
5	be looking at is the license rule site that was
6	conducted a few years back.
7	MR. CAMPANY: Two-thousand-seven?
8	MR. RIKHOFF: Yes.
9	MR. CAMPANY: That's a supplement to the
10	generic one?
11	MR. RIKHOFF: The supplement to the
12	generic license renewal guidance.
13	MR. CAMPANY: Okay, finally discovered
14	that today.
15	MR. RIKHOFF: Okay.
16	MR. CAMPANY: Is that the only one we need
17	to look at?
18	MR. RIKHOFF: That's the only one that's
19	recently available.
20	MR. CAMERON: Okay.
21	MR. CAMPANY: And the other thing I guess
22	I would add I would ask the NRC to do is convene
23	the host regions and the host states to look at
24	whether or not the regulations guiding decommissioning
25	in the current modern time text are sufficient, and

whether or not they actually accomplish goals, 1 terms of -- as far as public interest, public health, 2 safety and welfare. 3 4 Our concern, I think it's worth revisiting those rules and regulations, especially since you're 5 going to have a number of plants likely coming offline 6 and as Chris Recchia and others have mentioned, we're 7 now in this environment of merchant plants. 8 One of the questions I have frankly is, 9 where is the funding going to come from for the state 10 agencies to provide oversight and review of the actual 11 decommissioning process, because that used to come 12 from rate payers, at least as far as I understand, the 13 way public utilities would deal with this in the past. 14 How does that work with the merchant 15 plant, and I would hope that those costs aren't going 16 to be externalized and they're not going to have to be 17 born by the decommissioning trust fund, to further 18 19 delay that. So, there are number of issues I think 20 nationally, we need to get a handle on. 21 MR. CAMERON: Thank you, Chris. Could we 22 have a quick answer to that last point, about where 23 the funds for the state oversight and review come 24 from, when you're talking about a merchant plant? 25

1	MR. BROADDUS: I don't think I can speak
2	to that. I'd have to
3	MR. CAMERON: Okay.
4	MR. BROADDUS: get back to you.
5	MR. CAMERON: Okay, do you have say on it,
6	Doug?
7	MR. BROADDUS: I can comment on the
8	MR. CAMERON: Speak into the
9	MR. BROADDUS: So, you did mention about
10	revisiting rules and such.
11	I just wanted to make you aware, the NRC
12	has just initiated just recently started the
13	initial phases of rule making activity of the
14	decommissioning rules.
15	Our rules right now are primarily set up
16	for operating plants. There are some regulations
17	specific to decommissioning, but the process to go
18	from an operating plant to a decommissioning facility
19	is not well described within the regulations.
20	So, we've had to do it on basically,
21	essentially through a case-by-case basis of license
22	amendments, exemptions and other types of actions.
23	So, we are embarking on our rule making
24	activity to try to address that and have the
25	regulations more effectively address that transition

period.

SPEAKER: Can I just say, could those rules also -- would those rules also potentially apply to Yankee and Kewaunee and Crystal River and San Onofre, the ones that are --

MR. BROADDUS: It's a lot -- some of the -- some of what has happened already, you know, is -- has -- would be -- you know, some of those activities have already occurred for those plants, and in fact, some of those activities are -- had occurred and are in the process of occurring for Vermont Yankee, as well, because we don't have the rules yet.

The rule -- a rule making process will take a set number of years to complete. So, we don't see that the rule would be finished by the time that these plants are in the transition process. But there may be parts of the rule making -- and again, we're in the initial phases. So, we're still looking -- we'll have to do a scoping and define the overall scope of the role and everything.

So, that's going to happen, as we got throughout this process, but there could be other activities later on in the time, that could be --could impact those plants.

MR. CAMERON: Okay, thank you, Doug, and

1	I would just say, and thank you, Chris.
2	I would did you want to add something?
3	MR. WATSON: Yes, I just want to add one
4	small part of this, and part of this rule making
5	activity directed by the Commission, is that we also
6	look at the present rules in evaluating, which
7	includes the SAFSTOR's and other things.
8	So, it's going to be a while, but it takes
9	a lot of analysis sometimes, to evaluate those, but
10	it's also in the package to look at.
11	MR. CAMERON: Okay, and just we have
12	some final information for you, perhaps. This is
13	Shawn Harwell, NRC staff.
14	MR. HARWELL: How you doing? Shawn
15	Harwell, an analyst with the financial analysis and
16	international finance branch.
17	I want to be clear when I said I'd have to
18	get back to you on that. The trust funds are
19	specifically for sorry about that. Better?
20	All right, sorry, about that.
21	MR. SACHS: Are you the guy that
22	transferred money to the Cayman Islands every night?
23	MR. HARWELL: So, to answer your question.
24	I'm trying to.
25	The decommissioning trust funds are for

1 decommissioning, radiological decommissioning. They're not for paying taxes. They're not for non-2 3 radiological decommissioning activities. 4 That being said, to completely answer your 5 question, I'd have to go back and look at past instances and to see how other plants or other 6 7 licensees funded those, to answer your question. 8 can't say that. I don't know. I'd have to look that 9 up. But as far as the decommissioning trust 10 11 to fund qoes, and answer your question, 12 decommissioning trust funds are for radiological 13 decommissioning. 14 MR. CAMERON: Okay, thank you very much, 15 Shawn, and I just want to note that the NRC staff is 16 here listening and there is -- we have other NRC staff in the audience. 17 But you hear some of the concerns. 18 19 the formal part of the meeting is over, if the person 20 who asked the particular question, if you have any 21 information or you want to find out more about what their concern is, please go and talk to them, after 22 23 the meeting is over. But at least in terms of before we get 24 25 kicked out of this place, Nancy. Nancy Braus and then

Clay Turnbull and then Kimberly Medeiros. 1 MS. BRAUS: Hi. This also, what I'm 2 3 saying also pertains to the new world of merchant plants being decommissioned. 4 5 So, it seems like we may or may not have answers here, but I've been thinking a lot about how 6 the vast majority of corporations that existed 60 7 years ago are ancient history at this point, and I 8 9 feel like -- there are a lot of us that feel like the changes that Entergy will be present 60 years from now 10 are far from 100 percent, and some people feel much, 11 much farther from 100 percent, whether it's in the LLC 12 form that runs the nuke or whether it's the larger 13 corporation of Entergy. 14 15 So, the assumption is that the 16 decommissioning fund is going to grow over this period 17 of time, over the 60 years, to the point of being able 18 to fully clean this site. 19 There are so many questions with that. 20 many assumptions with that, that are potentially 21 faulty. One is the fact that they've just discovered 22 this pool, the Strontium-90 and Cesium and who knows 23 what else, under this off-gas building. If this is left to spread for 60 years, 24 25 who knows what the extent of that clean up is going to

1 Who knows if it's going to extend, you know, way up the cost of the clean up, and should Entergy no 2 3 longer exist, I've talked with representatives and my 4 Senators, our Congressmen, I've talked with people at 5 the State. Nobody really has any idea. What happens if Entergy does what they 6 7 just said they would do at the state, and if they 8 exist, walk away. If they don't exist, what happens if there is not enough money in the decommissioning 9 10 fund? 11 Is that just -- does that mean that the 12 State of Vermont picks it up? Does that mean -- who 13 is -- you know, who is picking that up for Entergy? I mean, I feel like the SAFSTOR is 14 15 definitely way for Entergy to get out of its financial 16 liability, should this -- the stock market not go up high, should -- you know, should anyone -- any one of 17 18 one-million things could happen. 19 Should this underground -- the underground 20 contaminants prove to be a lot more extensive than what we know now. 21 22 So, I just feel like it's something that 23 just should not be left to chance. Sixty years from now, we do not know what the corporate environment is 24 25 going to be for Entergy and I feel like for a small

1	state like Vermont, which is not growing particularly
2	fast financially, it's not growing particularly fast,
3	one-billion charge onto the State of Vermont is a huge
4	amount of money we're talking about, and I don't know
5	at this point, under your regulations, who else is
6	going to get stuck with the money to decommission an
7	orphan nuke in 60 years?
8	MR. CAMERON: Thank you, Nancy. Clay? Is
9	Clay here?
10	SPEAKER: I was told at the last meeting
11	that the financial portion would be
12	MR. CAMERON: Wait. Come on, now.
13	SPEAKER: Okay, I'm sorry.
14	MR. CAMERON: Nancy?
15	SPEAKER: I didn't hear it.
16	MR. CAMERON: And just
17	SPEAKER: I'm sorry.
18	MR. CAMERON: Just state that question
19	explicitly.
20	SPEAKER: Okay, the question is, when I
21	brought this up at the NCAP meeting, somebody said
22	that the person, which I think is you, who has
23	financial experience with the NRC, would be able to
24	address this question of what happens, should Entergy
25	no longer exist? Should Entergy in 60 years say,

1	"We're walking here," and the decommissioning fund is
2	not adequate? What is the answer to this? What's the
3	answer?
4	MR. CAMERON: Shawn Harwell, again.
5	MR. HARWELL: Hi. Shawn Harwell again.
6	The best way to answer your question, I
7	would say is that we're concerned with the
8	radiological decommissioning, just as you are.
9	MR. SACHS: Is Entergy goes belly-up, what
10	are you going to do?
11	MR. HARWELL: The growth of the fund
12	MR. SACHS: That's the question.
13	MR. HARWELL: as it is
14	MR. CAMERON: Let him try to answer the
15	question, please.
16	MR. HARWELL: We have reasonable assurance
17	to think that there will be enough money.
18	Should something like that happen in 60
19	years, we would not let someone walk away
20	MR. SACHS: They're at the top of their
21	game now.
22	MR. HARWELL: from their
23	responsibilities.
24	MR. SACHS: They're going no place but
25	down.

1	SPEAKER: All right, stop.
2	MR. HARWELL: There are alternative legal
3	methods that could be taken, but we would not let
4	anyone walk away from that type of responsibility.
5	That, I can assure you.
6	SPEAKER: Yes, I do have a follow up,
7	which is to quote Chris Recchia, at the NCAP meeting,
8	which is, if you know, you can say I am the most
9	responsible parent in the world, but when I'm dead,
10	I'm dead. My responsibilities are you know, no one
11	can come after me.
12	If Entergy is gone, if it's wiped out, if
13	it's Enron, then
14	MR. SACHS: You'll be dead.
15	SPEAKER: you know, what happens?
16	MR. SACHS: I'll be dead. You'll be dead,
17	Chip. You'll be dead. Everybody in this room is
18	dead.
19	SPEAKER: Stop it.
20	MR. HARWELL: Again, while it's a serious
21	question, I understand your concerns.
22	There are many hypothetical's and many
23	speculative a lot of speculation in that, and it
24	would be hard for to us to address that
25	MR. SACHS: You need to.

1	MR. HARWELL: at this time, when we
2	MR. SACHS: You're the man
3	MR. HARWELL: when all I give you is
4	MR. SACHS: to address this.
5	MR. HARWELL: that we would not let them
6	out we would not let I think
7	MR. CAMERON: I think we need to
8	MR. SACHS: Do it now.
. 9	MR. CAMERON: go on. Why don't
10	MR. SACHS: No, we need an answer, Chip.
11	SPEAKER: Just one more question.
12	MR. CAMERON: Okay.
13	SPEAKER: Okay, I'm done.
14	MR. CAMERON: Nancy, okay.
15	SPEAKER: We need to know now.
16	MR. CAMERON: Okay, all right.
17	SPEAKER: No good answer.
18	MR. SACHS: You don't have an answer,
19	clean it up now.
20	SPEAKER: Yes.
21	MR. SACHS: What's with this crap? Come
22	on.
23	MR. CAMERON: Clay Turnbull. Here comes
24	Clay, and then Kimberly Medeiros. This is Clay. You
25	can use this.

. 1	SPEAKER: I'm going to stand right here.
2	MR. CAMERON: Do you want to stand right
3	here or you want to stand over there? You can stand
4	wherever you want.
5	SPEAKER: I'd rather stand there.
6	MR. CAMERON: Good, there you are.
7	MR. TURNBULL: Great, thank you. Good
8	evening. Thanks for coming.
9	I'll start with just a little humor. This
10	is Vermont's idea of bottled water. It comes from a
11	well at my house.
12	All right, yes, I will speak up. Thank
13	you for requesting that.
14	So, I'm a member of New England Coalition
15	on Nuclear Pollution Board of Trustees. Proud to say
16	that I'm walking in footsteps for fore-fathers and
17	mothers that I'm really proud of.
18	As of 2011, NRC certified that Entergy
19	Vermont Yankee has enough money in the decommissioning
20	fund, when coupled with a parent guarantee to commence
21	decommissioning at around 650 million.
22	Entergy represented to the State of
23	Vermont that Entergy would make a good faith effort to
24	shorten the time, to beginning decommissioning as much
25	as possible. The key being when Entergy determined it

had accrued sufficient funds, Entergy then chose the 1 extreme case scenario from among its TLG 2 most decommissioning estimates and announced that 3 4 decommissioning would require \$1.24 billion. This is a striking contrast to 5 the decommissioning of two, two Exelon Zion reactors in 6 Illinois, that are now under decommissioning with the 7 target cost of about \$800 million for both reactors. 8 Admittedly, specially the created 9 decommissioning company is having trouble keeping on 10 financial track, but the contrast is 11 12 remarkable. decommissioning contractor, 13 Solutions said recently, in an NRC filing, that they 14 were doing the decommissioning at cost and would not 15 16 look to take a profit, unless there was a surplus. Could this be the case -- the cause of the 17 huge disparity in decommissioning estimates? 18 19 Entergy planning on taking a profit? If so, how much would that be, when comparing NRC's figures and Zion 20 figures and Entergy's? 21 Wouldn't Entergy reach the top-off point 22 23 in the decommissioning fund that much faster, if it renounced skimming it for profit? It, being the fund. 24 The people -- and this is key, the PSDAR 25

