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Public Meeting: Afternoon Session

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1	UNITED STATES OF AMERICA
2	NUCLEAR REGULATORY COMMISSION
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4	PUBLIC MEETING TO DISCUSS ENVIRONMENTAL SCOPING
5	FOR THE VERMONT YANKEE NUCLEAR POWER STATION,
6	LICENSE RENEWAL APPLICATION
7	AFTERNOON SESSION
8	+ + + +
9	WEDNESDAY
10	JUNE 7, 2006
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12	BRATTLEBORO, VERMONT
13	+ + + +
14	The Public Meeting was convened at the
15	Latchis Theater at 50 Main Street in Brattleboro,
16	Vermont, at 1:30 p.m., F. "Chip" Cameron, Facilitator,
17	presiding.
18	NRC STAFF PARTICIPATING:
19	F. "CHIP" CAMERON
20	RANI FRANOVICH
21	RICHARD EMCH
22	ERIC BENNER
23	FRANK GILLESPIE
24	
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1	SPEAKERS:	
2	BETH ADAMS	
3	SHAWN BANFIELD	
4	JOHN BLOCK	
5	CAROL BOYER	
6	CORA BROOKS	
7	BILL BURTON	
8	JOHNNY EADS	
9	ROBERT ENGLISH	
10	ANN ELIZABETH HOWES	
11	SARAH KOTKOV	
12	DAN MACARTHUR	
13	DAVID MCELWEE	
14	EVAN MULHOLLAND	
15	JILL NEITLICH	
16	NANCY NELKIN	
17	JANE NEWTON	
18	DEBRA REGER	
19	GARY SACHS	
20	RAY SHADIS	
21	SALLY SHAW	
22	CHRIS WILLIAMS	
23	MEGAN	
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1 P-R-O-C-E-E-D-I-N-G-S 2 1:35 p.m. 3 MR. CAMERON: Good afternoon, everybody. 4 If we could ask you all to take your seats and we'll 5 get started with this afternoon's meeting. Okay, Ray, Evan, would you like to join us 6 7 down here? Are we going to have a lot of continuing feedback with this thing? If we do, let's try to fix 8 9 It seems like there is a lot of feedback. 10 Again, good afternoon and welcome everybody. My name is Chip Cameron, I'm the Special 11 Counsel for Public Liaison at the Nuclear Regulatory 12 Commission, which we'll be referring to as the NRC, 13 14 today. 15 And it's my pleasure to serve as your Facilitator for today's meeting. And our subject 16 today is the environmental review that the NRC 17 conducts as part of its evaluation of a license 18 19 application that we received from the Entergy Company to renew the operating license for the Vermont Yankee 20 Reactor. 21 And I just wanted to cover three items of 22 meeting process for you, very quickly, before we get 23

to the substance of our discussions today. And I'd

like to talk a little bit about what the format for

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1 the meeting is. Secondly, some simple ground rules for running the meeting, and, lastly, I'd just like to 2 introduce the NRC staff who are going to be speaking 3 4 to you today. 5 In terms of format, we're going to start out with some brief NRC presentations, to give you 6 7 some background on the license renewal process. 8 we look at, what we evaluate in making a decision 9 about whether to renew a license for a reactor. have time for some 10 And we'll brief questions after those presentations on the license 11 renewal process, to make sure that you understand it 12 before we go to the primary purpose of today's 13 14 meeting, which is to hear from all of you on this 15 process. This meeting, as the NRC staff will tell 16 17 you, is a scoping meeting. That's a term that's used in connection with the preparation of environmental 18 19 impact statements. And, basically, what we would like to hear 20 from all of you on, is what issues should be looked 21 at, as the NRC prepares the draft environmental impact 22 What methodology should be used? What 23 statement. 24 alternatives?

And we're looking forward to hearing from

1 you on that today. And we are taking written comments on these issues, and the staff will tell you how to 2 3 submit written comments, but we wanted to be here with you in person today to talk with you and to listen to 4 5 you. In terms of ground rules, they're pretty 6 7 simple. When you do speak, please introduce yourself 8 to us and give us an affiliation, if you're affiliated 9 with a group. If that's appropriate, tell us that. 10 I would ask that only one person speak at a time. 11 Most importantly, so we can give our full attention to 12 whomever has the floor at the moment. 13 14 Also, so that our Court Reporter, Pete 15 Holland, up here, can get a clean transcript. So that 16 he knows who is talking. That transcript is the 17 public record of this meeting. It's our record of the comments and it's 18 19 your record of what was said here this afternoon. that will be available to anybody who wants it. 20 I would ask everybody to try to be brief, 21 so that we can give everyone an opportunity to talk 22 this afternoon. And I'm asking everybody to follow a 23 24 five minute quideline, when they come up here to the

podium to give us their comments.

1 If you could limit it to five minutes, that would be helpful, and when it gets close to five 2 minutes I may ask you to summarize your comments for 3 4 us, so that we can go on to the next person. 5 Five minutes may not seem like a lot of time, but it does accomplish a number of important 6 7 things. One, it's usually enough time for people to summarize their main points that they want us to hear. 8 9 Secondly, it alerts us to issues before 10 written comments come in, so that we can start working on those issues right away. And, lastly, it alerts 11 everybody in the audience, in the community, to what 12 some of the concerns are that people have with the 13 14 renewal application. So, we'll be following that five-minute 15 There is an ability to follow up with more 16 extensive comments in writing. There's also an 17 ability to talk to the NRC staff, who are here from 18 19 our Headquarters Office and from Region, after the 20 meeting. And we'll also be giving you some contact 21 information so that you can contact people, from the 22 NRC staff, if you have concerns or questions. 23 24 And I quess, finally, I just would ask all

of us, everyone, to just extend courtesy to everybody

1 else. We may hear different opinions on the issues, 2 different opinions from the ones that we hold today. 3 And I would just ask everybody to respect 4 those opinions. In terms of the NRC speakers, we're 5 going to start out this afternoon with an overview of the license renewal process. 6 7 And we're going to have Rani Franovich, 8 who is right here, to start out for us. And she's the 9 Chief of the Environmental Projects Branch, within the 10 License Renewal Program. Rani and her staff 11 manage the Environmental Review for all License Renewal 12 Applications, including this one for Vermont Yankee. 13 14 And Rani has been with the NRC for 14 15 a number of positions and areas years, in 16 responsibility. She was a Resident Inspector, these 17 are the NRC staff who are at every reactor that we licensed throughout the country, to make sure that NRC 18 19 regulations are complied with. She also was a Project Manager on the 20 Safety Review for several plants, I believe, that came 21 in for license renewal. She was also the Coordinator 22 of Reactor Enforcement, which was a position that 23

ensured that compliance steps were taken against

companies that may have violated the regulations.

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1 And, in terms of her educational background, she has a Bachelor's Degree and a Master's 2 3 Degree from Virginia Tech. And the Master's Degree 4 was in Industrial and Systems Engineering. 5 And after Rani is done, we're going to go right to Mr. Rich Emch, who is right over here. 6 7 Richard is the Project Manager for the Environmental 8 Review for the Vermont Yankee License 9 Application. 10 And he'll be talking about the specifics the Environmental Review, and how to submit 11 of And Rich is an old hand at the NRC. 12 comments. been with us for 32 years, and a lot of different 13 14 positions, mostly related to radiological health and 15 protection. And his background is in Health Physics. 16 He has a Bachelor's in Physics from Louisiana Tech 17 University, and a Master's in Health Physics from the 18 19 Georgia Institute of Technology. And Rani is going to introduce a number of 20 people, but I just wanted to introduce two people 21 before we get started. 22 One is Eric Benner. And Eric is the, is 23 a Branch Chief of the Branch that does the technical 24

review of the environmental issues that are in the

1 Environmental Impact Statement. And he'll be talking to us tonight and I'll give him a full introduction at 2 3 that time. 4 And, also, we have Mr. Frank Gillespie 5 He is a Senior NRC Manager. Frank is the Division Director of the Division of License Renewal 6 7 the NRC in our Office of Nuclear Reactor 8 Regulation. And I just would thank you all for being 9 here to help us with this decision. Rani. 10 MS. FRANOVICH: Thank you, Chip. You guys, 11 can everyone hear me? Is this better? Alright. 12 Thank you, Chip. I just wanted to open up the meeting 13 14 by thanking you all for coming here. 15 It's weather outside and nasty Ι 16 understand Vermont has had quite a bit of that 17 recently, and so I'm sorry we couldn't arrange for a prettier day for the meeting, but we're really glad 18 19 you took the time out of your busy schedules to come and talk with us today. 20 I hope the information that we provide 21 will help you understand the process we will be going 22 through in renewing the application for renewal for 23 Vermont Yankee. 24 And help you understand the role that you 25

1 can play in helping us to make sure that the Environmental Impact Statement we prepare for Vermont 2 Yankee License Renewal, is complete and accurate. 3 4 Next slide, please, Sam. I'd like to 5 start off by briefly going over the purpose of today's We'll explain the NRC's license renewal 6 7 process for nuclear power plants, with emphasis on the 8 environmental review process. And we'll talk about the typical -- is 9 10 this better? Okay. We'll talk about the typical areas included in the scope of our review. We'll also 11 share with you the License Renewal Review Schedule. 12 And really the most important part of 13 14 today's meeting, is to receive any comments that you 15 have on the scope of our review. They will also give you some information about how you can submit comments 16 to us, outside of this meeting. 17 conclusion of the staff's At. the 18 19 presentation, we will be happy to answer questions and receive comments that you may have on the process and 20 the scope of our review. 21 However, I must ask you to limit your 22 participation to questions only, 23 and hold your comments until the appropriate time during today's 24

meeting.

1 Once all questions are answered, we can begin receiving any comments that you have on the 2 3 scope of our Environmental Review. Next slide, 4 please. 5 Before I get into a discussion of the License Renewal Process, I'd like to take a minute to 6 7 talk about the NRC in terms of what we do and what our 8 mission is. 9 The Atomic Energy Act is the legislation 10 that authorizes the NRC to issue operating licenses. The Atomic Energy Act provides for a 40-year license 11 term for power reactors. 12 This 40-year term is based primarily on 13 14 economic considerations and anti-trust factors, not on 15 safety limitations of the plant. The Atomic Energy Act also authorizes the NRC to regulate civilian use 16 of nuclear materials in the United States. 17 In exercising that authority, the NRC's 18 19 mission is three-fold. To ensure adequate protection of public health and safety. To promote the common 20 defense and security, and to protect the environment. 21 The NRC accomplishes its mission through 22 a combination of regulatory programs and processes, 23 24 such as conducting inspections, issuing enforcement

Licensee

assessing

actions,

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and

performance,

12 evaluating operating experience from nuclear plants country and internationally. the regulations that the NRC enforces are contained in Title 10 of the Code of Federal Regulations, which is commonly referred to as 10 CFR. Next slide, please. As I've mentioned, the Atomic Energy Act for provides for а 40-year license term Our regulations also include provisions for

years.

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For Vermont Yankee the operating license will expire March 21st, 2012. Entergy has requested license renewal for Vermont Yankee. As part of the NRC's review of the License Renewal Application, we will perform an environmental review to look at the impacts on the environment of an additional 20 years of operation.

extending plant operation for up to an additional 20

The purpose of this meeting is to give you information about the process, and to seek your input on what issues we should consider, within the scope of our review. Next slide, please.

NRC's License Renewal Review is similar to the original licensing processes, in that it involves two parts. An Environmental Review and a safety This slide really gives a big picture review.

overview of the License Renewal Process, which involves these two parallel paths. I'm going to briefly describe how these two review processes work, starting with the safety review. Next slide, please. Two quiding principles form the basis of the NRC's approach in performing its safety review. The first principle is that the current regulatory process is adequate to ensure that the licensing basis currently operating plants provides maintains an acceptable level of safety, with the possible exception of the effects of aging on certain structures, systems and components. The second principle is that the current plant-specific licensing basis must be maintained during the renewal term, in the same manner, and to the same extent, as during the original license term. Next slide, please. You might ask what does the safety review consider? For license renewal, the safety review focuses on aging management of components, systems, structures and which important to safety, as determined by the license renewal scoping criteria, contained in 10 CFR, Part 5.

assess current operational issues, such as emergency

planning and safety performance. The NRC monitors and

The license renewal safety review does not

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1 provides regulatory oversight of these issues on an 2 ongoing basis, under the current operation license. 3 Because the NRC is addressing these current operating 4 issues, on a continuing basis, we do not re-evaluate 5 them in license renewal. Next slide, please. As I have mentioned, the license renewal 6 7 safety review focuses on plant aging. And the 8 programs that the Licensee has already implemented, or 9 will implement, to manage the effects of aging. 10 Let me introduce Mr. Johnny Eads, Safety Project Manager. Thank you, Johnny. Johnny is 11 in charge of the staff's safety review. 12 The safety involves the NRC staff's evaluation 13 14 technical information that's contained in the License 15 Renewal Application. referred 16 This is to the The NRC staff also conducts audits as 17 Evaluation. part of its Safety Evaluation. There's a team of 18 19 about 30 NRC Technical Reviewers and Contractors who are conducting the Safety Evaluation at this time. 20 The Safety Review also includes plant 21 The inspections are conducted by a team 22 inspections. of Inspectors, from both Headquarters and the NRC's 23 24 Region 1 Office in King of Prussia, Pennsylvania.

A Representative from Inspection Program

is here today. The Resident Inspector of Vermont 1 Yankee is Beth Sienel. Beth, thank you. As Chip 2 3 mentioned, the Inspectors work at the plant 40 hours 4 a week. They live in the community, and they are the 5 eyes and the ears of the NRC. We have at least two, Nuclear Regulatory 6 7 Commission Inspectors at every plant in the United 8 The results of the inspections are documented 9 in separate inspection reports. The staff documents the results of its 10 review in a safety evaluation report. That report is 11 then independently reviewed by the Advisory Committee 12 on Reactor Safequards or the ACRS. 13 14 The ACRS is a group of nationally-15 recognized technical experts that serve 16 consulting body to the Commission. They review each License Renewal Application and Safety Evaluation 17 Report. 18 19 They form their own conclusions recommendations on the requested action, and they 20 report those conclusions and recommendations directly 21 Next slide, please. 22 to the Commission. This slide illustrates how these various 23 24 activities make up the Safety Review Process.

like to point out that these hexagons, the yellow

1 hexagons on this slide, represent opportunities for public participation. Also, the staff will present 2 the results of the Safety Review, to the ACRS, and 3 4 that presentation will be open to the public. 5 Next slide, please. The second part of the review process involves an Environmental Review 6 7 with scoping activities and the development of an 8 Environmental Impact Statement. 9 As I have said, we're here today to 10 receive your comments on the scope of that review. We'll consider any comments on the scope that we 11 receive at this meeting, or in written comments. 12 Then, in December of this year, we expect 13 14 to issue the draft Environmental Impact Statement, for 15 Next slide. So, the final Agency decision 16 on whether or not to issue a renewed license, depends 17 on several inputs. Inspection Reports and a confirmatory 18 19 letter from the Region 1 Administrator. Conclusions and recommendations of the ACRS, which are documented 20 in a letter to the Commission. The Safety Evaluation 21 Report, which documents the results of the staff's 22 Safety Review. 23 final 24 And the Environmental Impact Statement which documents the results of the staff's 25