1	does not show how much Entergy will be paid over cost,
2	and by the way, during the state certificate of public
3	good MOU hearings, our technical expert Ray Shaddis
4	cross-examined Michael Toomey of Entergy, every which
5	way he knew how, but could not get him to say whether
6	Entergy would or intended to make money on this
7	decommissioning. Thank you.
8	MR. CAMERON: Thank you, Clay. Thank you.
9	Kimberly, do you want to
10	MR. SACHS: What's the answer?
11	MR. CAMERON: No. Kimberly, do you want
12	to come up?
13	SPEAKER: I have no comment.
14	MR. SACHS: That's all we're here for.
15	SPEAKER: It's not just comments, it's
16	questions.
17	MR. CAMERON: Yes, questions and comments.
18	SPEAKER: Maybe the NRC representatives
19	can address Clay's comment.
20	MR. CAMERON: Clay? Where are you? Okay,
21	Clay, do you want to you may comment. NRC is
22	listening.
23	Can you characterize the question you
24	would like them to answer?
25	MR. SACHS: How much profit is Entergy

Т	making off decommissioning?
2	MR. CAMERON: Interesting. I want to make
3	sure I want to make sure that they hear the exact
4	question he wants answered, okay.
5	MR. TURNBULL: This process tonight is not
6	anywhere near a venue adequate to get an answer to the
7	question of how much would Entergy be making if
8	they're going to make money on this decommissioning,
9	because I could be told anything tonight, and we're
10	all going to go home and there is nothing on the
11	record. There's nothing under oath. There is nothing
12	with
13	SPEAKER: Ask it anyway.
14	MR. TURNBULL: meaningful there is no
15	way to test.
16	Okay, they're asking please, they want the
17	question out there, how much is Entergy planning to
18	pay themselves from the decommissioning fund?
19	MR. CAMERON: Okay, so, we got a question
20	and I appreciate what you said about this type of
21	forum is really difficult to have a complete
22	discussion of your question, so I took it as a
23	comment, for them to think about.
24	But now, we have a question, and does
25	anybody do you guys understand the question? Is

1	there anything that we can say? How about it?
2	SPEAKER: No, it's Chinese.
3	MR. SACHS: Is Entergy entitled to make a
4	profit off decommissioning, is the question. Do you
5	get it, guys? It's okay, I'll step back.
6	MR. CAMERON: Go ahead, Bruce.
7	MR. SACHS: Come on, Joe. What do you
8	think?
9	MR. CAMERON: Okay, we'll
10	MR. SACHS: Take a guess. What do you
11	think? Give me a good guess. Yes, is the answer.
12	MR. CAMERON: Is there someone hear named
13	Gary Sachs?
14	MR. SACHS: Oh, good, my turn to speak?
15	MR. CAMERON: Not yet. Bruce?
16	MR. WATSON: Let me just say that we're an
17	independent safety regulator. We regulate the safe
18	decommissioning of the site.
19	Now, there is other costs associated with
20	decommissioning, such as site restoration that are, I
21	think part of the settlement agreement, along with
22	what to do with the money that's left over from that,
23	that we are not a party to.
24	So, we really can't make any comment on
25	MR. SACHS: Come on, Bruce.

1	MR. WATSON: profitability of the of
2	Entergy on the decommissioning process, since the
3	funds that they're going to spend that that we have
4	you know, are looking at when we review the
5	decommissioning cost estimates, are for the safe
6	decommissioning of the site.
7	MR. CAMERON: Okay.
8	MR. WATSON: Don't really have an answer.
9	MR. CAMERON: All right.
10	SPEAKER: You know what that means.
11	MR. CAMERON: Kimberly?
12	SPEAKER: They're represented here. Have
13	them answer.
14	MR. CAMERON: Kimberly? This is Kimberly
15	Medeiros, and next, we're going to go to after
16	Kimberly, we're going to go to Guy Page, Carol Levin,
17	Meredith Angwi, okay, and you can correct me up here
18	for the record too. Yes, I couldn't read it, and
19	Kevin Kamps, if Kevin is here. I don't see Kevin, but
20	okay, Kimberly, go ahead.
21	MS. MEDEIROS: Thank you. So, I have been
22	working with the Citizen's Awareness Network for 20
23	years. So, I really never stay down, and I went
24	through the Yankee Rowe decommissioning with the NRC,
25	and I was there for when we sued you and we won, and

when we won, didn't really change anything. All you 1 did was change your own rule. 2 So, we pretty much stopped dealing with 3 4 you, but here we are again, and we have no choice in 5 the matter. What I'm asking you to do is to stop 6 7 like you're Ambassadors to the acting industry. You're kind of in bed with the -- you 8 9 pretty much let them do whatever they want to do, and 10 it's been that way as long as I can remember. This is precedent-setting 11 а 12 decommissioning, with Vermont Yankee being a merchant 13 reactor, and I would like you to ensure that this plant is properly cleaned safely, and you need to look 14 15 for all the contamination. You can't trust a company 16 who is a -- who are proven liars, and I'm sorry to say 17 that that is a true statement. I would like to reiterate that I agree 18 19 very strongly that the EPZ needs to stand until the 20 fuel is all removed, and I would like to see this reactor decommissioned, because in 1974 -- I mean, I'm 21 22 sorry, 2074, I would be 100. So, that's kind of 23 crazy. MR. CAMERON: Okay, thank you. Thank you, 24 Kimberly. How about Guy Page and then Carol and then 25

1	Meredith and then
2	MR. SACHS: Chip?
3	MR. CAMERON: we will go to Gary Sachs.
4	MR. SACHS: Chip?
5	MR. CAMERON: Okay, Kevin, he is here.
6	Okay, Kevin. So, we'll go to Kevin and then Gary
7	Sachs, after hear from Guy, Carol and Meredith, and
8	this is Guy Page, correct?
9	MR. PAGE: Thank you, yes.
10	MR. CAMERON: Okay.
11	MR. PAGE: Thank you.
12	MR. SACHS: Thank you, Guy.
13	MR. PAGE: Let's see. Well, I think the
14	decommissioning put forward by Entergy for Vermont
15	Yankee is thorough, is detailed, will ensure the
16	safety of the public, provide consistent and economic
17	activity at the plant, as well as important
18	environmental benefits, and all of this is good for
19	Vermont.
20	MR. SACHS: And you want to
21	MR. PAGE: Two components of the plan
22	MR. SACHS: have them speak to you?
23	MR. PAGE: stand out in particular to
24	me. First, Vermont Yankee wants to go the extra mile
25	by building an additional dry cask storage pad, so

1	that by 2020, all spent fuel may be situated in dry
2	cask.
3	MR. SACHS: And it's not the extra mile.
4	It is required.
5	MR. PAGE: The virtual invulnerability of
6	these dry casks to severe weather, earthquakes,
7	terrorist attacks and other threats have been well
8	documented by independent scientific experts.
9	SPEAKER: And not the ones
10	MR. SACHS: Yes.
11	MR. PAGE: Of note, I want to say in
12	hearing last week, a place made
13	MR. CAMERON: Look, you just can't get up
14	and be negative, perhaps rightly so. No one is
15	interrupting you. Let him speak without being
16	interrupted.
17	MR. SACHS: He's speaking, and he's paid to
18	speak.
19	MR. CAMERON: Okay, doesn't matter. Go
20	ahead, Guy, please continue.
21	MR. PAGE: Thank you.
22	MR. SACHS: We haven't heard enough of
23	that.
24	MR. PAGE: At a legislative hearing last
25	week

1 MR. SACHS: You're doing great, Guy. it up. 2 MR. PAGE: -- Vermont Yankee was applauded 3 by state officials for its decision to move forward 4 5 with building and maintaining a pad, at an estimated cost of \$150 million. б 7 The assumption of this cost for Entergy is 8 to advance the decommissioning process instead of waiting for the U.S. DOE to resolve the issue of spent 9 Thus, minimizing the impact on the 10 waste storage. 11 decommissioning trust fund. I was at a meeting on just -- just in 12 13 part, the letter that I'll be sending to you, but I 14 last week, very interesting was meeting 15 informational meeting that Mr. Gundersen was speaking 16 at, and he and the other gentleman who was running the 17 meeting noted that that decision may very well move up 18 the decommissioning time, and they thought that was a 19 very good idea. 20 Second, Vermont Yankee's decision 21 pursue SAFSTOR decommissioning, agreed to the by the 22 2002 memorandum of understanding governing the sale of 23 the plant to Entergy, is a sound safe decision for 24 this reason, because radioactivity decays over time. 25 The longer Vermont Yankee waits to conduct

1	the stated work of decommissioning, the less risk
2	there is, in that sense, of inadvertent contamination.
3	I used to be a roofer, back in the day,
4	and I learned that it's actually not very dangerous up
5	on the roof. It's not dangerous on the ground. The
6	danger is the transition. It's getting from the
7	ground to the roof, and that's like that's the
8	actual spade-work of the decommissioning, okay.
9	So, in that sense, waiting, there is
10	nothing wrong with waiting until that the decay
11	decreases, the level of radioactivity. I know there's
12	a lot of other considerations that go in there, but
13	from that
14	MR. SACHS: Electrical.
15	MR. PAGE: from the area from the
16	perspective of radioactivity decay alone, it does make
17	sense to wait.
18	MR. SACHS: That's not true.
19	MR. PAGE: And my final comment is that I
20	really want to say, and this isn't in the letter
21	either, but I just wrote down a few notes.
22	MR. SACHS: Way to go, Guy.
23	MR. PAGE: As visitors to our beautiful
24	state, my native state, I am sure on behalf of many of
25	us here, I sincerely apologize to you for these

1	disruptions.
2	MR. SACHS: Me too.
3	MR. PAGE: Okay, I can assure you, it's
4	not how Vermonter's normally do things.
5	MR. SACHS: No, it's not.
6	MR. PAGE: Been to a lot of town meetings
7	and covered them as a reporter, and doesn't matter
8	what's being brought up, you know, a farmer could be
9	listening to a town budget, that he thinks he's knows
10	is going to lose his farm, and still, you do not get
11	up and you do not disrupt and so, I apologize for
12	that.
13	MR. SACHS: Nuclear reactor shut down.
14	Thank you, Guy.
15	MR. PAGE: So, I would
16	MR. SACHS: Thanks, Guy.
17	MR. PAGE: So, I will give you a copy of
18	this letter and I've also given copies to the media in
19	the hopes that perhaps there might be
20	MR. SACHS: Maybe somebody cares.
21	MR. PAGE: my cross will be shared with
22	any luck. Thank you.
23	MR. CAMERON: Okay, thank you. Thank you,
24	Guy. Carol Levin, and Carol, you can you can hold
25	this or you can stand. Do you want to do this? Why

don't you come on up here then? 1 MS. LEVIN: Sure. 2 This is Carol. MR. CAMERON: 3 4 MS. LEVIN: Okay, I'm Carol Levin and I 5 wish you all a good evening, ladies and gentlemen. My name is Carol Levin and I am from 6 Guilford, which is in the 10 mile zone from Vermont 7 8 My husband, Richard Gottlieb, died February 15, 2012 from a bone cancer disease, multiple myeloma 9 10 with a secondary, more devastating soft tissue disease 11 caused by the multiple myeloma called amyloidosis that 12 affected Richard's swallowing mechanism and his heart. 13 The damage to his heart is what proved 14 fatal, when his heart stopped that day after 15 Valentine's day. 16 We have been big supporters over the years 17 for the local movement, buying and eating and drinking 18 many products grown here in Windham County, and this 19 tri-state area. 20 When it was announced that Strontium-90 21 was found in the wells of the VY plant, I did some research and found that it main affect is that is a 22 23 toxic that gets in the ground and the ground water, and then through the grass and other plants that 24 25 animals and humans eat, and it gets into the bone

1 | tissue of humans.

Although I'm not absolutely certain, but I'm highly suspicious that the effects of Strontium-90 probably caused my husband's cancer.

We drank -- we drank milk, ate vegetables and fruit, cheese, chicken and some meat, yogurt, ice cream, all grown and produced locally, and the major workforce impacted by this particular kind of cancer are workers in the oil refinery business, but Richard lived in Southern Vermont for nearly 40 years and was in the solar energy business.

I urge all who are involved in the nuclear plant decommissioning, to the Commission, as soon as possible, and to remove and remediate all the toxic materials in the ground, in the ground water and in the aquifers under the property and the buildings, both inside and outside the buildings, including removing the buildings and getting to the underneath land.

The two recommendations I have are one, the dry cask containers now being considered a temporary location, but most likely, they will become permanent. They need to be treated and secured now, as if it were permanent right away, so no harm could come to the community, if they're disrupted.

Two, in 60 years, almost none of us are 1 going to be here, probably a dozen of the younger 2 people may still be alive, and the people that are 3 here are going to have to deal with -- not the people 4 5 here, but the people remaining, who come after us, are going to have to deal with this closed and toxic 6 7 nuclear plant and its surroundings. We have absolutely no project on what the 8 economy might be 60 years from now. So, please use 9 the funds that are available now, to decommission the 10 11 plant now. Thank you very much. 12 MR. CAMERON: Thank you, Carol. Meredith, 13 do you want to use this standing, or do you want to 14 use this? MS. ANGWIN: I'll just use this. 15 16 MR. CAMERON: Okay. 17 MS. ANGWIN: Hi. My name is Meredith 18 I have worked in many aspects of energy. 19 have some patents and control of NOx from gas turbines 20 and I have worked in nuclear. 21 I wanted to say that I hope that you will 22 go with the process that you have to assess what risks 23 are and to be very vigilant about those risks, but not to assume that because somebody is frightened of 24 something, that it is a risk. 25

For example, smoke. Smoke is not good for anybody. There is no safe level of inhaling smoke. There just isn't, and but if you go with that, you're going to end up with the idea that children can't have candles on their birthday cakes.

So, what we have to do and what we have done is, we assess safe levels of this and of that. There is a little bit of urea in all the water you drink, but there is a level for that, and you go right ahead and drink the water, because that's all the water in the universe. Well, I don't know if in the universe, but certainly on the surface of the earth, and that is how we do things.

So, what I'm trying to say is, when you're assessing a Strontium -- some Strontium that's been detected or that there is this or there is that, do not look at it as, "Oh my gosh, it's absolutely unacceptable," because anything, you have to realize that there have been rules that have been assessments of what is a safe level, just like there is for everything in the water you drink, and you must vigilantly keep to those rules, but you do not have to say, "Well, just think, if we spent another \$400 million, we could get it down to this and to that."