1 Environmental Review. Again, the yellow hexagons on 2 the slide indicate opportunities for 3 participation. 4 An early opportunity is during the scoping 5 meeting today. A meeting on the draft Environmental 6 Impact Statement is another opportunity. opportunity to request a hearing ended on May 27th. 7 I understand that three Petitions to 8 9 Intervene were proffered, and among those three there are about ten issues that are in contention. 10 mentioned, the ACRS meetings, also, are open to the 11 public. 12 That completes my overview of the License 13 14 Renewal Review and the Environmental Review in more detail, and Richard Emch, the Project Manager is going 15 to discuss the Environmental Review in a little more 16 detail now. 17 MR. EMCH: Next slide, please. As this 18 19 slide indicates, we perform our environmental review along the guidelines of the National Environmental 20 Policy Act of 1969. 21 What that Act requires is that Federal 22 agencies use a systematic approach to consider the 23 24 environmental impacts of major projects.

impact requirement or Environmental

environmental

Impact Statement is required any time one of those 1 major Federal actions is going to significantly affect 2 3 the quality of the human environment. 4 In this particular case for a license 5 renewal, the Commission made the decision that we would issue an Environmental Impact Statement for all 6 7 License Renewal Applications, and that's what we're 8 about in this process. Next slide, please. 9 This is a, so to speak, a flowchart of the 10 analysis process that we follow. In the 1996 and 1999, the Nuclear Regulatory Commission developed 11 something we refer to as the GEIS, the Generic 12 Environmental Impact for License Renewal. 13 14 This statement evaluated the 92 aspects of 15 environmental impact for all 103 plants in the United States. Of those, 69 of those impact issues were 16 17 considered to be Category 1 issues, which in our parlance means they were the same, essentially, for 18 19 all plants and they were small. The rest of the issues are what we call 20 Category 2 issues. The Category 1 issues we do not 21 have to do a plant-specific in-depth evaluation of 22 those issues for each plant. 23 24 The Category 2 issues we do have to do a

plant-specific review for each plant. For Category 1

1 issues, even though we don't do a plant-specific, in-2 depth review, we do what we call a search for new and 3 significant information. That means we look to see if there's any 4 5 information that is new and significant, that would cause us to want to reconsider that generic conclusion 6 7 on the Category 1 issues. 8 On the Category 2 issues, as I said, we do 9 a complete in-depth review. An example of a Category 1 issue is radiation protection. The effect on humans 10 of radiation from the plant, releases from the plant. 11 The reason that's a Category 1 issue, is 12 because the NRC has regulatory requirements and has 13 14 standards and limitations for doses to the public, and the conclusion is, it's a generic conclusion. 15 16 the plant continues long as to 17 regulations, the impact is considered to be small. An example of a Category 2 issue, is what 18 19 we call impingement. When the plant is drawing in water from the Connecticut River for their cooling 20 systems, this water comes in through screens and there 21 is the chance that some aquatic organisms will be 22 23 trapped on those screens and die. 24 And that's an example of an Environmental

Impact that we do a plant-specific review for.

1 the new and significant information, that's the one that has the little yellow arrow on it. 2 3 If we find, if in the course of doing our 4 review, if we find that there is new and significant information, that would cause us to question the 5 applicability of the 6 the Category 1, 7 conclusion, then, if we find that information then that causes us to change our mind and to do an in-8 9 depth review of that issue for the plant. 10 Next slide, please. This is the decision standard that we are reviewing against. Basically, my 11 version of it is, we are evaluating the plant to 12 determine if the environmental impact of an additional 13 14 20 years of operations is acceptable, is okay. 15 Next slide, please. When I say the 16 environmental impact of an additional 20 years, it's 17 important to remember here, I think, that the evaluation that we are doing, is the impact from year 18 19 2012 to year 2032. In order to do that, though, we have to 20 examine a lot of what is going on today in the 21 environmental impact from the plant. 22 This slide has a, is a schedule for the entire process. 23 24 I believe you folks all have this slide,

but I'm just going to hit a few of the high points.

1 Obviously, the scoping meeting today is part of our scoping process. The scoping process, in the parlance 2 3 of NEPA, is we come into the community and we ask the 4 people who live and work near the plant, I sometimes 5 refer to you folks as our local environmental experts because you live and work here. 6 7 We ask you if there's any information that 8 you think we need to know about. Any issues that you 9 think we need to review, in the environmental impact, 10 and any information that you think we need to be available, that we need to be aware of. 11 That's our purpose, our stated purpose for 12 being here tonight. My purpose for being here tonight 13 14 is to hear what you folks have to say about that 15 issue. 16 There are other ways to give us those 17 comments. You can send them to us in writing. can send them by e-mail. And if you choose to do 18 19 that, instead of speaking tonight, we need to receive those comments by June 23rd. 20 21 we get those comments, we'll along with all the other 22 evaluate them all, information that we have, and we'll develop a draft 23 24 Environmental Impact Statement.

We'll issue that. The current schedule

for that is December of this year. After we issue that draft Environmental Impact Statement, we will come back, probably to this same theater, in January, and hold another public meeting where we will ask you, the public, to give us your comments about that draft Environmental Report.

You can tell us what you like, what you don't like, what you think we missed, that sort of thing. And, to help you with that, those of you who are attending tonight, there were blue and yellow cards.

If you filled out one of those cards, hopefully you gave us your address, and when we publish the draft Environmental Impact Statement, we'll send a copy of it to you, so that you will know that the process has started and you'll have good head start on the process.

After we collect the public comments, we'll then issue, we'll take those into consideration, make adjustments as necessary in the draft, the draft statement, and issue the final statement in August of 2007. Next slide, please.

This is a depiction of all the various areas that we draw information from. First is, of course, the Licensee's Application. There's a piece

of the Application called the Environmental Report. 1 There's copies of it outside, if you want 2 3 to take a look at it. If anybody wants to get a copy 4 of it, if you'll so note, on that little yellow or 5 blue card, we'll send you a copy of it. We'll probably send you a cd, it's kind of 6 7 heavy, the whole report is. We also do, we have a 8 team of people from the Nuclear Regulatory Commission 9 and our Contractor, Argonne National Laboratory. The head of the team, the Lab Team, is 10 David Miller. David Miller is the Head of the Lab 11 Team from Argonne National Laboratory. They are a 12 team of experts in various areas, that help us do the 13 14 review for the environmental aspect, for the 15 environmental impact. When we do an audit, we come out to the 16 17 site for a week-long look at the facility, at the environs, we examine documentation. We meet with 18 19 people who we need to consult with, such as in the state of Vermont, one is the Agency for Natural 20 21 Resources. We met with the State Radiation Protection 22 We'll be meeting with others as time goes on. 23 people. We met with the State Historic Preservation Officer. 24

And we meet with local government officials, as well.

1 We meet with Social Services. One of the 2 issues that we look into is socio-economics. 3 talked to permitting authorities in the state of 4 Vermont. 5 The state is responsible, has been delegated the responsibility by EPA, to issue what we 6 7 call the National Pollutant Discharge Elimination 8 System Permit. This is a permit that talks about what 9 level of heat and chemicals are allowed to be released 10 by the plant. And then finally, the thing that we're 11 here for tonight, is the public comments. 12 To get information from you folks to help 13 14 us with our review. Next slide, please. This is a 15 depiction of all the various areas, in a broad sense, that we look at. 16 We look at environmental justice. We look 17 socio-economics, air quality, water quality, 18 19 terrestrial and aquatic ecology, radiation protection, hydrology, and archeology and culture resources. 20 if I missed any, they're on the chart behind me. 21 Now I'd like to talk directly, give you 22 some additional information. First, as I said, my 23 24 name is Rich Emch. The phone number that you can

reach me at is on that slide up there.