Once it's at the level that has been

1	assessed, that is the right level. Thank you very
2	much.
3	MR. CAMERON: Thanks, Meredith.
4	MR. SACHS: Getting older, Meredith.
5	MR. CAMERON: We're going to go to Kevin
6	Kamps and Gary Sachs, and Claire Chang and Bob Picard.
7	Kevin? Standing?
8	MR. KAMPS: Yes.
9	MR. CAMERON: Okay.
10	MR. KAMPS: Well, actually
11	MR. CAMERON: Do you want to use this?
12	MR. KAMPS: can I use that?
13	MR. CAMERON: Yes, sure.
14	MR. KAMPS: Okay, thanks so much, Chip.
15	Hello. My name is Kevin Kamps and I serve
16	as radioactive waste specialist at Beyond Nuclear,
17	based in Takoma Park, Maryland, and I apologize for
18	just getting here. It's taken a while today. There
19	was an NRC meeting all day long on reactor pressure
20	vessels, and I kept having to pull over. I drove up
21	to testify, I couldn't drive and testify.
22	I congratulate, you know, all the folks
23	who had a hand in shutting down Vermont Yankee,
24	because on December 29th at 12:12 p.m., the reactor
25	risks went away. Well, technically when the fuel came

out some weeks later.

But the reactor risks are over at Vermont Yankee, and that's really good news.

So, that was a part of why I was late, and a public service announcement, I don't know, I just got here. I got to mention about the highway shutdown at Exit 3. You can't get on. So, you have to north, to go north, and there is a five mile line of cars, and that's what took the last hour to get here.

So, I have some cheat-sheets to remind myself what to say. These are handouts that are available out in the hallway right there, on the table. I just put them out there. We've got stickers by Yuko Tonohira in Brooklyn, Radiation Not In My Water, that's a sheet, Radiation Not In My Fish, that's a cap, Radiation Not In My Playground, that's a child, and my comments follow along two major themes.

One is decommissioning risks and the other is the high-level radioactive waste.

So, decommissioning risks, I'm reminded of, of a meeting that happened in Charlevoix, Michigan, a small town in Northern Michigan, when Consumers Energy, who owned the Big Rock Point plant before Entergy took it over, made a sudden about-face

on the decommissioning plans.

They went from SAFSTOR, perhaps 60 years of SAFSTOR moth-balling so to speak, to immediate dismantlement, and then they called a sudden meeting and a lot of us got to drive a long ways to get there in time for the meeting.

The things I wanted to warn about, lessons from Big Rock Point, and this report that I wrote way back in 2006 is out on the table. It's entitled "Say Yes to Michigan, Say No to the Plutonium State Park, Background on Big Rock Point Nuclear Power Plant".

A lot of shenanigans got played at Big Rock Point. The workers weren't told much, if anything, about what they were getting into, while the decommissioning contractor, British Nuclear Fuels, Limited, now a part of the Entergy Solutions empire, was bragging on its own website that Big Rock Point was the dirtiest atomic joint that they had ever decommissioned, which was really saying something, because British Nuclear Fuels ran the Sellafield Facility in England, which is a very dirty radiological mess.

So, workers were being told everything is fine, don't worry about it, and at the same time, British Nuclear Fuels had to take some pretty serious

precautions, like not using explosives to dismantle 1 anything because the facilities were so contaminated. 2 So, they ended up spending at that -- it's 3 4 a small place. It's 70 megawatts electric. spent \$366 million on the decommissioning. If you do 5 the math, that's many billions of dollars on the 6 7 decommissioning, and what got left behind? 8 NRC rubber-stamps an unrestricted read, Greenfield Site, they called it, and it's in the 9 Plutonium in the soil, plutonium in the 10 groundwater. The thing they don't know is what's in 11 12 the sediments of Lake Michigan. 13 Big Rock Point, from 1962 to 1997, years was discharging down a canal into Lake Michigan. 14 The NRC, the State of Michigan, the EPA, the companies 15 16 involved, nobody has checked the sediments in the canal, in the lake, and the title for this paper came 17 18 from a proposal that was put out there, that this be 19 a state park, and the taxpayers could pay the company 20 \$20 million for a radioactively contaminated parcel of land and bus school kids in. They were going to build 21 a museum, glorifying the atomic age. 22 23 A lot of us said, "No way, you're not doing it, " and they didn't do it. We stopped them. 24 25 So, there's a lot of lessons from Big Rock

1 Point. You know, how deep does the clean up go? shallow is the clean up? How much contamination gets 2 left behind? 3 At Big Rock Point, it's a significant 4 amount of contamination left behind, and when they say 5 'unrestricted reuse', they mean unrestricted reuse. 6 Maternity ward, daycare center for small children, 7 growing food, it's a problem. 8 So, there is a lot of details, I won't get 9 into, but there is a lot of things to watch out for. 10 11 A previous speaker said the risk is on the ladder. The risk is on the ground, it's on the ladder, it's on 12 the roof, and there is pitfalls at every step, and the 13 workers again, are going to be on the front line of 14 these risks. 15 16 So, another handout we have out there on the table, 'Your Nuclear Workplace, Know Your Risks, 17 Know Your Rights', radiological protective gear, 18 you're entitled to, and contacts for more information. 19 20 The final handout that I have out there is 'Ionizing Radiation', a chart as to where the radio-21 nuclides go and a previous speaker just now mentioned 22 23 Strontium-90, going to the bone. Some of these shorter-lived radio-isotopes, because the reactor 24 shutdown, they will dissipate and be gone, but some of 25

these risks are, of course, forever, really. 1 I mean, Iodine-129 is forever. It's 157 2 million years, 1,314 million years, it depends on if 3 you multiply that by 10 or 20, and there is a chart in 4 5 the report that gives those half-lives and then times 10, then times 20, and that's the contamination that's 6 7 out there. You know, they check the sediments. They 8 9 should check the soil, the groundwater, the sediments of the Connecticut River. 10 11 I was lucky enough, or unlucky enough to go to the technical meeting, where Consumers Energy, 12 the previous owner of Big Rock Point, met with the NRC 13 at NRC Headquarters. 14 This is around 2005, 15 Consumers Energy said to the NRC, "Lake Michigan is 16 not our property, so, we're not responsible for the 17 contamination out there, right," and the NRC said, "Yes," and that's how that decision went down. 18 19 So, whose property is the Connecticut 20 River? Who owns the contamination that's in the 21 sediment to the -- of the Connecticut Rivers? Who owns the contamination that's in the flora and the 22 fauna and food chain? 23 This very discussion underway in Japan. 24

Who owns the contamination that came out

25

of Fukushima Daiichi. A golf course sued Tokyo Electric Power Company for contaminating the golf course, saying, "Guess what, quys? We didn't create this stuff. You did. So, the lawsuits are many over there. The last thing I wanted to talk about is the high-level radioactive waste. The pool is a very risky place. You lose cooling water through a southern drain-down, as by the

The pool is a very risky place. You lose cooling water through a southern drain-down, as by the drop of a heavy load, which almost happened at Vermont Yankee several years ago, almost happened at Palisades in Michigan, back in 2005, and the NRC was complicit in the cover-up for many months.

So, the drop of heavy loads is a real danger. You lose the water in a great big hurry, and that waste can be on fire in a matter of hours, if not sooner, and there is no contingency because when the water is gone, the radiation shielding is gone. The dose rates near the pool would be something like 10,000 rem an hour. You're dead in seconds, if you approach it.

That was the whole problem at Fukushima Daiichi. I happen to be in Montpelier on Saint Patrick's Day 2011, because we had a Chernobyl photo exhibit, long planned. It was the 25th anniversary of

Chernobyl.

So, that was the night that the Japanese self-defense force helicopters were trying to drop seawater by helicopter, onto the pool of Unit No. 4 at Fukushima Daiichi, very reminiscent of what happened at Chernobyl, the dropping of, you know, fire-retardant materials from helicopters, and it was because there was tremendous concern that Unit 4's pool was empty of water, that it had drained, and now the official version of things is that, no, the water was always there.

Well, there must have been a concern, if they went to such great lengths and such great risks, putting those pilots at such great risks, to try to drop that water in there.

So, if you have a sudden drain-on, if you have a slower motion boil-down and you lose the water that way, and again, at Fukushima Daiichi, they were without electricity to turn the lights on in the control room for like 10 days, let alone to run the cooling water pumps on the high-level radioactive waste storage pool.

So, a fire in the pool and the waste is supposedly going to be out of there by 2020, but that's five more years of pool risks at Vermont

Yankee, and then once the irradiated fuel moves into 1 dry cask storage, that's where the risk moves to. 2 Granted, it's a reduction of risk, but the 3 4 risk is not zero, far from it, because NRC regulations on dry cask storage don't require safequards against 5 terrorist attack, the some -- if attackers were to 6 show up with anti-tank missiles, they could blow the 7 dry casks away. 8 It wouldn't be that difficult to create 9 urban walls around the dry cask storage to prevent 10 11 line of sight attacks. MR. SACHS: Right. 12 And there was enough public 13 MR. KAMPS: pressure in places like Prairie Island, Minnesota, 14 15 with an Indian reservation 100 yards away from the 16 nuclear power plant, that the urban walls were put in place, preventing line of sight attack. 17 They have those as well, out at Palo 18 19 Verde in Arizona. This can be done. It's not very 20 expensive. I have an uncle in Michigan with a Bobcat who would do it for \$50,000 and be very happy about 21 I mean, jobs, right? 22 it. 23 MR. SACHS: Only in elementary school. MR. KAMPS: So, the last thing in want to 24 say about the dry casks, and then I'll sit down, is 25

the hold tanks.

We have known since the year 2000, when in had the honor of meeting Oscar Sarante, January of 2003, when I met him. Oscar Sarante worked for Exelon, Commonwealth Edison in Chicago. He was their lead quality assurance inspector, and he got tasked to do the quality assurance inspection on the hold tack dry cask fabrication facility, in the Pittsburgh area.

He led an audit with a dozen other auditors, one each from the utilities in the country using hold tacks, and in a short three-day audit, they found nine major categories of quality assurance violations.

NRC had just done a QA audit not long before, found nothing wrong. Everything is fine. Just one example was the welds on the hold tacks.

The fabrication facility called U.S. Tool & Dye was cooling the welds in baths of water, putting fans on them, introducing brittleness into the welds.

The people doing that work were not qualified to be doing that work. The materials they were using were not quality assured, but they don't know where those materials came from, what impurities were in those materials.

So, Oscar Sarante, and he was backed up by

1	Dr. Ross Landsman of the NRC Chicago Office, dry cask
2	inspector, they have major questions about the
3	structural integrity of the hold tacks sitting still,
4	going zero miles per hour onsite storage, let alone
5	going 60 miles per hour or faster on the rails, which
6	NRC has certified them for to carry this stuff to
7	Indian reservations out west, for example.
8	So, my bottom line, all you vigilant folks
9	here who shutdown Vermont Yankee through your courage,
10	your vision, your creativity, your determination, if
11	anybody could keep on their eyes on this
12	decommissioning process, if anybody could keep their
13	eyes on the risks of high-level radioactive waste,
14	it's you guys, and believe you me, it's going to have
15	to be you guys. It ain't going to be the NRC. It
16	ain't going to be Entergy. They have other
17	motivation.
18	So, thank you very much.
19	MR. CAMERON: Thank you, Kevin. Gary?
20	MR. SACHS: Do you want to ask the
21	question I asked about earlier, or do you want me to?
22	MR. CAMERON: Why don't you do it, about
23	the habitability, right?
24	MR. SACHS: No, I'm actually thinking
25	about what I heard Mr. Bruce Watson say.

1	MR. CAMERON: Oh, okay.
2	MR. SACHS: Mr. Watson said on a webinar
3	last week, that the people who determine whether or
4	not Vermont Yankee is to be decommissioned immediately
5	or put in SAFSTOR, that is down between the owners and
6	the stakeholders. Did you say that, sir?
7	MR. WATSON: Yes, and let me clarify a
8	couple things.
9	The determination on which strategy that's
10	going to be used for decommissioning is up to the
11	owners. It's also up for them to get the input from
12	stakeholders, such as the state, the local community
13	and the other people who are interested in the
14	decommissioning.
15	With that said, we would hope that they
16	would take some of that consideration into their
17	planning and strategies for doing the decommissioning.
18	So, yes, it's a true statement. Part of
19	that, I also mentioned before is that we encourage the
20	licensee to or the state to
21	MR. SACHS: Actually, I'm okay with the
22	MR. WATSON: seek the Advisory
23	Committee
24	MR. SACHS: Is it okay for you to stop
25	there?

1	MR. WATSON: No, I want to finish the
2	question.
3	MR. SACHS: But you've already spoken
4	quite a bit, and I haven't had much chance yet.
5	MR. WATSON: Well
6	MR. SACHS: I think it's fair that
7	MR. CAMERON: You've had more time than
8	anybody.
9	MR. WATSON: So, you know, we encourage
10	the formation of a Citizen's Advisory Panel, which the
11	state has done, to inform the public and also the
12	stakeholders, other stakeholders, on the information
13	and work with the utility and the licensee to work on
14	decommissioning issues.
15	MR. CAMERON: Okay, go ahead, second
16	question?
17	MR. SACHS: Well, I wasn't even thinking
18	of asking one, but it's another question, habitability
19	question. How many of those totally decommissioned
20	reactors that have been totally decommissioned, do
21	have daycare centers on them now and are habitable?
22	Main Yankee is not, Connecticut Yankee is not. How
23	many of them are, that you decommissioned?
24	MR. WATSON: I'll answer that. The 10
25	power reactors that have been decommissioned for

1	unrestricted release, meaning the footprint of the
2	reactor itself has been the license has been
3	terminated, are available for the owner to decide what
4	they want to do with the property, not the NRC, and
5	they may invest some of that with the state.
6	Main Yankee donated some of the land to a
7	non-profit organization, which maintains part of the
8	site as a park. Some utilities have elected to build
9	additional generating stations on the property,
10	because they're valuable to them.
11	There is water, cooling water. There is
12	the grid infrastructure. There has also been
13	environmental impact statements done on the property
14	
15	MR. SACHS: How about a number? A number,
16	sir?
17	MR. WATSON: Well, I'm
18	MR. SACHS: I'm looking for a number.
19	MR. WATSON: How many have been
20	childcare centers built on them?
21	MR. SACHS: Yes.
22	MR. WATSON: I don't know. But I do know
23	
24	MR. SACHS: That's a good answer.
25	MR. WATSON: Okay.