1 We have made arrangements to have the documents involved in the review, the Environmental 2 3 Report, any letters that we sent to the Licensee, any 4 requests for additional information, and, indeed, when 5 we issue the draft Environmental Statement, it will be sent to these four libraries. 6 7 The Vernon Free Library in Vernon, the Brooks Memorial Library here in Brattleboro. 8 9 Hinsdale Public Library in Hinsdale, New Hampshire, 10 and the Dickinson Memorial Library in Northfield, Massachusetts. 11 A11 public four of these libraries 12 graciously volunteered to make the documents available 13 14 so that members of the public can see them, just in 15 case you don't have access to a computer, to the 16 Internet. 17 If you do have access to the Internet, the documents can also be viewed at the web site on the 18 19 slide up here. To send us written comments on, during this scoping process, you can send them, by mail, to 20 the address that's up here. 21 You can send them by e-mail to the address 22 that's up there, VermontYankeeeis@NRC.gov. My staff 23 24 and I will be checking that web address everyday.

you can deliver them in person to our offices in

Rockville, Maryland.

Again, as I mentioned before, we need to receive the comments by June $23^{\rm rd}$. If you don't quite meet the June $23^{\rm rd}$, date - anything that we get by June $23^{\rm rd}$, we will consider.

Anything that we get after June 23rd, we'll consider if there's time to do it. With that, that completes my presentation. Actually, it completes the NRC's presentation, and Chip, are you ready for questions?

MR. CAMERON: Yes, I think we are. Are there questions on, that will help you to understand this process a little bit more clearly, before we go into the comment part of the meeting. Yes, ma'am, if you could just introduce yourself to us, please.

MS. NEITLICH: Yeah, my name is Jill Neitlich. And I have a question about the democratic process, and I did ask you before, Rich. And basically what I think you said to me was that you have a script and there's no room for the democratic process.

But I'm kind of concerned about the democratic process within the NRC. Because what I've noted is that you haven't really turned down an application for an uprate or for a license renewal.

1	So that's a little confusing to me.
2	So does that mean that actually there is
3	no democratic process within the NRC?
4	MR. CAMERON: Thank you, Jill, and Rich,
5	there's a number of issues there, and one is the
6	turning down of applications, and I'm not sure what
7	Jill is referring to by a democratic process within
8	the NRC.
9	But you might talk about what that process
LO	is, for her.
l1	MR. EMCH: Okay. Yes, Jill, and I did talk
L2	before the meeting. Sort of a paraphrase of what I
L3	said, Jill, but I'll try to be a little more complete
L4	here.
L5	MR. CAMERON: Rich, excuse me for
L6	interrupting you, but this is for everybody. When you
L7	come down to this mic, I guess it's not projecting
L8	back, so you really sort of need to speak into the
L9	mic, so that everybody can hear you.
20	This one is, but you can't hear this one,
21	at all.
22	MR. EMCH: You can't hear me when I talk on
23	this mic? Oh, you have to be really close to it,
24	okay.
25	MR. CAMERON: Try to do it with that one,

1 and then if it doesn't work, then we'll figure this Go ahead. 2 out. MR. EMCH: All right, I'm going to try to 3 4 hold it up real close, without actually inhaling it. 5 All right. MR. CAMERON: Closer and louder. 6 7 MR. EMCH: Okay, I'll see what I can do. What I was trying to say earlier was the democratic 8 9 process, if you will, occurs before we get to this, 10 here, okay. The democratic process, if you will, is 11 when you go, when you as a community vote for the 12 select 13 members of your board, your 14 representative, your congressmen and state senators. Your elected officials are the democratic 15 They're the ones who you rely on to make 16 decisions about what you, how things are going to work 17 in your state. The process that we're involved in is, 18 19 the Nuclear Regulatory Commissions's process is the application and 20 Licensee makes an the Regulatory Commission reviews it and makes decisions 21 based on its review of that application. 22 We do not, as part of that review process, 23 24 we, our review is against a set of technical review

standards, both either on the safety side or the

1 environmental side, and we don't, there is nothing in our process that calls for a vote, by the people of 2 Brattleboro, about whether or not they want this plant 3 4 to be re-licensed. 5 As I said, the democratic process occurs when you go to the polls, the voting booths, to vote 6 for your elected officials, and then they're the ones 7 who you rely on to make your decisions for your state 8 9 and your community. MR. CAMERON: And, Rich, something that I 10 think, a point that Jill raised that's of interest to 11 is the status of our review of other 12 everybody, License Renewal Applications, and not just direct 13 14 answer to, well how many have we approved or denied, but what that process is like in terms of a License 15 16 Application coming in? Is there enough information in it 17 request for additional information? If you could just 18 19 address that briefly, and then we'll go to other people. 20 MR. EMCH: When an application is first 21 sent in, we do what we call an Acceptance Review. 22 Those of you who were here on March 1st, heard Johnny 23 24 describe the Acceptance Review.

Basically, that review is just to make

1 sure that there's enough of the appropriate kind of information in the application to allow the NRC staff 2 3 to start its review. Later on, as we go through the review, we 4 5 do our review against published technical standards, both in the safety and environmental area. 6 7 heard Rani talk about the audits, the inspections. 8 And what we're doing in our review 9 process, is we're doing our review to make sure that whatever the Licensee has put forward as their 10 application, meets our standards. 11 And if it meets our standards, the 12 Commission is probably going to accept the application 13 14 and probably going to approve the application, because 15 that's the way we do our work, we use standards. 16 Along the way, we're going to ask a lot of 17 questions. We refer to them as a request for additional information. There will be hundreds of 18 19 them on Vermont Yankee, if it's anything like the other plants. 20 There will be times along the way when we 21 will tell them that they, that what they have given us 22 does not meet our standards. And we will say you need 23 24 to consider, you either need to go back to the drawing

board in that particular area, but whatever you do,

1	you're going to have to do something, because you're
2	not meeting our standards in that area. And the
3	Licensee, the Applicant, will almost undoubtedly, as
4	all the 42 that have followed before them have done,
5	in all those areas the Licensee will go back and make
6	adjustments and eventually give us plans and
7	information that meets our standards and then the
8	application will be approved. That's the process that
9	we follow.
10	MR. CAMERON: Okay, other, thank you, Rich.
11	Are there other questions on process that we can
12	answer for you, before we go to comments? Evan, if
13	you could just introduce yourself.
14	MR. MULHOLLAND: My name is Evan
15	Mulholland. You had a slide, information gathering.
16	And my question is does the NRC, on the environmental
17	front, does the NRC passively take information that's
18	submitted, or there are staff members that go out and
19	do extra studies and assessments and that sort?
20	MR. EMCH: We consult with a wide range of
21	people, Fish and Wildlife Service, NOAA Marine Fishery
22	Service, the Agency for Natural Resources in the state
23	of Vermont, with the state organizations in New
24	Hampshire and Massachusetts.
25	We consult with a wide range of experts

1	and people who are in the know. We don't go out and
2	actually count fish, no. But we talk to the people
3	who do.
4	MR. CAMERON: Okay, and part of the purpose
5	of the scoping and comment process on the draft
6	Environmental Impact Statement, is to the extent that
7	we have not found information on our own, we look for
8	people to submit information that may be relevant to
9	our review, right?
10	MR. EMCH: Correct.
11	MR. CAMERON: Okay. Anybody else have a
12	question on the License Renewal Process? Okay, let's
13	go over there and find out what the questions is. And
14	if you could just introduce yourself to us now.
15	MS. NELKIN: Hi, I'm Nancy Nelkin. Well,
16	referring to the democratic process question before,
17	one of the issues is, you know, you are saying well we
18	elected our representatives.
19	This plant is in Vermont, just miles from
20	the Massachusetts border. Those of us in
21	Massachusetts and in New Hampshire, don't have a
22	democratic process.
23	Furthermore, the Nuclear Regulatory
24	Commission, you know, you guys have this whole
25	bureaucracy and lawyers, and it's really not fair,

1	it's not a fair fight.
2	MR. EMCH: I'm not sure what your question
3	is, ma'am?
4	MS. NELKIN: Actually, I have a number of
5	questions, so bear with me. It was said early in the
6	presentation that the 40-year license was not based on
7	a safety concern, it was based on an economic concern.
8	How do we know when a plant is no longer
9	safe to operate? That's a question I have. One of
10	the speakers went over and said, oh, we're going to do
11	assessments and inspections, and inspections and
12	almost counted how many times she said the word
13	inspections, but it's never been an independent safety
14	assessment that we have asked for.
15	And, essentially, has been rammed down our
16	throats. So, you know, my feeling is that the idea of
17	assessments, you know, as long as you're going over
18	paperwork and talking to people who, you know, aren't
19	taking a fresh look at it, we don't feel safe.
20	MS. FRANOVICH: Let me address
21	MS. NELKIN: And I have another question.
22	And that is
23	MS. FRANOVICH: Before you ask, before you
24	ask
25	MS. NELKIN: this is the third
ļ	I and the second

1 question. MS. FRANOVICH: -- but let me answer that 2 one, so I don't lose track of it, before you get to 3 4 your third one, and then, Rich, can we come back and 5 get our third one, after I answer the --MR. CAMERON: Yeah, and I just want to say 6 7 is that we welcome your comments and hope that you make some of your conclusions, give those to us when 8 9 we go to the speaking part. 10 But if you could just give us questions and we'll try to answer them. And, Rani, 11 you want to go to the second question? 12 MS. FRANOVICH: If it's okay, I'd like to 13 14 go on and answer the 40-year license term, and then 15 the reliance on inspections. And then we'll get to 16 your third one. The 40-year license term is based on 17 economic considerations and anti-trust factors. 18 19 it comes to plant aging, and when a plant becomes too old to safely operate, it's really not so much about 20 the plant, it's about the systems, the structures and 21 the components that are relied on to make sure the 22 plant can operate safely. 23 24 And so we don't look at it on a plant

basis, we look at each individual structure, component

1	and system, that's important to safety. And we make
2	sure that either it's replaced, it's refurbished, or
3	they test it or they monitor it, or they do something
4	to manage the aging of that structure, component or
5	system. So that's how
6	MS. NELKIN: So you're suggesting that a
7	plant will never be obsolete as long as you can
8	replace the parts?
9	MS. FRANOVICH: I'm suggesting that for
10	license renewal, what we look at is the management of
11	aging of structures, components and systems, rather
12	than when does the magic day happen when the plant is
13	no longer safe.
14	As to the inspections, yeah, we do conduct
15	inspections. We send people to the plant to look at
16	the material condition. To look at aging management
17	in place, aging management programs the Applicant is
18	relying on today, to manage the effects of aging.
19	And so it's not just a paper review. We
20	actually do
21	MS. NELKIN: But the people from the NRC,
22	who already have a track record
23	MS. FRANOVICH: Right.
24	MS. NELKIN: don't we know, to let
25	things go

1 MS. FRANOVICH: And so, the NRC --2 MS. NELKIN: -- in lieu of the 3 regulations. 4 MS. FRANOVICH: Could I please answer your 5 The NRC's position is that it's an independent Federal agency that has the role and 6 7 responsibility of regulating nuclear material use in this country, including operators of nuclear power 8 9 plants. There's also the Advisory Committee on 10 Reactor Safeguards, that then independently reviews 11 the work of the staff and reports its recommendations 12 and conclusions directly to the Commission. 13 14 MS. NELKIN: Okay, one more question, and that is why are we looking at this license renewal in 15 2006. You know, I would like to see the track record 16 of Vermont Yankee between now and at least 2010, 17 before we make this decision. 18 19 FRANOVICH: The regulations require that an Applicant have about 20 years of operating 20 experience before they can come in for renewal. 21 in order to ensure that there is a timely review of 22 23 their application, because this is, it's a significant 24 capital investment for an Applicant to apply for license renewal. 25

1	They want to know the outcome of the
2	Regulators decision process in a timely manner. So,
3	we require that they submit their applications within
4	five years of the end of their 40-year license term.
5	So anywhere between 20, year 20 and year
6	35, an Applicant can come in for renewal. And when
7	they decide to do that, it is really kind of an
8	economic decision of there's of their choosing.
9	MR. CAMERON: Okay, thank you. Thank you
10	for those questions and, thanks, Rani and Rich. Yes,
11	sir.
12	MR. BLOCK: I have two questions that are
13	connected. My name is John Block, that's B-l-o-c-k.
14	The first question is how often does the input that
15	you receive from the public, actually effect the scope
16	of a GEIS?
17	And the second is, please cite for me
18	which specific cases I could look up and find, in a
19	GEIS, or a draft GEIS, evidence of the effect of the
20	public comments upon that process. Thank you.
21	MR. CAMERON: Okay, thank you, Jonathan.
22	Richard.
23	MR. EMCH: I don't know that I can tell you
24	how many, you know, on every single one, but I'll give
25	you an example, sir. I was the Project Manager for

1	the Millstone Plant review in Waterford, Connecticut
2	that ended last year. And during scoping a number of
3	local citizens provided us, during the scoping
4	meeting, they provided us copies of studies about
5	radiation heath effects.
6	Most of them we already knew about, but
7	there were a couple of them that were fairly local,
8	that we were not aware of. And so they provided those
9	to us.
10	And in Section 4.7 of the Final
11	Environmental Impact Statement that we wrote, we
12	discussed the status review of those studies.
13	MR. CAMERON: Okay, thank you, John. We're
14	going to take two final questions here and then we're
15	going to go to public comment. Yes.
16	MEGAN: My name is Megan, and I was
17	wondering if the Hinsdale Evacuation Point is in
18	Keene, and is it part of the evaluation assessment?
19	MR. CAMERON: Okay, Rich, could you,
20	there's a, did you hear the question?
21	MR. EMCH: I did, Chip.
22	MR. CAMERON: Okay.
23	MR. EMCH: As Rani mentioned in her
24	presentation, license renewal does not really address
25	emergency preparedness. As Rani also mentioned, the

1 reasons why it doesn't and is, that it's just not considered to be something that we would, it's a today 2 3 issue. 4 If there was a problem, it's a today 5 If there is a problem with an Emergency Preparedness Plan, it's not something that we want to 6 7 be waiting until 2010 or 2012, to be assessing. 8 Ιf there's an issue with emergency 9 it's something that preparedness, needs to be 10 addressed now, for the current operating plant. there are processes in place to do that. 11 The Nuclear Regulatory has processes. 12 The state of Vermont, the state 13 FEMA has processes. 14 of New Hampshire have processes to do that. They have 15 regular drills and exercises where they identify 16 places in the plan that need to be improved, and that is indeed what is happening here. 17 I understand there were some questions 18 19 about school buses, during the last exercise in New Hampshire, and the state of New Hampshire is taking 20 actions to address those. 21 MR. CAMERON: Okay, and that answers the 22 question about the relationship of emergency planning 23 to license renewal. 24 But just as an emergency planning issue 25