1	MR. SACHS: I appreciate that.
2	MR. WATSON: Because I don't know. I
3	really don't keep up with what they
4	MR. SACHS: How many are free for people
5	
6	MR. WATSON: do every day.
7	MR. SACHS: to walk on?
8	MR. WATSON: They're all free to be walked
9	on, but they're owned by
10	MR. SACHS: Except for the
11	MR. WATSON: private property, okay,
12	except for the one I know in Maine, which became a
13	park that is sponsored by
14	MR. SACHS: Yes, but the reactor
15	MR. WATSON: a non-profit.
16	MR. SACHS: The waste in Maine, the
17	cooling the casks are still in a you know,
18	bigger than this hotel, not occupy-able space.
19	I wanted to comment on something that Mr.
20	Kamps had said.
21	We had some casks. Actually, we have five
22	of our casks, of the 13 we currently have, which were
23	not property leak-rate tested, and that was told
24	that came out from Holtec. How the hell did it get
25	through NRC testing, but they didn't do the leak-rate

1	testing?
2	Do you take your information from the
3	licensees, regarding dry casks also?
4	SPEAKER: Where else do they get their
5	information?
6	MR. SACHS: Just checking.
7	MR. CAMERON: Anybody?
8	MR. SACHS: Anybody want to answer it?
9	Really, like do you do any work to check the casks?
10	MR. CAMERON: Let's see if we can get an
11	answer to your question.
12	MR. FERDAS: Yes, I'll take that. We do
13	do inspections. There is, as we talked about
14	MR. SACHS: Once every 25 years?
15	MR. FERDAS: No, no.
16	MR. SACHS: How often?
17	MR. FERDAS: As I mentioned before, we
18	have an inspection program.
19	MR. SACHS: How often?
20	MR. FERDAS: Our inspection program
21	requires us to be onsite for anyone that has dry cask
22	storage on a two year frequency.
23	MR. SACHS: So, you come in, you look at
24	a cask and you leave?
25	MR. FERDAS: No.

1	MR. SACHS: You come in, you open it a
2	cask
3	MR. FERDAS: No.
4	MR. SACHS: you make sure it's sealed
5	correctly?
6	MR. FERDAS: Let me finish, please. I
7	want to give you an answer.
8	MR. CAMERON: This is not a cross-
9	examination.
10	MR. SACHS: Sure it is.
11	MR. FERDAS: Okay.
12	MR. CAMERON: No, it isn't.
13	MR. FERDAS: What we try to do
14	MR. SACHS: I want to make sure
15	MR. FERDAS: we are performance based
16	agency, what we try to do is, we align our inspection
17	
18	MR. SACHS: Relax your shoulders, Marc.
19	MR. FERDAS: and actual
20	MR. SACHS: Relax your shoulders. It's
21	okay. It's okay, Marc. I'm not here to
22	MR. FERDAS: No, it's also okay to let me
23	finish to answer the question.
24	MR. SACHS: Well, I don't have to. I'm a
25	stakeholder.

1	MR. FERDAS: Let me just
2	MR. SACHS: You're on my turf.
3	MR. FERDAS: answer your question.
4	MR. SACHS: I don't trust you.
5	MR. FERDAS: Let me just
6	MR. CAMERON: Do you have another
7	MR. FERDAS: I'm just curious
8	MR. SACHS: I got a bunch of other
9	questions.
10	MR. FERDAS: What we do is, we do the
11	inspections when actual loading campaigns are ongoing.
12	For those plants that do not have loading campaigns,
13	after an extended period of time, we do come onsite to
14	review how they're maintaining their dry cask storage
15	system.
16	MR. SACHS: Okay, so, we have five that
17	have we not leak-rate tested. What is the effect
18	of that? What is the can you tell us can
19	someone come back to us, who live here, and tell us
20	the effect of not having had the leak-rate testing on
21	those casks that are here?
22	MR. CAMERON: Gary?
23	MR. SACHS: Are we more likely to have
24	'x'?
25	MR. FERDAS: I do not know the specifics

1	of that. I was not in charge of the group when that
2	occurred, however, there is an environmental
3	monitoring program around the ISFSI where the
4	radiation levels are measured.
5	MR. SACHS: Thank you, sir, that's good.
6	MR. CAMERON: Gary, how about two more
7	questions, and then
8	MR. SACHS: How about I read what I
9	presented, sir? You told me to write them down. I
10	wrote them down.
11	MR. CAMERON: Yes, but
12	MR. SACHS: For now.
13	MR. CAMERON: Gary, we have like
14	MR. SACHS: I know you do, but this is the
15	way you said you'd be here past nine. This is the
16	way it's supposed to be.
17	MR. CAMERON: Gary?
18	MR. SACHS: Okay, I cite NRC information
19	notice 96-34, in reference to hydrogen explosion in
20	the process of sealing a dry cask 1996-34.
21	I cite 19840113, regarding the fuel rod
22	drop that occurred at Vermont Yankee. That was in
23	1998. I cite NRC 94-12, where the NRC proposes a fine
24	for multiple alleged violations of NRC requirements at
25	Vermont Vankee Nuclear Power Plant in Vernon Vermont

mishandling at this now closed, thank you very much,
reactor.
Because of multiple "Because of
multiple examples of the alleged violations."
Also for the silt, etcetera that had
clogged the alternate cooling tower here at VY, "It
involved a build-up of silt and debris in the
alternate cooling tower basin and suction pit, which
left the system inoperable, possibly since 1989." You
guys are overseeing it. Possibly you didn't oversee
that in those five years.
MR. CAMERON: Gary?
MR. SACHS: I'm here. This is where I am.
MR. CAMERON: Wait a minute. I got a guy
who can answer some of your questions.
MR. SACHS: Great.
MR. CAMERON: Okay, this is Darrell,
introduce yourself.
MR. DUNN: My name is Darrell Dunn. I'm
with the Office of NMSS in the
MR. SACHS: Can you clarify what that is?
MD DIDDI Nuclear Metarial Cafety and
MR. DUNN: Nuclear Material Safety and
Safeguards in the Division of spent fuel management in

1	So, my Branch looks at dry cask
2	MR. SACHS: Do you think the best place in
3	the country to work best place in the Government to
4	work?
5	MR. CAMERON: Gary, will you just let
6	SPEAKER: Gary?
7	SPEAKER: Leave him alone.
8	MR. SACHS: He can sweat too.
9	MR. DUNN: My Branch looks at, reviews,
10	approves or does not approve renewals of dry cask
11	storage systems.
12	So, you asked about the helium leak-rate
13	testing.
14	MR. SACHS: Yes, I did.
15	MR. DUNN: Okay, so, that should have
16	really never occurred
17	MR. SACHS: Yes.
18	MR. DUNN: and all of the casks that
19	are going to be loaded with Holtec systems will be
20	leak-rate tested.
21	MR. SACHS: How do we know, if those
22	weren't? What can you tell us, to make us believe
23	you're telling me the truth?
24	MR. DUNN: The ones that you've said
25	MR. SACHS: What can you tell me?

1	MR. DUNN: The ones that you've said were
2	not leak-rate tested were not leak-rate tested.
3	MR. SACHS: Why not? You're overseeing
4	them.
5	MR. DUNN: They just
6	MR. SACHS: That's your job.
7	MR. DUNN: They should have been leak-rate
8	tested.
9	MR. SACHS: Are you going to swap them out
10	with good ones?
11	MR. DUNN: No.
12	MR. SACHS: Why not?
13	MR. DUNN: So, the leak-rate testing, the
14	casks were backfilled with helium. Helium is an inert
15	gas. It also provides heat transfer.
16	Those casks are low-heat load casks. So,
17	what's the effect of the low-heat the lack of
18	helium leak-rate testing on the low-heat low cask?
19	Very little, because there is nothing that's going to
20	happen to the fuel because it's just too cold.
21	Now, if the fuel was hot, that would be a
22	different story, okay but
23	MR. SACHS: So, how do we know that the
24	casks that the most recent fuel that just got
25	transferred in, that's going to be pulled out in five
ļ	I

Ŧ	years, now do we know that those aren't going to be
2	put in casks that aren't that are helium leak-rate
3	tested?
4	MR. DUNN: They will be helium leak-rate
5	tested
6	MR. SACHS: How do we know?
7	15 because it is a requirement, because
8	that got fixed.
9	MR. SACHS: They did not do it for those
10	five.
11	MR. DUNN: But that got fixed.
12	MR. CAMERON: Gary? Okay, Gary, thank
13	you. Last
14	MR. SACHS: Can I just say this?
15	MR. FERDAS: Chip? Chip, just one other
16	thing with that.
17	MR. CAMERON: Okay, go ahead, Marc.
18	MR. FERDAS: And important aspect is that
19	there is NDE testing that was done on those casks
20	SPEAKER: What is NDE?
21	MR. FERDAS: Sorry, non-destructive
22	examination testing that's done on all the welds, that
23	are made on that cask.
24	So, one, you have those were tested for a
25	structural integrity. The helium leak-rate test is a
•	

1	backup test to that first examination of the welds.
2	So, we do have confidence that those casks
3	
4	MR. SACHS: Confidence? Wait, sorry.
5	MR. FERDAS: We have confidence that those
6	casks are structurally adequate.
7	MR. SACHS: We are looking for more
8	MR. FERDAS: Okay.
9	MR. SACHS: than confidence. Can I
10	just
11	MR. CAMERON: Gary?
12	MR. SACHS: say that
13	MR. CAMERON: Gary, yes.
14	MR. SACHS: I'm not finished. May I
15	finish?
16	MR. CAMERON: I've got to
17	MR. SACHS: I've got that, to there.
18	That's what I got left. I got there to there.
19	MR. CAMERON: Gary, that's is that
20	those are many questions, right?
21	MR. SACHS: No, those aren't questions.
22	It's bringing things forward that have not been
23	mentioned.
24	MR. CAMERON: Okay, Gary, I'm going to
25	give you a couple minutes.

1	MR. SACHS: Please, fine.
2	MR. CAMERON: To do it, okay?
3	MR. SACHS: Chip, I sat and waited. I
4	done all this crap you told me to do, without
5	MR. CAMERON: Stop saying that.
6	MR. SACHS: You told me to not make noise.
7	I didn't make fuckin' noise.
8	MR. CAMERON: Okay, Gary, I'm going to
9	give you the microphone back.
10	MR. SACHS: Yes, thank you.
11	MR. CAMERON: Okay, but we have a bunch of
12	people
13	MR. SACHS: I am so tired of this crap.
14	MR. CAMERON: bunch of people
15	MR. SACHS: At every meeting
16	MR. CAMERON: waiting
17	MR. SACHS: I can't speak.
18	MR. CAMERON: Waiting to speak
19	MR. SACHS: People just do what you tell
20	them to do.
21	MR. CAMERON: And I just want to if
22	MR. SACHS: I've got questions, man.
23	MR. CAMERON: If people who have if you
24	have questions, you can submit them in writing to the
25	NRC.

1	MR. SACHS: No, Chip, but this is when we
2	get to speak to them. This is what I want them to
3	sweat.
4	MR. CAMERON: Okay.
5	MR. SACHS: Not when they're in their
6	office and you can't see them.
7	MR. CAMERON: Gary? Gary?
8	MR. SACHS: I got it.
9	MR. CAMERON: You've got two minutes.
10	MR. SACHS: I got it.
11	MR. CAMERON: Okay.
12	MR. SACHS: I got it.
13	MR. CAMERON: You got two minutes.
14	MR. SACHS: Great. I got it. Okay, the
15	end nuclear where am I? Oh my God.
16	SPEAKER: Gary, thank you for caring so
17	much.
18	MR. SACHS: Thank you. Okay, let's
19	continue to the spectacular cooling tower collapse of
20	2007. I don't need this.
21	The NRC oversaw the spectacular cooling
22	tower collapse and oversaw the repairs. They had to
23	come back in 2008. They had to come back in 2008
24	because they were not able to see. They were doing
25	supervision without the ability to see. You cannot do

supervision without vision. Supervision means over-1 vision. Latin, vision means to see. 2 If the NRC can't see when doing repairs on 3 4 the plastic cooling towers, then how can they be 5 called -- say that they're doing supervision? Okay, that's another cooling tower. 6 7 SPEAKER: Gary? 8 MR. SACHS: Yes. 9 I want to ask a question. SPEAKER: The simple thing I want to 10 MR. SACHS: 11 bring up is that Entergy right now has just been said 12 to be over-bought in the market. 13 What that means is that's the reason why 14 Entergy executives are going and selling hundreds of 15 thousands of Entergy shares. What over-bought means, 16 I didn't know before yesterday, but what over-bought means is they're at the top of their game. From here, 17 Entergy stock goes nowhere but down. 18 19 We have a nuclear reactor leaking 20 Strontium and we have a company that says they don't 21 want to clean it up. 22 You know, when Vermont Yankee took cable 23 to Vermont in 1967 and said, "We want to run a reactor for 40 years," they didn't say, "We want to run a 24 25 reactor for 40 years, but not clean it up for 100."

1	No, they didn't say that.
2	You guys are messing with the State of
3	Vermont. It's gross. It's really wrong, what you're
4	doing.
5	MR. CAMERON: Okay, Gary.
6	MR. SACHS: Let me finish what I
7	MR. CAMERON: Gary?
8	MR. SACHS: Let me finish.
9	MR. CAMERON: Gary, you've been here for
10	a while.
11	MR. SACHS: I've got the microphone. You
12	don't, Chip.
13	MR. CAMERON: I'll turn the microphone
14	off.
15	MR. SACHS: I'm not surprised.
16	MR. CAMERON: I mean, I think the
17	settlement you said a good comment, okay. No, no,
18	no.
19	MR. SACHS: I don't care.
20	MR. CAMERON: You said a good comment.
21	MR. SACHS: Who did?
22	MR. CAMERON: He did. He said, "Thank you
23	for caring," okay.
24	MR. SACHS: Thank you too, Chip. Always
25	great to have you back here.

1	MR. CAMERON: You're welcome. You're
2	welcome. Claire and then Bert Picard.
3	MS. CHANG: So, I have a question. This
4	two credit lines that Entergy is establishing to pay
5	for the transfer of dry cask storage, it's \$145
6	million? Where is that credit line coming from?
7	MR. LYNCH: Entergy is borrowing money
8	from two lending institutes, and it's being backed up
9	by the company assets.
10	So, it's no different than you or I
11	borrowing money to pay for, you know, something that
12	we're going to build on our own home.
13	MS. CHANG: So, you don't own those
14	lending institutions?
15	MR. LYNCH: No, they're banks.
16	MS. CHANG: So, how much interest are you
17	paying on those loans?
18	MR. LYNCH: I have no idea.
19	MS. CHANG: Is that interest being then
20	also applied or to be reimbursed through the
21	decommissioning fund?
22	MR. LYNCH: The monies that are being
23	borrowed would be paid for by the litigation against
24	the Department of Energy, because those are costs that
25	we could recuperate for them not meeting their
l	

1	contractual obligations to take the fuel.
2	MS. CHANG: So, let me get this straight.
3	So, there okay, so, that's just the
4	that's just moving the spent fuel from the pool into
5	the dry casks.
6	MR. LYNCH: That's correct.
7	MS. CHANG: Is that what that \$145 million
8	is for?
9	MR. LYNCH: That's correct.
10	MS. CHANG: So, that's going to be for
11	this next five years?
12	MR. LYNCH: Correct.
13	MS. CHANG: But that's not that is this
14	part up here in the pie chart, that's the spent fuel
15	management part? Is that included in that?
16	MR. LYNCH: Yes, out of the \$368 million,
17	about \$143 million is the transfer of the fuel from
18	wet to dry.
19	MS. CHANG: So, but you have that as part
20	of the decommissioning cost of the \$1.2 million.
21	MR. LYNCH: Billion.
22	MS. CHANG: Billion, sorry. 'B'. So, but
23	you're getting that money back from the DOE, or you
24	will sue them to get the money back?
25	MR. LYNCH: Assuming we're successful,

1	that's correct.
2	MS. CHANG: I don't know that any no
3	nuclear reactor owner who has sued the DOE has been
4	unsuccessful, up until this point. They've all gotten
5	their money back, right?
6	MR. LYNCH: I'm not aware of what other
7	licensees have done.
8	MS. CHANG: Oh, I cannot believe that, for
9	one minute, or even three seconds.
10	MR. SACHS: We get you're lying, Mr.
11	Lynch.
12	MS. CHANG: I'm sorry.
13	MR. SACHS: We think you're lying, sir.
14	MS. CHANG: Okay, so, that money
15	MR. SACHS: Here's the new Entergy.
16	MS. CHANG: it's going to get back from
17	the DOE
18	SPEAKER: From taxpayers.
19	MS. CHANG: right?
20	SPEAKER: Yes.
21	MS. CHANG: That's \$145 million
22	MR. SACHS: Yes.
23	MS. CHANG: that you're borrowing.
24	MR. LYNCH: I'm sorry, there is two people
25	talking at the same time. So, if you can ask the

1	question, I'd be more
2	MS. CHANG: I'm sure you
3	MR. LYNCH: than happy to answer it.
4	MS. CHANG: have been in many
5	conversations where two people have been talking at
6	the same time.
7	MR. CAMERON: Claire, can you just ask
8	your question?
9	MS. CHANG: I did ask my question. So,
10	the DOE
11	MR. CAMERON: Just ask your question.
12	MS. CHANG: The DOE is going to give you
13	back this money, that you're including in the cost of
14	the \$1.2 billion to decommission this fund
15	decommission this reactor, but that money that DOE is
16	giving you back, is that going into the
17	decommissioning fund then, the trust fund?
18	MR. LYNCH: The money would be paying back
19	the creditors that loaned us the money in the first
20	place, to allow us to transfer the fuel from wet to
21	dry.
22	MS. CHANG: But you're including that cost
23	into there is something fishy going on here, and
24	I'm not a financial person, so I can't quite put my
25	finger on it.

1	But if you're including those costs in the
2	decommissioning trust fund amount, but somehow, you're
3	not paying for it, but the DOE is paying for it, then
4	why are you including it in this cost that the trust
5	fund has to pay for?
6	SPEAKER: Yes?
7	MR. LYNCH: The overall break down of all
8	the costs are explained in decommissioning cost
9	estimate.
10	We go through why each cost is costing
11	that it is.
12	MR. SACHS: We think you're full of shit.
13	MR. LYNCH: So, that's part of the PSDAR
14	and it's part of a very detailed decommissioning cost
15	estimate. It explains all the costs, where the
16	monies are coming from and how it's being
17	MR. SACHS: Subtract \$1.4 million from
18	\$1.24 billion.
19	SPEAKER: Can we get him a microphone?
20	MR. TOOMEY: Give me a microphone.
21	MR. CAMERON: Mike, you want to get on
22	that?
23	MR. TOOMEY: Sure. Mike Toomey from
24	MR. SACHS: You're a scumbag, Mike Toomey.
25	The behavior you pull up

1	MR. TOOMEY: In answer to your question
2	MR. SACHS: is crap.
3	SPEAKER: I agree with you, Gary.
4	MR. TOOMEY: The answer to your question
5	is that the \$1.24 is the total cost of the project,
6	which we have identified. When this \$143 million of
7	the project is done, then you'll have less, you'll
8	have \$143 less that has to go.
9	So, the cost of the project after this
10	work has been done will be whatever \$124 billion minus
11	\$143 million
12	MR. SACHS: Good. What is that total?
13	MR. TOOMEY: It's just like the work of
14	anything else.
15	MR. SACHS: What is that total?
16	SPEAKER: It's point-one. It's really the
17	amount that the trust fund is supposed to grow to.
18	MR. LYNCH: Well, it has to grow if we
19	are successful in we've established a line of
20	credit. We get this funding in place, which we have,
21	we do the work and we get the money back from the DOE,
22	then that's right, that \$143 million will be reduced,
23	will reduce the total cost of the project.
24	MR. SACHS: So, how much of
25	MR. LYNCH: So, whatever that is.

1	MR. SACHS: What are we looking for?
2	MR. LYNCH: Whatever \$1.24 billion minus
3	\$143 million is, which is approximately \$1
4	whatever whatever that number is, right, 1.1.
5	MR. CAMERON: Okay, can you thank you,
6	Mike and thank you, Claire. Can you guys talk after
7	the meeting or some time?
8	SPEAKER: We'd like to hear this in
9	public.
10	MR. SACHS: Yes.
11	MR. CAMERON: Yes, well, I think we're
12	I think we've heard about enough as we can, right now,
13	and I got to go to Bob Picard.
14	MR. SACHS: You said you were going to be
15	here past nine, and now, you're clocking back on your
16	
17	MR. CAMERON: No, we're going to be here
18	past nine, but we still have 10 people to go here, or
19	more, okay?
20	SPEAKER: I have a
21	MR. CAMERON: Bob Picard?
22	MR. SACHS: Let her ask her other
23	question.
24	MR. CAMERON: Wait a minute, Claire, do
25	you have you have one more question? Well, go
ł	1

1	ahead, as your second question.
2	MS. CHANG: Thank you very much.
3	MR. CAMERON: You're welcome.
4	MS. CHANG: I appreciate it. So, but I
5	miss your red vest.
6	MR. CAMERON: Okay, thank you.
7	MS. CHANG: Now, the second question is,
8	Entergy goes belly-up next year. What are you going
9	to do?
10	MR. SACHS: Come on, NRC.
11	MR. BROADDUS: If I can I'll answer one
12	part of that, which is the decommissioning trust fund
13	does not go away if Entergy, the entity goes away.
14	MR. SACHS: Who takes responsibility for
15	it?
16	MR. BROADDUS: Whoever
17	MR. SACHS: The funding.
18	MR. BROADDUS: becomes the licensee
19	after that.
20	MR. SACHS: What if there isn't one? What
21	if it's you?
22	MR. BROADDUS: We will keep we will
23	continue to hold Entergy responsible
24	MR. SACHS: What if Entergy goes belly-up?
25	MR. BROADDUS: for that.

1	MR. SACHS: What if there is no Entergy?
2	MR. CAMERON: Let's let let's
3	concentrate on Claire.
4	MS. CHANG: Gary's line of questioning is
5	appropriate. I asked exactly
6	MR. SACHS: This is Nancy's line of
7	questioning.
8	MS. CHANG: Entergy does an Enron and it
9	implodes. It's not that far-fetched.
10	MR. SACHS: We expect it.
11	MS. CHANG: No one would have expected
12	MR. SACHS: They're scum.
13	MS. CHANG: Enron to have died, no one.
14	So, next year, I'll pick a date for you too. April
15	1st, 2016. Entergy dies. What are you to do?
16	MR. PERSINKO: Well, the first thing I was
17	going to mention is let me answer one thing.
18	The trust fund still exists. I mean, the
19	trust fund will still exist when Entergy if Entergy
20	
21	MR. SACHS: It will still be under-funded.
22	MR. PERSINKO: was to be gone, but the
23	trust fund will exist and the it will be up to the
24	trustee of the trust fund to hire another clean up
25	contractor to clean up the to decommission the

1	reactor.
2	MR. SACHS: Up to who?
3	MR. PERSINKO: But it would be another
4	clean up contractor if Entergy
5	MR. SACHS: Who hires them?
6	MR. PERSINKO: did not exist.
7	MR. SACHS: Who hires them? Who hires
8	them?
9	MR. CAMERON: Gary, come on, stop it.
10	MR. PERSINKO: I'm trying to answer the
11	question.
12	MS. CHANG: He's trying to answer it.
13	MR. PERSINKO: It would be the trustee of
14	the trust fund, I believe.
15	MS. CHANG: So, who is
16	MR. PERSINKO: And the trust fund
17	excuse me, the trust fund, I believe is Mellon Bank.
18	You know, these licensees have it with separate
19	independent banks. So, the trustee that is with a
20	third party. It's not with the NRC. It's not with
21	the licensee. That money is with the third party,
22	okay, and that's who they go to, to get money to do
23	the decommissioning planning and to execute the
24	decommissioning, okay.
25	MS. CHANG: And so, they don't go through

1	you at all?
2	MR. PERSINKO: They advise us when or
3	notify us when they're going to they want to use
4	funds. They also report to us every year on the
5	health of that fund, and if there is any short-falls,
6	then we will address with the Entergy
7	MS. CHANG: So, the
8	MR. PERSINKO: to come up with the
9	short-fall in those funds.
LO	MR. CAMERON: I'm going to have to ask you
L1	to finish up, okay?
L2	MS. CHANG: So, it goes back to this is a
L3	merchant plant and that you don't have the rules and
L4	regulations in place, and it's our fault that you
L5	don't have them in place. It's your fault and you
L6	knew years ago, decades ago that this was the
L7	scenario.
L8	MR. CAMERON: I think you made your point.
L9	MS. CHANG: Right?
20	MR. CAMERON: I think you made your point,
21	Claire. Thank you.
22	MR. SACHS: Thank you, Claire.
23	MR. CAMERON: Now, this is Bert? Oh, Bob
24	Dickerman? Did we hear from Bert Picard? Okay, why

don't you come -- Bob, come on. Do you -- you're

here, and Harvey Sckaktman, Chuck Schwer, 1 Williams and Michael Granger. This is Bob Dickerman. 2 MR. DICKERMAN: I'm Bob Dickerman. 3 4 from Northfield, Massachusetts, just over the line. Something I've been seeing 5 in the newspapers down in Greenfield, is these two numbers, 6 7 \$650 million or so and \$1.2 billion 8 decommissioning in the trust fund. My question has been, you're saying you 9 10 \$1.2 billion now. You're talking 11 decommissioning 40 years or 50 years or 60 years into 12 the future. 13 So, my point is that at historical rates 14 of inflation of three percent, we're not going to be 15 spending \$1.2 billion in, you know, 40 or 50 or 60 16 years from now. It will be more like four times that or \$5 billion in 2060 dollars or whatever they are, 17 they're won't be any 2050 dollars around to use at 18 19 that point, so that will be, you know, 2060 or 2070 20 dollars and it will require \$5 billion to do the same amount of work that \$1.2 does today, and I wish that 21 22 was showing up more in the newspaper because people 23 are getting the impression that it's going to be \$1.2 billion, when it isn't. 24 25 Ιf inflation qoes higher than the

historical rate, maybe more like in the 70's when it 1 seven, eight, nine, ten percent, then it could be \$20 2 billion at that time. 3 4 So, I just want to get that out there. have another question, for you, Darrel. 5 I quess you're the expert on dry cask storage. 6 As I was sitting here, I just began to 7 wonder how does concrete deteriorate over long periods 8 of time, under that high radiation dose from those 9 spent fuel rods? 10 MR. CAMERON: Okay, Darrel, do you want to 11 provide an answer to that? Thank you. 12 MR. DICKERMAN: Do we have any empirical 13 data, test data, and I quess I have to say, I assume 14 we don't, because no plants have been decommissioned 15 for that length of time. 16 Oh, no, we do have -- we do MR. DUNN: 17 have data, and as part of storing fuel beyond 18 19 initial 20 year license period for dry cask, independent spent fuel storage installations and all 20 certificate of compliance holders that provide casks 21 that can be used, like the Holtec systems that are 22 used at Vermont Yankee, they all have to come up with 23 what we call aging management programs, and they have 24 to address specifically, these issues. 25

1	So, we have we are going to issue some
2	revised regulatory guidance. It's NUREG 1927. It's
3	going to be Revision 1 of that, and in that revision
4	to that regulatory guidance, we're also going to
5	include some example aging management programs, and
6	one of them is going to deal specifically with
7	concrete.
8	MR. DICKERMAN: How do you get a reading
9	on that? I mean, because you can't test for 60 years
LO	yet. I mean, how do you tell whether your methodology
L1	works?
L2	MR. DUNN: There is empirical data for
L3	radiation exposure of concrete, as there is for
4	radiation exposure of metals. So, we have empirical
.5	data for that.
.6	MR. DICKERMAN: Good. Okay, thank you.
L7	MR. CAMERON: Okay.
.8	MR. DICKERMAN: One other quick question.
19	I want to repeat again to you, Joe Lynch, you're the
20	representative here on the panel from Entergy, right?
21	Yes?
22	MR. LYNCH: That's correct.
23	MR. DICKERMAN: I want to ask you again,
24	does Entergy intend to make a profit on the
25	decommissioning process?