1	for Megan's benefit, Hinsdale is part of the emergency
2	planning review? I guess I'm asking a question?
3	MR. EMCH: Hinsdale is inside the ten mile
4	EPZ, yes sir.
5	MR. CAMERON: Okay, all right, thank you.
6	And let's go to Gary. If you could just introduce
7	yourself to us.
8	MR. SACHS: Gary Sachs, Brattleboro. I
9	heard you say that you look to these environmental
10	impact meetings to determine the scope of your impact,
11	to learn things from us.
12	And this is a partial comment and a
13	partial question. For the most part, we, in the local
14	environment are volunteers. And very few of us have
15	enough time, very, very few of us have the dedication
16	to this issue that we certainly would expect from you,
17	as the NRC, and from individuals who work with
18	Entergy.
19	And, so I think it's an awful lot to ask
20	the locals to come to you with how we should approach
21	the environmental scope and how it affects the
22	environment.
23	My other question is more direct. How
24	many NRC paid employees are here today, given the

number of us, residents, who are not paid here? Thank

1 you. MR. CAMERON: Okay, thank you, Gary. 2 3 Rich, in regard to Gary's first point, you did 4 mentioned that you talked to state and local 5 government agencies about issues, right? MR. EMCH: Let me give a slightly broader 6 7 answer than that, Chip. MR. CAMERON: Okay, all right. 8 MR. EMCH: As I mentioned earlier, we have 9 10 the Generic Environmental Impact Statement, and what we did was we found approximately, we searched and 11 found approximately, decided approximately 92 issues 12 that are always part of the scope of the review. 13 14 And we do a search, an exhaustive search for additional information. And when I said that 15 we're here to ask you for your help, we can do the 16 review without your help, if that's what you're 17 driving at, sir. 18 19 But we think it's important for us to come out and ask you for your help, just in case there is 20 some information that you have that we don't. 21 that's why we're here. 22 MR. CAMERON: And I quess there was a 23

Gary asked about the number of NRC

and I would say that all of the NRC

employees,

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employees who are here tonight, or today, are paid as 1 employees of the government. And I don't know 2 3 approximately how many people we have here, but Rich? 4 MR. EMCH: Approximately 25. 5 MR. CAMERON: Okay. We're going to go to public comment now, and thank you for those questions, 6 7 and thank you Rich. We're going to go to Mr. Ray 8 Shadis, first, to lead off for us. 9 And Ray is with the New England Coalition 10 and he'll tell you more about that. And I don't think we, Deb Katz is not here right now. So, I'll let you 11 know who is going to speak next. 12 SHADIS: The New England Coalition 13 14 intends to file written comments. We have a number of 15 I pulled out four to address in the two comments. 16 meetings this afternoon and this evening. 17 And by agreement with the NRC folks, just as to not take up too much time, I'm going to deal 18 19 with two of them this afternoon and then the other two this evening. 20 Basically, the four issues are the off-21 22 site spent fuel pool accident consequences, radiological consequences. The cumulative off-site 23 24 radiological impact of routine operations, as well as

the radiological impact of routine operations on

eventual decommissioning.

And the cumulative off-site impact of chemical releases unplanned. And, finally, consideration of the advances in the discipline of seismological evaluation.

And I would just start with the spent fuel pool accident off-site consequences. I don't know if a spent fuel pool accident or act of sabotage, is within the design basis accident that are considered in the environmental assessment or not.

The credibility of such accidents was roundly studied by NRC staff in NUREG 1738, on the accident risk and decommissioning nuclear power stations. And that study, in turn, referenced a number of other NRC studies, many of them having to do with operating plants.

Two of those studies specifically considered Vermont Yankee on a site-specific basis. One of those studies dealt with the seismic fragility of two spent fuel pools. One in a PWR, and then one in a boiler water reactor that happens to be Vermont Yankee.

NRC's consultant, seismic consultant, Dr. Robert P. Kennedy, in an appendix to NUREG 1738, says that the postulated critical failure mode for the

1 Vermont Yankee spent fuel pool, would be a plane sheer 2 failure of the floor slat. Then it goes on to say, 3 possibly, the entire floor will drop out. 4 But I think such a gross failure is 5 unlikely. And then he goes on to say, that in his opinion, a more likely failure would be a wall 6 7 failure, in that case leaving as much as four feet of 8 water in the bottom of the pool. And, of course, you gentlemen know that if 9 10 there is some water left in the pool, it is a far more dangerous situation, then if the pool was drained 11 completely. 12 Because that water will then block cooling 13 14 up through the fuel assemblies. And I need to point 15 out that, from our perspective, that the issue that probably needs to be addressed, in your environmental 16 impact study, or in a supplement to it, would be the 17 consequences. 18 19 And the appendix, let's see, where is it Just one moment. Yeah, Table A4-7, this is in 20 now. Appendix 4. Using the base case of Millstone 1, which 21 is a reactor almost identical to Vermont Yankee, with 22 just three and a half cores in the spent fuel pool. 23 24 Vermont Yankee has probably twice that or

close to twice that. It speculates that with 95

percent evacuation, the Table includes an estimate of 1 26,800 cancer fatalities within a distance of zero to 2 3 500 miles. Whether that's strictly speculative, 4 5 postulated or whatever, they're at six, in the Table, in a referenced NRC study, NUREG CR-5176. And those 6 7 numbers have not be repudiated, they have not been put 8 out there in speculative space. I think, when the original license was 9 10 issued, for Vermont Yankee and estimates were made, public representations were made as to the potential 11 for consequences of a design-basis accident, we had 12 certain numbers given to us. 13 14 And, since that time, of course there's 15 been a lot of representation from the industry and 16 also from NRC, in essence, diminishing those numbers, 17 putting all of those numbers away. quess it's New England Coalition's 18 19 position that NRC really needs to reconcile the numbers from the original license time, 20 license period, and the representations that are being made by 21 NRC spokespersons today. 22 By the Utility spokespersons and the 23 24 numbers in this report, which I think are quite

outstanding. So, that is, that is one comment.

And the, on the second topic, cumulative 1 off-site radiological impact of routine operations and 2 3 also the cumulative impact of routine operations and 4 radiologically on decommissioning. 5 There are two things that we would like 6 you to consider. One is that, as you know, the state 7 of Vermont posts radiation measuring devices, TLDs, 8 around the plant perimeter. 9 And the state reports that three times in 10 the last decade or so, that the state limit of 20 millirem per year has been exceeded at the fence line. 11 And we took a quick look at those reports 12 for those three years, and then also at a study, I 13 14 believe, done by Duke Engineering for Vermont Yankee, and found that the TLDs in the same sector were the 15 16 ones that read high in each of those instances. 17 And, you know, this is not an anomaly for a bad detection instrument, because they are changed 18 19 out quarterly, and the excess is the average over a 20 year. The other thing that we noticed is that 21 the only other abnormally high reading, that occurred 22 in each of those three instances, was at the interior 23 24 of the Vernon Elementary School. The other thing that

we noticed was that the turbine hall and the offending

47 1 TLD, and the elementary school, line up axially. There's a straight line to be drawn from the turbine 2 3 hall, to the one monitor that read high, to the 4 elementary school reading high. 5 The state folks thought this might be an artifact of excess of radon in the school. 6 7 course, we don't generally use TLDs to go chasing The other thing that we noticed, was that 8 radon. there was no correlation between the measured amount 9 of radon in the school, for those instances, and the 10 high TLD readings. 11 From an amateur science point of view, we 12 believe enough 13 there's here to warrant 14 investigation. 15 (Applause.) MR. SHADIS: I should point out to you that 16

MR. SHADIS: I should point out to you that we have not looked for correlation on weather or meteorological conditions, but it might well be a consideration that these high readings are a result of temperature inversion and downdraft from the release stack.

In any case, just for the sake of these little nuclear workers over there in the elementary school, we really do think this shall be part of the environmental scoping.

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1 The other thing, very quickly, in terms of cumulative radiological impact, I discussed this 2 briefly with Dr. Masnik, here from NRC, earlier. 3 4 Vermont Yankee had gotten permission to 5 store contaminated soil on site, starting back, I think in 1998, maybe a little earlier. And, at the 6 the amount was some excavated soil from a 7 construction project, about 135 cubic yards. 8 9 And then roughly at 35 or 40 cubic yards 10 they anticipated generating contaminated sanding salts from the roads from silt in 11 the cooling towers, and also from waste sludge. 12 And, in 2004, Entergy received permission 13 14 to increase that amount. They had accumulated, they 15 thought, about 500 cubic meters of contaminated soil on site, and they wished to dispose of, on-site, an 16 17 additional 150 cubic meters per year. That's about ten big dump truck loads. 18 19 And this disposal site or, excuse me, this storage site is on the south end of the site, just south of 20 the cooling towers. 21 It is constantly sprayed down with what is 22 called drift, sideways spray from the cooling towers. 23 the riverbank. We believe that the 24 Ιt is on phenomenon of bio uptake, of sedimentary separation, 25

1	of chemical combination, can leach and separate and
2	concentrate the radioactive material in that disposed
3	of or stored soil, complicating decommissioning,
4	polluting the river, winding up in the biota.
5	And so we believe that should also be
6	investigated as part of the environmental assessment.
7	Those are the two topics. Thank you for listening
8	that long.
9	MR. CAMERON: Well, great, and thank you
10	for those specific comments, Ray.
11	MR. SHADIS: And we'll provide documents.
12	As I said, we will be doing written comments.
13	MR. CAMERON: Okay. Thank you, Ray. Let's
14	go to Evan, Evan Mulholland. And then we'll go to
15	Chris Williams and then Shawn Banfield. Evan
16	Mulholland.
17	MR. MULHOLLAND: I have written comments,
18	I'm just going to read them. My name is Evan
19	Mulholland. I'm an attorney representing the New
20	England Coalition in its appeal in Vermont
21	Environmental Court of the Clean Water Act Permanent
22	Amendment recently issued for the Vermont Yankee Power
23	Plant, as full disclosure.
24	I'm here today, though, as a member of the
25	public and I'm concerned about the impact on our

environment of 20 more years of operation of the Vermont Yankee reactor.

Specifically, I've got concerns about the effect on the Connecticut River and on the fish and other wildlife that live in and on the river. According to the environmental report drafted for this license renewal process, Entergy states that it withdraws water to cool the reactor, from the river, at a rate of up to 360,000 gallons per minute when using once through cooling.

The majority of this water is discharged back into the river at temperatures that can reach 100 degrees Fahrenheit, at the point of discharge. The recently issued NPDES Permit Amendment, which New England Coalition is appealing, allows for Vermont Yankee to increase the temperature of the river by an additional one degree Fahrenheit over what it was previously allowed.

The environmental impact of this extra thermal waste discharged into the river, is potentially significant. Temperature is critical for American Shad and other fish species, particularly during migration and spawning.

Even this one degree increase in water temperature may adversely effect the Shad and other

1 species, reducing their population in the river In its report, however, Entergy does not 2 3 assess these impacts. 4 Entergy's conclusion that the impact on the environment is small, is based on the fact that 5 complies with state 6 the discharge and Federal 7 pollution limits. There's no further discussion of what 8 9 effect another 20 years of increased thermal discharge 10 will have on the eco-system. Whether or not the discharge from Vermont Yankee is in compliance with 11 its State and Federal permits, Entergy should be 12 required to take a hard look at, and assess a direct, 13 14 indirect and cumulative impacts on the river eco-15 system of 20 more years of increased thermal 16 discharge. Thanks. 17 MR. CAMERON: Thank you very much, Evan. Is Chris Williams here? Chris. 18 MR. WILLIAMS: My name is Chris Williams. 19 I live in Hancock in Addison County. And I'm not 20 certain that my unprepared remarks here are going to 21 be completely on point, but I believe that the safe 22 operation and safe oversight of any operating nuclear 23 24 power plant in this country, or in the world, has a

significant long-term impact on the environment in the

area where the plant is located. And, just for the record, standing here in Brattleboro, I want to point out some experiences I've had in two locations in the United States.

The first is in the state of Ohio. I lived in the Midwest for quite a while, doing battle with the nuclear industry, as well as the coal-fired electric industry.

In Port Clinton, Ohio, the Davis Besse Nuclear Power Plant is operated by First Energy Corporation. Several years ago, with significant Nuclear Regulatory Commission on-site oversight, it was discovered that a boric acid leak had eaten a hole in the reactor vessel lid, which is about 18 inches thick.

That hole came within several millimeters, several millimeters of breaching. The whole thing happened, as I said, under the oversight of the Nuclear Regulatory Commission.

Outside that plant, there's a big sign.

It has safety is Job One. What happened at Davis

Besse was criminal. That the Nuclear Regulatory

Commission allowed them to go get another vessel head

from Midland Plant, which was canceled, up in

Michigan, and put that plant back in operation, was

1 nothing short of criminal. The second reactor that I had quite of a bit of experience with in the Midwest 2 was in Bridgeman, Michigan. 3 It was the DC Cook Nuclear Power Plant, 4 5 owned by then, American Electric Power. The Bridgeman Plant was shut down after it was discovered that 6 7 significant safety features in the plant were not 8 operating, in some cases, for more, not operating 9 properly, for some cases, for more than ten years. 10 Outside that plant there's another sign that said safety is Job One. Those safety systems 11 were non-operational with significant daily oversight, 12 on-site, by the Nuclear Regulatory Commission. 13 14 Here at Vernon, as in the rest of the 15 country, it's part of the operating license that the Nuclear Regulatory Commission gives the companies that 16 17 operate these power plants, as part of that process and part of that license, they're allowed to routinely 18 19 emit radioactive releases, in both the air and water. I'm sure everybody in this room knows 20 Long-term, that's a problem. We'd like to know 21 how much has been released by the operation of Vermont 22 Yankee, year-to-date, or operational lifetime to date. 23 24 And how much is projected under routine operational conditions? How much is going to be 25

1 released over the proposed license extension? 2 I want to close with just one other 3 observation. Recently, several people, four from 4 Vermont, traveled to Kiev to attend a conference, marking the 20 th Anniversary of the accident at 5 Chernobyl. 6 7 There were probably 150 of us that took the conference organizers up on the opportunity to go 8 9 visit the Chernobyl site. And I have to say, we've 10 all seen the pictures. And the pictures actually, they do the situation justice. 11 What struck me the most was that the 12 people living 30, 40 kilometers away, from the 13 14 accident site, very basic, poor, agrarian folks. were people that depend on their land for everything. 15 And what's just painfully obvious, when 16 you visit there? Is that their lives have been 17 destroyed by the technology that was arrogantly placed 18 19 and operated 30 to 40 kilometers away. And the folks that lived in Pripyat, the 20 community that built and operated Chernobyl, well, you 21 know, they're not there anymore. Pripyat is a ghost 22 23 town. 24 But the one thing that the locals, the non-nuclear locals had, was their land. And it was 25

1 taken away from them. So as we look to re-license Vermont Yankee, we have to draw a parallel. 2 3 We're not so different from the, from the 4 people in the Ukraine or in Belarus. And when these 5 companies tell us that safety is their Number One job and the Nuclear Regulatory Commission assures us that 6 7 they're on the job all the time. 8 I don't believe we can take those claims 9 seriously, and have to do everything we can to ensure 10 that arrogance doesn't prevail. Just because you're scientifically smart, doesn't mean you have your act 11 And I'll just leave it at that, thanks. together. 12 (Applause.) 13 14 CAMERON: Thank you, Mr. Williams. Shawn Banfield. 15 MS. BANFIELD: Good afternoon. 16 My name is 17 Shawn Banfield and I'm here today as an active member and an Officer of the Board of Director for the 18 19 Vermont Energy Partnership. I'd first like to thank the NRC for 20 hosting this meeting today. I do have a prepared 21 statement, which I will read from. And I'll start 22 with the Vermont Energy Partnership was founded in 23 24 2005, shortly after the state report warned the series of energy challenges they will face in Vermont. 25