1	SPEAKER: Yes.
2	MR. LYNCH: The cost associated with the
3	decommissioning is an estimate to do the work, and our
4	goal is to do the work with the cost that we have.
5	There is no profit built into that estimate.
6	MR. DICKERMAN: Thanks.
7	MR. CAMERON: Okay, thank you. Bert? You
8	want to use that?
9	MR. PICARD: Sure.
10	MR. CAMERON: Go ahead.
11	MR. PICARD: Bert Picard, Brattleboro,
12	stakeholder.
13	The NRC, it's interesting. When the State
14	of Vermont had 27 Senators to four vote that they
15	didn't want this nuclear plant here past the 40 years,
16	didn't mean a thing to you. When the Governor didn't
17	want it, didn't mean a thing to you.
18	So, what are you? A Government of
19	occupation, right? Government of occupation. That's
20	what you are. I have no respect for any of you. We
21	all know the revolving door between the industry and
22	the regulators, right?
23	Okay, good. But anyway, I know where I
24	stand. You know, the occupied. But still, I'll say

something.

1 First of all, you don't have a plan to get rid of the nuclear fuel, right? You don't have a 2 plan. Entergy is saying, "Oh, we'll start moving it 3 4 in 2026 and we'll be done in 2052." You know, that's a horse and pony show, right? I mean, this is all a 5 crock of you know what, right? 6 7 You don't have a plan. You don't know what to do with this poison. You've been working on 8 it for years. You don't know what to do. This stuff 9 should have been left alone, right? 10 11 Okay, so, that means we basically have to begin to prepare to store this stuff forever, right 12 here on the Connecticut River, in our community. 13 So, what's with these cheap casks? 14 Why 15 not do like in Europe? Why not have the good ones, you know, that you can monitor remotely, that are 16 going to last a while, because this is going to be a 17 18 while. This is going to be our great, great, great 19 grandchildren's problem, all right. So, what's with the cheap casks? Even an 20 berm seems to be a problem. I don't know, you know, 21 22 I mean, does that have to be requested on bended knee? "Please, shield the school." Come on. What are we 23 dealing with here? This is a joke. 24 So, first of all, we're going to have this 25

161 stuff forever probably, you know. The other thing is, 1 your Government is in a mess. Everybody talks about 2 how dysfunctional Congress is, right, and the economy 3 is in a mess. Wall Street is doing real good right 4 now, right? Maybe next year, not so good? Oh well, 5 get a golden parachute, right? 6 Well, Enron -- I mean, Entergy ain't going 7 to be around in 40 or 50 or 60 years. Everybody knows 8 9 that. Okay, so, what does 10

that mean though? Practically, decommission now with the money that's in the fund now.

Maybe you got to write new rules for merchant plants. So, write the new rules. just do it. Please, this is -- we're talking about just mitigating a little bit, the problem that we have with this poison, right? So, that's just minimum.

So, the time to decommission is now. With the climate change crisis that are coming and all of that, things are only going to get crazier. We don't do it now, it ain't happening. I don't want to know what's going to be going on in 50 years. You know, this thing ain't going to be cleaned up in 50 years. If it's not starting to clean up now, as soon as possible, like 2021 or 2026, like Mr. Gundersen said, it ain't happening. That's realistic.

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1	So, I say decommission now. Write new
2	rules if you have to. But that's a minimum that we
3	can demand, and from what I've heard tonight, which is
4	just a show to keep the civilians thinking that they
5	got a democracy, which we obviously don't, not as far
6	as you guys are concerned, I would want to see a
7	hearing convened by the State of Vermont that will
8	force Entergy and you guys and everybody else to come
9	and get sworn testimony, to at least get into some of
10	these questions a little bit more in depth. Thank
11	you.
12	MR. SACHS: Yes.
13	MR. CAMERON: Okay, thank you, Bert.
14	Harvey Schaktman. Okay, Chuck Schwer?
15	SPEAKER: Betsy had to go home.
16	MR. CAMERON: Betsy has gone home?
17	SPEAKER: She's here.
18	MR. CAMERON: Betsy, okay, come on up,
19	Betsy and then Michael Granger will be next, and Chris
20	Myers, Schuyler Gould. This is Betsy.
21	MS. WILLIAMS: I'm Betsy Williams. I live
22	just up the road here, and I don't have any notes. So,
23	I'm just going to speak about a few things, few
24	reactions, no pun intended. All right, pun was
2.5	intended

1 Couple of things, just reactions of things that have been said. I have to say, I find it -- when 2 we're talking about one of 3 the most 4 substances known to human kind and I would really invite anyone to disagree with me on that, that's what 5 The most dangerous substances we're talking about. 6 that are known to human kind. 7 I find it more than a little insulting, 8 when it's compared to birthday cake candles. 9 We do have reason to have concern here, 10 very good reason to have concern, and when, sir, I 11 12 would -- I have to respectfully say to you, when you 13 tell me the casks will be adequate, that does not give 14 me great assurance. 15 I am looking for a hell of a lot more than 16 I want to know that that thing is not going adequate. to crack and I want to know that when the Connecticut 17 18 River floods, that nothing will happen to that 19 radioactive waste that's sitting under water in a flood plain. 20 I want to know when some idiot flies a 21 plane into it, that it's not going to irradiate this 22 23 entire region. Can you give me that assurance? Ι don't think so. 24 When I'm told that basically we have no 25

right to say anything about our safety, because you 1 quys control our safety, we're not allowed to jay-walk 2 but by God, we better not talk about safety of nuclear 3 4 plants. I've had enough. The level of my distrust and venom and how 5 disrespected we have been is just -- it's a very deep 6 well. We have made it so clear in this state, that we 7 want some control over what happens at this site, and 8 we have been -- had the doors shut on us over, and 9 over, and over again by you guys. "Nope, you don't 10 have control," and when we do get one tiny little 11 leverage point of control, we get sued. 12 SPEAKER: Bastards. 13 MS. WILLIAMS: By the people who told us 14 they wouldn't, "Of course, we're not going to follow 15 eminent -- we're not going to go that route. 16 We're going to be partners with trustworthy. 17 Vermont." Well, hey, it didn't quite go your way, did 18 19 it? So, we sued -- they sued us. I would like to have some evidence, some 20 time that you guys give one bit of a damn about 21 anything any of us have to say, because I haven't seen 22 23 it yet. MR. CAMERON: All right, Betsy Williams. 24 Michael Granger? Chris Myers? 25

SPEAKER: He's gone. 1 MR. CAMERON: Schuyler? This is Schuyler 2 Do you want to use this, Schuyler? 3 Gould. 4 MR. GOULD: Thank you. Schuyler Gould of the Vermont Yankee decommissioning audit. 5 Section 3 of the PSDAR, 6 7 commenced to begin decommissioning when the nuclear decommissioning trust funds, "Are adequate to complete 8 decommissioning and remaining spent nuclear fuel 9 management activities that the Federal Government has 10 11 not yet agreed or been ordered to reimburse." This statement and others clearly makes 12 the assumption that Entergy has the right to use 13 decommissioning funds for nuclear 14 spent fuel 15 management activities. On May 20, 2009, Mr. Jay Faer, Entergy 16 Executive, was asked before the Vermont Public Service 17 Board, sworn testimony, "Would you also agree with me 18 19 that the definition of completion of decommissioning 20 excludes spent fuel management and site restoration?" "Yes." 21 So, my question to Mr. Toomey, if I might 22 ask, when did Entergy's notion that -- and on what 23 basis did Entergy change its notion that 24 25 management activities would be allowed to be charged

1	to the decommissioning fund?
2	My question to the NRC is, where does it
3	in NRC regulations, say that it is appropriate and
4	legal for Entergy to use decommissioning funds for
5	spent nuclear fuel management activities?
6	MR. CAMERON: Mike, we're going to go to
7	Mike for the first question and then Doug, for the
8	second. Mike Toomey.
9	MR. TOOMEY: Thank you. The definition of
10	decommissioning under the Vermont Public Service Board
11	orders and the memorandum of understanding, and as far
12	as as long as Entergy has owned the plant, includes
13	spent fuel management, from the beginning, since 2002.
14	So, I don't know
15	MR. SACHS: Why is there that loan?
16	MR. TOOMEY: I don't know what
17	MR. SACHS: Why did you take out a loan if
18	
19	MR. TOOMEY: Why don't you take a seat?
20	MR. SACHS: Why don't you take a seat?
21	MR. TOOMEY: Why don't you take a seat?
22	MR. SACHS: Why don't you take a seat,
23	Mike?
24	MR. TOOMEY: The issue of Mr. Faer's
25	testimony is I don't know the context. I don't know
1	I and the state of

1.	what questions became before and after, and I need to
2	make sure
3	SPEAKER: Just answer my question, please.
4	MR. SACHS: The answer is obvious.
5	MR. TOOMEY: I'd have to look at the
6	transcript, to see the context of the question, but
7	the overall decommissioning project absolutely
8	includes spent fuel management. That has to be done,
9	as part of the decontamination and dismantlement of
10	the plant, you have to deal with the spent fuel that's
11	onsite.
12	So, spent fuel management is part of the
13	decommissioning project, and it would be funded out of
14	the decommissioning trust fund, unless we're
15	successful getting the money from the DOE.
16	If we are successful in getting the money
17	from the DOE
18	MR. SACHS: Which you are
19	MR. TOOMEY: then there is no impact on
20	the decommissioning trust fund, other than a temporary
21	one.
22	What we have tried to do and we are
23	planning to do
24	MR. SACHS: You're trying to pay the debt
25	with our money.

MR. TOOMEY: -- is on the decommissioning 1 fund for the next five years, for this 2 trust substantial front-loaded cost of the dry fuel storage 3 4 campaigns, we are trying to have no effect on the 5 decommissioning trust fund. By taking the lines of credit out, we'll borrow the money, use it --6 MR. SACHS: Thank you. 7 MR. TOOMEY: We're not invading the 8 principle of the trust fund for the first five years. 9 When the money comes back from the DOE, assuming we 10 get 90 cents on the dollar, which is the assumption we 11 made, that will be used to pay the lines of credit 12 and then it won't have an affect on 13 off, decommissioning trust fund, other than the interest 14 15 costs, but that's function of the U.S. Government. When you recover damages in a case like that against 16 the Federal Government, under the Constitution, you 17 can't recover interest. So, there will be an interest 18 19 cost. But the principle cost will not affect the 20 decommissioning trust fund, and it was our effort to 21 allow that trust fund to grow and to get us closer to 22 23 the day when we can begin major dismantlement and decontamination activities. 24

MR. CAMERON: Thank you. We're going to

1	go for your second question, Schuyler, to Shawn
2	Harwell from the NRC.
3	MR. HARWELL: Thank you. The second part
4	of your question was where is it in the regulations?
5	The nuclear decommissioning trust funds
6	were established for radiological decommissioning at
7	the site.
8	The licensees have an option to do co-
9	mingling. They can put other funds in the
10	decommissioning trust fund. However, those must be
11	clearly delineated and so, that the NRC can track the
12	money.
13	Now, to access that money, first and
14	foremost, we're concerned with the radiological
15	decontamination, decommissioning.
16	To access that money, the licensee has to
17	file an exemption request, at which point we will look
18	at the circumstances at hand, and decided whether
19	we'll allow that exemption for the licensee to take
20	out money for other activities.
21	We currently have a request under review,
22	and that's about as much as I can say.
23	MR. CAMERON: Sure, go ahead.
24	SPEAKER: I just wanted to ask about that.
25	I've read through the regulations and I understand why

1	there might be exemptions.
2	I mean, in some cases, they do anticipate
3	it, for instance, longer than 60 years of
4	decommissioning
5	MR. CAMERON: Schuyler, apologies, but we
6	have to get you on the transcript.
7	MR. GOULD: Okay, sorry, thank you. Why
8	would the NRC grant an exemption? There is no
9	contingencies mentioned in the regulations which might
10	allow for an exemption? Why would you grant an
11	exemption and why should you grant an exemption?
12	MR. CAMERON: Okay, very clear. Shawn,
13	I'm bringing this back up to you, and I think Schuyler
14	was pretty clear about his two questions.
15	MR. HARWELL: Okay, to answer your
16	question.
17	When you have the decommissioning trust
18	fund, there are certain fees that go in establishing
19	funds.
20	So, if a licensee wanted to put in money
21	to keep it to grow, without having to pay extra
22	fees to different funds, to do the three elements, I
23	want to talk about three elements, radiological
24	decommissioning, spent fuel management, site
25	regtoration

1	So, originally, the intent of the
2	decommissioning trust fund was for the radiological
3	decommissioning. That was our requirement, NRC
4	requirement. The licensee has the option to also put
5	in funds into the decommissioning trust fund, to pay
6	for those other elements.
7	Now, they can do it in different methods.
8	They can sub-account. They can create sub-accounts.
9	They can make sure that they track the money. It has
10	to be a line item, so that an analyst, like I, myself
11	can see where that money is going.
12	So, we take in the NRC takes into
13	consideration, when we see that money, we only want to
14	see the radiological decommissioning portion. That is
15	the requirement for us.
16	The others are more of a business strategy
17	to have to pay less fees to earn interest on a fund.
18	Does that answer your question?
19	MR. GOULD: No. So, the problem is that
20	
21	MR. CAMERON: Okay, Schuyler, last one.
22	MR. GOULD: Okay, I'm still trying to get
23	an answer.
24	MR. CAMERON: I know.
25	MR. GOULD: So, you're telling me that the
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1	funds that are there were committed to radiological
2	decommissioning. I don't hear you saying that any of
3	those funds were put in a separate account or separate
4	accounting for spent fuel management.
5	So, why would any of those funds go into
6	spent fuel management?
7	MR. HARWELL: Sure. I think if I can
8	your name right, sir. Mr. Toomey?
9	MR. GOULD: No, Schuyler.
10	MR. HARWELL: Schuyler. No, I'm talking
11	to Mr. Toomey, over here.
12	From what I understand, the State of
13	Vermont and Entergy have an agreement where they see
14	decommissioning as more than radiological. It
15	includes spent fuel management as a process of
16	radiological decommissioning.
17	SPEAKER: Can we get a reference for that?
18	I never heard of it.
19	MR. CAMERON: You know, we really need to
20	go on. Could we talk? Could we talk later?
21	MR. BROADDUS: I can provide some
22	additional information, as well.
23	MR. CAMERON: Okay, why don't you go
24	ahead.
25	MR. BROADDUS: That might help clarify.

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MR. CAMERON: Okay, go ahead.

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MR. BROADDUS: There is another section of the regulations that also requires licensees within five years of their -- the end of their license term or within five years of their plan to shutdown, to submit to the NRC, an irradiated fuel management plan, and it's their plan for how they expect in five -- in that five year time period, you know, after they shut down, how do they expect to pay for the cost of the irradiated fuel management -- spent fuel management.

So, Entergy did submit an irradiated fuel management plan to us, prior to -- five years prior to their original period of the license term, which I don't remember the exact date of that. But it's -but their license -- they were in license renewal. So, it would have been five years before they went into that extended period.

So, and my recollection is, and we can get you the specifics, but my recollection is that that plan, they submitted at that time indicated that they would come in and want to use -- they were planning to use a portion of their decommissioning trust fund for irradiated fuel management at that time, if there were sufficient funds within the decommissioning fund to do that.

Τ	MR. CAMERON: Okay.
2	MR. BROADDUS: And that's where there
3	is a tie within the regulations, but it doesn't
4	specifically say that you know, how that that
5	irradiated fuel management plan will be funded. It
6	just requires the licensee to tell us
7	MR. CAMERON: Okay, thank you
8	MR. BROADDUS: what they're going to
9	MR. CAMERON: and again, if you could
10	get Mr. Gould that information, that would be helpful.
11	Ann Darling, Bill McKim, Francis Rod,
12	Michael Mulligan. Ann? How about Bill McKim?
13	Francis? Francis Rod? Michael Mulligan? Is this
14	Mike, in the yellow, okay. Okay, this is Michael
15	Mulligan and thank you for your patience. I know you
16	were here early.
17	MR. MULLIGAN: I'm Michael Mulligan from
18	New Hampshire. How many here are from New Hampshire?
19	That's not bad.
20	I would like to thank the police for being
21	here, and for the job they do, and I want to really
22	thank you a lot.
23	I was a reactor operator at the Vermont
24	Yankee. Got fired for raising safety issues. But the
25	ioh I did was basically moving water from one place to

another. I mean, that's basically the job I did, and 1 so, maybe we need to talk about what are the places 2 3 where they have water. 4 One of the most dangerous -- one of the most costly place that have water is in the condensate 5 The condensate storage tank sits 6 storage tank. 7 outside the building. It's a huge tank. A lot of 8 radioactive water in there and stuff, and so, you know, my major concern, the most risks would be that 9 tank. 10 The bottom of the tank, you know, had 11 12 leaks in the past. There is issues with having leaks 13 -- well, not now, but you know, they had leaks in the past. 14 15 So, my question is, well, what happens in 16 five years when nobody has any heat and all that sort of stuff, and you know, the tank has a chance, you 17 know, of icing over and stuff like that? 18 19 So, there's certain tanks in Vermont 20 One of them would be of course, the torus. The torus is a humongous tank and stuff. There is --21 there is main condenser, which is another not so 22 23 contaminated water and stuff like that. So, the question, you know, is what -- you 24 know, the separator up in the refueling floor, the 25

primary coolant pump. So, these guys got an idea that they're going to not have heating. They're just going to let that building be as-is, and I'm saying, what are they going to do in the future, you know?

Minus 10 degrees or all that sort of stuff, and you know, pipes can freeze with the frost, frozen pipes and they get leaks and then there is all sorts of corrosion type of stuff and so, you know, I think the accident in the future is going to be one, the torus is going to -- they're going to find a leak in the torus one day, and they're going to go down in the basement and the basement is going to be full of water, and you think you had radiation problems -- or contamination problems in the past. You ain't seen nothing yet.

Same thing, like I said, the CST tank is the most risk-full, I think tank there, and I think they should get rid of the water, pipe off that tank, maybe, you know, even kind of think about well, maybe we ought to build a new tank. Big tank outside, maybe a couple of different tanks, you know, different radioactivity levels, and stuff, and you know, make it so there is, you know, nice cement floor underneath it, and new materials and all that sort of stuff and probably, that would be the safest way.

I got a couple more comments. One is

Pilgrim Plant. Pilgrim Plant right now, Entergy owns

Pilgrim Plant. They're in deep trouble. They're in

a situation of basically, Vermont Yankee was three or

four years ago.

A lot equipment problems and you know, all they're waiting for is one mistake, somebody kind of tells a fib, and you're going to have Vermont Yankee over again. So, there is -- there's a problem right there.

One more thing is, the inspectors, the inspector staff, the residents, their bosses and stuff like that, you know, I'm an Irishman and you know, I mourn things at times and stuff, and you know, I always thought I was competitive with the NRC, we didn't agree on a lot of things.

But what I realize now is we're not going to have to have this staff around. We're not going to have their bosses with, you know, deep education and deep experience, and you know, I'm kind of sorry, I'm going to miss them. Times, I didn't like them, but you know, looking at it right now, they had a lot of education and a lot of enlightenment to our community, I think, and stuff like that, and we're going to miss that education and thank you.

Thanks, Mike. MR. CAMERON: John Ward, 1 Chris Williams and Andrew Larkin. John? 2 3 SPEAKER: I'm going to pass. MR. CAMERON: Are you John? 4 SPEAKER: No. 5 6 SPEAKER: No. 7 MR. CAMERON: Okay, thank you. MR. WILLIAMS: Chris Williams, I work with 8 the Vermont Citizen's Action Network, the Vermont 9 Yankee Decommissioning Alliance, and I'm a Board Chair 10 of the Nuclear Information and Resource Service. 11 But for a large chunk of my life, I was 12 consumer advocate working to protect consumers from 13 14 overruns and price gouging by regulating utilities, and in that capacity, I had a lot of time 15 spent locked in rooms with utility companies and 16 Government officials, while deregulation was being 17 worked out, back in the late 90's and so forth, and 18 one of the recurring questions that myself and my 19 colleagues brought up was, this notion of the merchant 20 21 nuclear facilities and ultimately, the under-funding 22 or non-funding of the decommissioning funds. Here we sit, some 20 years later, and what 23 I've been describing where we're at and where you're 24

at is basically the early stages of a train wreck, and

1 when I say that, I'm really saying it with all 2 sincerity. I have been watching this for a long time, 3 4 lots of people have been watching it, and I'm sure that you've been watching it, and whatever it's going 5 to take to prevent this train wreck of what, 44 6 7 potential units that are now merchant plants, Kewaunee is the first car in the train, Vermont Yankee is the 8 second. 9 10 I would urge the Commission and the 11 utilities, as well as all the state jurisdictions 12 involved, to get on this soon and not -- not wait until these things start careening off the track. 13 14 You know, in the end, when many of us who are somewhat cynical, look at this, it looks like, you 15 16 know, ultimately there is going to have to be a massive Federal bailout to get these plants cleaned 17 18 up. But in the end, you know, we really can't 19 20 let these things just sit around and continue to 21 contaminate the sites and the surrounding areas, where 22 they're existing. We've seen this coming for a long time. 23 24 I am certain that your financial analysts and other people within your agency or your Commission have seen 25

1	this, and you know, I would urge you to act sooner,
2	rather than later, to prevent the train wreck. Thank
3	you.
4	MR. CAMERON: Okay, thank you, and John
5	Ward is our next speaker. Andrew Larkin, Lissa
6	Weinmann, Ned Childs and Gary Pontelandolfo. John?
7	MR. WARD: The first thing I'd like to ask
8	is if the people from Senator Leahyy's office and
9	Senator Sander's office are still here? I don't see
10	them. I don't think so.
11	MR. CAMERON: I don't see them either.
12	MR. WARD: All right.
13	MR. CAMERON: Okay.
14	MR. WARD: Because being from
15	Massachusetts, there is a lot that I cannot do. What
16	I can do is, I can go on record and say that our town
17	has asked for the continuation of the EPZ and also,
18	the continuation of the 15 minute notification, as
19	opposed to the 60 minute notification that has been
20	asked for.
21	The other thing that I wanted to ask for
22	here, and this is just myself, not as a representative
23	from a town or city or state, but this would be a very
24	good idea for all of you to keep in mind.
25	Arnie Gundersen was absolutely right, when

he said the AOG building should be removed and the 1 ground should be cleaned up under that, as soon as 2 possible. 3 We've known for a long time that there was 4 5 a Tritium plume moving from that area. The Strontium has just been found in that well, because that is a 6 heavier element. It moves much slower. We could take 7 care of a lot of that contamination sooner, before 8 9 that plume moves, and save a lot of money. I'd like to see that decommissioning fund 10 11 be spent as efficiently as possible, so that we can 12 get started sooner and get more done. Thank you. Thank you, John. Is Andrew 13 MR. CAMERON: here? How about Lissa? 14 15 MS. WEINMANN: Hi. I'm getting a little 16 faded here after work, and then sitting. So, I'm not sure what is going to come out because I don't have 17 prepared remarks. 18 19 But I will say that I think we're all in 20 this together. There is no national nuclear waste 21 policy. There is Yucca Mountain. There is not going 22 to be a Yucca Mountain. If there is a Yucca Mountain, 23 it's full already. So, there is no place to put this 24 stuff. We had -- we're trying to deal with new 25

situations with old rules that do not serve us anymore, and there has been Bills in Congress. They go nowhere. But we know we need a new law, because the Nuclear Waste Policy Act of 1982 really didn't foresee all these problems. It didn't -- for instance, we didn't foresee that spent fuel rods would be in pools for 30, 35 years.

I mean, the pools were designed to hold those rods for five years. We're in virgin territory here.

You can say all day long that the spent fuel pools are just as safe as the casks, but you know the kind of discussion that goes on within the NRC about that. You know what your outgoing Chairperson said about spent fuel pools 12 years ago, that they were in eminent danger because they were being overcrowded, and beyond that, are not designed for that purpose of long-term storage.

So, we know all this and we are all in it together, and it's not Entergy's fault. Entergy is a company. They want to make money. We all know, they agreed to close the plant, but then they didn't close the plant because the Federal law says they don't have to, just like the Federal law says they don't have to move the spent fuel right away. They could leave the

spent fuel there, if they so decide. 1 So, the MOU is worth nothing. I love the 2 feel-good feelings between us and Entergy and I hold 3 4 nothing against Entergy honestly, because we know 5 we're they're at. What we need are new laws, okay, and I 6 7 don't understand why nobody talks about the nuclear waste fund. Okay, you guys all know what it is. You 8 all know that there is about \$38 billion sitting in 9 DOE's Department of Energy nuclear waste fund. Where 10 11 is Department of Energy tonight? They're the ones 12 that are having responsibility for this long-term. What about that \$38 billion that rate 13 14 have been paying into for the central payers repository that will not happen? 15 16 Okay, everybody is talking now about 17 interim storage and that's still imperfect, I agree 18 with the speakers who said we need to treat this waste 19 storage facility, this high-level nuclear waste 20 storage facility, that we never banked on, that we're completely unprepared for, we need to treat it like 21 22 it's going to be here forever, okay, because it very well might be. 23 24 So, don't third-world cask us. Give us

what Europe and Japan had. Get the spent fuel pool

1 cleaned up pronto, because fires are a concern and you all know it. That's why you agreed to do it quickly 2 and so did Dominion, okay, or else you wouldn't be 3 4 doing it. 5 Let's all work together to change law, nobody is paying attention. We need to bring all the 6 host communities together, to sit down. 7 you admitted tonight, as per McFarlane's comments in 8 the New York Times a month ago, you're in completely 9 10 new territory. no provisions for 11 There is merchant reactors. This is all new stuff. You need to rewrite 12 It's going to take three or four years. 13 the rules. You're going to talk about it. 14 You know, we have to deal with this right 15 16 now, in this community. We're sitting with this stuff. My kids are sitting with this stuff. We need 17 It's it very seriously. sacred 18 treat to responsibility that our community is barring with no 19 20 perks, okay. Blue Ribbon Commission. Oh, let's find an 21 interim storage facility and let's give them all kinds 22 Let's give them all kinds of 23 of economic perks. economic development perks. Let's give them more fire 24 fighters. Let's give them more police because we're 25

1	carrying this very, very important responsibility for
2	the whole rest of the nation here.
3	Okay, we are the interim storage facility
4	and we deserve a hell of a lot more than we're getting
5	right now. We're getting nothing right now.
6	You're suing DOE for the storage. What do
7	we get as a community? We deserve a whole lot more
8	and if we're smart, we're going to fight with other
9	communities nationwide, to change the law, to use the
10	nuclear waste fund for the most pressing issues first,
11	and we're going to get it done by working together,
12	not yelling at each other. Thank you very much.
13	MR. CAMERON: Thank you, Lissa. Is Ned
14	Childs here? There is Ned, and Gary Pontelandolfo?
15	Gary?
16	MR. PONTELANDOLFO: Thank you.
17	SPEAKER: No, here is Ned.
18	MR. CAMERON: And last speaker would be
19	Sally Shaw and then I'm going to turn it over to Drew
20	to close up.
21	MR. CHILDS: Good evening. I'll try to
22	keep this brief.
23	It's there's been a lot of good
24	comments tonight, and call it a train wreck or call it
25	a the early end stages of a chain letter scheme, a
1	1

186 ponzi scheme, it's kind of a fine mess, you know, and 1 you guys are sitting there presiding over it, and 2 3 maybe you didn't sell the first tickets, but it's not 4 looking very good. My name is Edward Childs, the New England 5 Coalition, and we intervened, New England Coalition 6 7 intervened in the original operating license hearings 8 in the 1970's raising questions around the safety and 9 security of the temporary onsite storage of highlevel nuclear waste. 10 The at the time regulator, Atomic Energy 11 Commission, did not permit us to raise these concerns 12 13 in the hearing process, with the assurance that these concerns were encompassed in generic studies and 14 15 agency determinations to be made. In the NRC era, after or just before Three 16

In the NRC era, after or just before Three Mile Island, the determinations matured into the waste confidence rule, as you know, just for everybody else, the NRC said it is confident, high-level waste can be safely stored until removal to a national repository, originally, that was going to be ready in 1998, then it 2005, and now, as we are all discussing literally, maybe never. Maybe in Finland.

Repack the deadly fuel where it sits, every 100 years or so. That's the Commission casual

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That's the best you can do, and now, you're 1 response. currently development an extended storage 2 and transportation regulatory program, including safety 3 4 and environmental analysis to support long-term storage up to 300 years handling the spent fuel, and 5 the associated updates to the waste confidence rule 6 7 making. So, Vermont, for all practical purposes, 8 is becoming a final national repository. I'm just 9 repeating things that were already said earlier, to 10 try to be less repetitive. 11 12 Anyway, the Entergy PSDAR said that an 13 additional site -- and additional pad, additional 14 ISFSI pad would be added in close proximity to the 15 existing pad, to expand the storage and allow for the spent fuel assemblies to be stored. 16 Now, NRC authorizes storage of spent fuel 17 in two different ways, as you are aware, and if not, 18 19 then maybe you need to pay attention. 20 The first way is site-specific, that's 10 CFR Part 72 or a general license, a site-specific 21 application review safety and security, and requires 22 23 publication that notice for a hearing. Obviously, there is some interest in a hearing in this location, 24

maybe not in Nebraska, and in this hearing, evidence

188 1 taken and testimony is given under oath, relevant disclosures must be made. 2 The alternative process, the general 3 license authorizes storage of spent fuel in casks 4 5 where a reactor has been previously licensed, and in that situation, no formal hearing opportunity is 6 7 provided. So, the New England Coalition is proposing 8 Vermont Yankee, as it's a merchant generator and for 9 various other reasons, is a special case and we would 10 like you to require of Entergy, a site-specific Part 11 72 ISFSI license application. 12 Several things make the Vermont Yankee 13 We don't know, in this case, site unique. 14 financial aspects, whether Entergy is going to have 15 money when the time comes, to do this decommissioning, 16 undefined term of storage and 17 assurance some projections that have been given 18 are at 19 fictional or non-existent, take that with a grain of 20 salt. So, all right, we have, as it's been noted 21 earlier, houses and schools around, it's in a small 22

So, all right, we have, as it's been noted earlier, houses and schools around, it's in a small village. The five year cooling period, now we're in the safe storage, might take you 50 years. You got the merchant plant and they haven't look at any

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1	alternatives to the environmentally sense of the site.
2	Therefore, we will appeal, in the next
3	several days, to the NRC Commissioners, I guess your
4	bosses, to require the more probing in-depth and
5	inclusive site-specific ISFSI license application
6	process.
7	We favor dry cask over wet pool storage.
8	It's not in our interest to delay and an environmental
9	impact statement was reasonably filed for license
10	renewal, and so, you should be able to do that with
11	little alterations.
12	So, justice demands a full and fair
13.	hearing. Thank you.
14	MR. CAMERON: Thank you, Ned. We're going
15	to Gary, and Gary, please introduce yourself to us.
16	MR. PONTELANDOLFO: Hi. I'm Gary
17	Pontelandolfo. I drove over two hours from Northwest
18	Connecticut to come up here, and I really appreciate
19	everyone who stayed so long.
20	We care. That's why we're here, and I'm
21	looking this way intentionally because I'm not sure
22	that all you fellows at the table up here do care.
23	That's interesting, because I was just
24	going to say there are so many acronyms in our world
25	today, that I get confused sometimes, and I just I

1 ' was thinking it was Not Really Cocky. In fact, I had a disturbing incident, the more I think about it, the 2 more disturbing it is. 3 4 When I arrived here, I signed in two cards, one to be here and one to speak, and there was 5 a gentleman who told me he was from the NRC that was 6 7 watching, and he actually spoke to me. I asked him a couple of questions, and before I really came in and 8 settled down in here, I walked outside the side door, 9 had a cigarette, walked around the building and came 10 back in. 11 Five minutes later, I walked passed the 12 13 table and the gentleman was still there. I think it 14 was you, right? Am I recognizing you? Because you didn't recognize me, and you wanted me to sign in, as 15 16 if I had just got here, five minutes after having a conversation with me. 17 I really hate to think, though I kind of 18 19 do, that that's the kind of attention the NRC pays to 20 things. Like I said, I'm from Connecticut. 21 lived in Connecticut all my life. I'm a member of the 22 People's Action for Clean Energy, otherwise known as 23 PACE, which has been around since the 70's. 24 There is a lot of people, all volunteers 25

1	in that organization in Connecticut, and we're paying
2	attention to what you're doing up here, because we're
3	hoping to close this up soon, and what's going on here
4	is going to set a precedent. So, we're paying
5	attention.
6	MR. CAMERON: Gary, can I get you to wrap
7	up, so we can go on?
8	MR. PONTELANDOLFO: Okay, one more thing
9	I'd like to say, and really, this is the most
10	important thing.
11	I'm sure there is people working within
12	the NRC, maybe some of you are here, who are truly
13	good people and want to do the right thing, and have
14	consciences that still operate will, and I'd just ask
15	if you would help those of us who mostly volunteer our
16	time, because we care so much about this, do what you
17	can from within the NRC, to try to hold their feet to
18	the fire. We need help, and last thing.
19	On the way up here I listened to the
20	radio. I heard the Who, "We Won't Get Fooled Again",
21	and I'm going to say, when I get home, I am going to
22	get down on my knees and pray that we don't let them
23	fool us again.
24	MR. CAMERON: All right, all right, thank
25	you, Gary. Sally?

MS. SHAW: My name is stakeholder, that 1 would be S-T-A-K-E-H-O-L-D-E-R aka Sally Shaw. 2 I'd like to start my comments with a quote 3 from the settlement agreement between Entergy and the 4 Vermont Public Service Department. 5 shall "Entergy Vermont Yankee make 6 7 appropriate filings with the NRC to obtain authority to begin radiological decommissioning within 120 days 8 after it has made a reasonable determination that the 9 funds the NDT adequate 10 in are to complete decommissioning, " etcetera, etcetera. 11 From the Public Service Board's final 12 order conditioning the license to continue until the 13 end of 2014, they say, "If the decommissioning trust 14 15 fund continues growing at its historic rate, the fund could reach the \$1.16 billion in under 15 years," and 16 17 they also say, in that settlement agreement, they repeat the thing that was said up above in the 18 19 settlement agreement. 20 But it says its site assessment study, that their cost analysis suggests they might commence 21 decommissioning by the 2040's, which is not 15 years. 22 23 It's closer to 30. Conversely, they say in the site 24 assessment study that they assume the Department of 25

Energy will start transferring spent fuel from the 1 site beginning in 2026, and complete removal of all 2 fuel by 2052. 3 time, decontamination and 4 Αt the 5 dismantlement are scheduled to start, Entergy assumes all spent fuel will have been removed from the site 6 and therefore, will not affect the decommissioning 7 activities. 8 9 Well, that means that the anticipated start date for decommissioning would be 2052. 10 Elsewhere in the SAS, they say they base 11 12 their cost analysis on the maximum SAFSTOR period, which allows them up to 60 years because that scenario 13 shows funding adequacy with the largest margin. 14 Under this last scenario, dismantling and 15 decommissioning of the plant would not begin until 16 approximately 2069, nor be completed until 2075. 17 So, much for openness and transparency. 18 I mean, in these various legal documents, they've 19 20 given at least half-dozen different estimates of when they're actually going to start dismantling and 21 decontaminating the plant and the site. 22 I would love it if the NRC could give us 23 a date certain for start and completion date of the 24 decommissioning, but I know that is not in your job 25

1 description.

I'm wondering if in fact, you do need to change the rules and whether you need a 2.802 petition for rule making from one of us citizen volunteers, in order to do that, because the situation is really not fair to be affecting the community and the stakeholders. That's my first question.

The second one -- may I? I'll be quick.

MR. CAMERON: We've got to be moving.

MS. SHAW: I'll be real quick. Some people have gone on, and you know, I'm being as quick as I can.

I have some standard comments to make, and I would really like the opportunity, if you don't mind. Thank you.

In 1991, a leak was discovered in the drain line from the canister rack to the chemical drain in the rad waste building. This leak contaminated the soil under the concrete floor of the lab, the volume of contaminated material was estimated to be approximately 58,000 cubic feet.

Radio-nuclides associated with that spill included cesium-134, strontium-90, iron-55. They claim, this is from the SAS, that that location is the only location on the Vermont Yankee site where those

radio-nuclides are known to have been released to the environment. I don't believe that is true, because I remember back during the tritium leak, when they did some excavation of the trench, they found Strontium-90, Cobalt-60 and iron in that trench. So, maybe they took this quote in the SAS from an older study and had neglected to include the fact that yes, we do know that those ingredients, those radio-nuclides were released during the tritium leak.

Anyway, it implies that what the NRC did when the -- when this came to their attention was that they approved the area as an onsite waste disposal area under the requirements of NRC regulation 10 CFR 20.2002.

I found that really astounding, so that when a nuclear plant violates their defense-in-depth, when they violate their trust, and allow radio-nuclides to leak in our environment, your response is to say, "Oh, that's okay, we'll just change the designation and call it a nuclear waste dump site." That's kind of scary to me. I don't know if that's a question or a statement, but it's kind of scary.

So, I want to know, this is a question, what is going to happen to the Cobalt-60 in the Connecticut River sediments, that Entergy admitted to,

1	before, as they were testifying before the Legislative
2	Committee on administrative rules in the Vermont State
3	Legislature? When will that be cleaned up? What will
4	happen to all the radioactive water Entergy plans to
5	transfer into the torus, to use as backup clean water
6	for the spent fuel pool, after that is dismantled?
7	Where is all this water going to go? Does
8	that get shipped to Texas, to be put into their
9	facility, or does it just get drained into the
10	Connecticut River? I want a specific answer.
11	MR. CAMERON: We're going to answer those
12	questions and then, thank you very much. Can we do
13	it? Answer the question?
14	MR. FERDAS: I can talk to the torus
15	question.
16	The torus will be used as part of the
17	SAFSTOR operations. When that is not needed anymore,
18	that water will be drained from the torus and taken
19	offsite to a processing facility.
20	There is no intention for that to be
21	released into the Connecticut River.
22	MR. CAMERON: And how about the
23	Connecticut River Cobalt questions, Bruce?
24	MR. WATSON: As part of their planning for
25	the decommissioning, I would expect that if the
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1	historical records indicate that they had a release of
2	material to anywhere onsite, they could characterize
3	that area, to see what the levels are, to see if they
4	have to do any additional clean up work.
5	That's part of the normal process for
6	planning for decommissioning.
7	MS. SHAW: Is the river considered on the
8	site?
9	MR. WATSON: I don't know if it's in the
10	licensed part of the facility or not. I am just
11	don't think it is, but it may be in by reference. I
12	don't know.
13	MR. CAMERON: Okay, thank you, Sally, for
14	the questions, and I'm going to ask Drew, Senior NRC
15	official here, to close the meeting out for us. Drew?
16	MR. PERSINKO: I think folks are here to
17	I think we have this room until the absolute
18	latest, 10:00 probably.
19	But first of all, let me thank everybody
20	for your participation. I really mean that. There
21	was really good participation tonight. You gave us
22	numerous comments and you've given us a lot to
23	consider.
24	You know, as everybody was talking, I was
25	trying to take notes and trying to kind of group the
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comments, and you know, there were quite a 1 comments in the emergency preparedness area, number --2 lot of comments, I saw also in the financial areas, 3 4 the decommissioning trust fund area. So, some questions in the environmental 5 relating to the GEIS, generic environmental impact 6 7 statement, questions came up, and the other area was in the spent fuel area. 8 There was a number of questions, and there 9 were really two aspects of the spent fuel, as I see 10 it. 11 There was the -- there were spent fuel 12 comments made concerning movement of the fuel to the 13 ISFSI and the building of the ISFSI and things of that 14 15 nature, and then there were comments relating to the permanent disposal of spent fuel. 16 You know, the permanent disposal of spent 17 fuel in this -- in the U.S. is really a national 18 19 policy issue and it's a bigger issue than just the 20 NRC. So, it's not an issue that the NRC is 21 going to solve alone. It's a national policy issue. 22 So, we need to -- we will, we will look at 23 the transcripts. We'll look at your comments. We'll 24 digest them. It's going to take us a little time to 25

digest them. We will group the comments and we will 1 respond as best we can to the comments we received, 2 and questions we received, and I believe the best 3 place for us to respond would be on our website. 4 But we will bin the comments in different 5 groupings and attempt to then respond to the comments 6 received, and we will be considering these 7 8 comments, as we do the review of the PSDAR, as Doug said initially, beginning of the meeting tonight. 9 One last -- couple last things I want to 10 say in my closing remarks are, just because the plant 11 is now shut down and is not operational, it does not 12 mean that the NRC is no longer involved. 13 14 The NRC will still be providing safety 15 oversight through licensing and through inspections, 16 and it really gets back to our mission at the NRC, which is how I started the meeting, about protecting 17 18 health and safety, public health and safety. 19 I do want to assure you, there were a 20 number of comments made tonight about NRC and the way 21 we are doing safety. 22 I do want to assure you that we, at the NRC, do take our safety responsibility seriously. 23 24 really do. We do care, as somebody was saying. Thank 25 you very much.

1	MR. CAMERON: Okay, and thank you, all.
2	I'll thank the panel, and we're adjourned. Thank you.
3	(Whereupon, the above-entitled matter went
4	off the record at 10:20 p.m.)
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CERTIFICATE

This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission

Proceeding:

Vermont Yankee Post-Shutdown

Decommissioning Report - Public Meeting

Docket Number: 05000271

Location:

Brattleboro, Vermont

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken and thereafter reduced to typewriting under my direction and that said transcript is a true and accurate record of the proceedings.

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