Our founding members came together because 1 2 they recognized the importance of making sure we have 3 adequate electricity, so Vermont continues to be a 4 great place to live and work. 5 The Partnership is a diverse group of more than 50 business, labor, community leaders, committed 6 7 to addressing the immense electricity supply issues 8 that we are going to face in Vermont, in the very near 9 future. Our members include a cross-section of 10 experts of the energy sector. Our members employ 11 thousands of Vermonters. 12 They run big and small businesses. 13 14 They represent Union workers, some of whom 15 devote their professional lives to upgrading the 16 Vermont Yankee Plant safely. The Partnership fully 17 supports the re-licensing of the Vermont Yankee Nuclear Power Plant in Vernon, and I will explain to 18 19 you why. 20 It is no secret that Vermont's demand for energy is continuing to grow. It may be a less known 21 fact, however, that Vermont faces uncertainty over its 22 future energy supply. 23 24 Currently, one-third of Vermont's electric 25 supply comes from Hydro Quebec. These long-term

1 contracts with the state will begin to expire in 2014, 2 and there is no quarantee that these contracts will 3 either be renewed or renegotiated given the company's, 4 Hydro Quebec's more local business opportunities in 5 the province. approximate one-third of 6 Another 7 supply here in Vermont, is made up of a wide array of 8 both in-state and out-of-state sources, renewable and 9 non-renewable. 10 The Partnership supports the development of renewable sources, and we encourage the 11 increased used of energy efficiency in the expansion 12 on conservation measures. 13 14 However, the fact remains a reliable 15 energy portfolio, here in Vermont, must be made up 16 elsewhere, of base load sources of power. Yankee accounts for the last one-third of our Vermont 17 portfolio. 18 19 34 percent of Vermont's electricity supply needs are met by the Vermont Yankee 20 Plant. So let me put this debate into proper context. 21 Vermont has not brought on a single, significant power 22 generating facility in over 20 years. 23 24 And there are no plans to do so in the

To make matters worse, proposals to

near term.

develop small scale generation in Vermont, have been met with sharp criticism and serious opposition. In a time when energy costs are at their highest, Vermont Yankee will not only play an essential role in our state's energy portfolio, it is critically important to the Vermont economy and environment.

From an economic standpoint, I would just quickly say that a stable, relatively low-cost power provider will help to maintain and expand businesses here in Vermont, while at the same time providing for an opportunity to bring and attract new businesses to the state.

In a time where Vermont faces an increasing, aging population, the plant provides employment to 600 highly skilled men and women. These individuals and the company provide more than 200 million in economic benefits to the Windham County Region and the state as a whole.

According to the Vermont Public Board, I'm sorry, the Public Service Department, the company, through the State's Power Purchase Agreement, will provide customers in Vermont, approximately 250 million dollars in savings over the life of the contract.

But aside from the important economic

1 benefits, the Vermont Yankee's continued operation, 2 I'm sorry, there are also some relative environmental 3 benefits from this in-state power generation source. 4 In 2005, alone, according to the Nuclear 5 Energy Institute, Vermont Yankee avoided emissions of 7,700 tons of sulphur dioxide, 2,000 tons of nitrogen 6 7 oxides, and 2.5 million tons of carbon dioxide. Emissions of sulphur dioxide, lead to the 8 9 formation of acid rain. Nitrogen oxide is the 10 precursor to both ground-level ozone and smog. greenhouse gases, like carbon dioxide, contribute to 11 global warming. 12 live in a country where half the 13 14 electricity generated comes from coal-burning sources. 15 Yet, in Vermont, we can be very proud to say that 16 that's not the case. Vermont Yankee does not release harmful 17 greenhouse gases or other toxins into the atmosphere 18 19 which are the primary cause for global warming. issue of global warming, a climate change, has rapidly 20 reached alarming levels. 21 And power-generated facilities have been 22 at the heart of that crisis. In the United States, 23 24 coal is the leading power provider with over 600

25

plants operating.

1 Of these plants, of the 600 plants, 36 percent of all U.S. emissions are accounted by those 2 3 plants' generation. It has become abundantly clear 4 that the nuclear energy is the only emission-free 5 source that can meet consumer demand, reliably and at a reasonable cost. 6 7 Leading environmentalists, from around the world, like Dr. Patrick Moore, Co-Founder of Green 8 9 Peace, have come to the conclusion that nuclear power 10 is the only source that can help remedy and save the planet from catastrophic climate change. 11 Just last month, Dr. Moore said in the 12 Washington Post, nuclear energy is the only large 13 14 scale, cost effective energy source that can reduce 15 these emissions, while continuing to satisfy the 16 growing demand for power. 17 And these days, in these days it can do so He went on to say that it's extremists who safelv. 18 19 fail to consider the enormous and obvious benefits of nuclear power, also fail to understand that nuclear 20 practical, environmentally 21 is safe and

Without Vermont Yankee, Vermont utilities would be forced to buy additional power on the spot market that would be less reliable and certainly

friendly.

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1 considerably more expensive. So the Partnership asks, do Vermonters 2 3 really want to pay more and to depend on power from 4 fossil fuel sources, such as natural gas and coal, 5 which contribute to the global warming and the earth's degradation? 6 The Vermont Partnership thinks not. 7 In 8 closing, the Vermont Yankee has an important and 9 crucial role to play in the future of your state. 10 Ιt is both environmentally economically appropriate to grant the plant a license 11 extension. We know that there is a wide array of 12 support for the continued operation of this plant, for 13 14 the reasons I have articulated here today. Its essential economic benefits. 15 Its environmentally sound operations, and its important 16 role as a component of the Vermont energy portfolio. 17 On behalf of the Partnership, we would 18 19 like to thank you for taking the time to hear from us 20 today. MR. CAMERON: Thank you, Shawn. 21 MacArthur here? 22 Dan. MACARTHUR: Hi, 23 MR. mу is Dan name 24 MacArthur, I'm the Emergency Management Director for the town of Marlboro. I want to make several points 25

here.

First of all, Marlboro has actually, is one of those formal petitions for hearing that the NRC should have received, and we are requesting that Marlboro be included in the EPZ.

It's the only town with any property within the ten mile radius, which was not included when the original license was granted in the 1960s, I guess. And we are formally requesting that if there is going to be an extension of the license, that the license be changed so that Marlboro can be included.

It's only fair, and there's no, as far as we're concerned, there's no other possible way to reconfigure the EPZ. I've drawn a little map of it and I will, if the current license that the NRC has granted to Vermont Yankee shows a really funny shaped EPZ with Marlboro just completely hacked out of it.

So we would like to be included in that, and that will be part of an ongoing formal request that we have. As for the purpose of the meeting here today, the environmental scoping, I'd like to follow up a little bit on comments that Ray Shadis made and Chris Williams, as well.

We, there's many of us in the local citizenry know that our environment, our homes, our

farms, our entire livelihood are at risk here. If there's ever a sizeable release of radioactivity, then our property values will plummet. Our ability to sell, possibly even eat our own produce, will be diminished.

And I can't imagine a greater environmental impact than that. I mean we're talking about all or nothing, here. And I don't know whether you want to try to do a mathematical analysis of all or nothing, or not.

But from my perspective, it doesn't make any sense. If there's any possibility, that there's going to be any kind of impact like that, then I think that the NRC can only include that in the environmental scoping.

And this goes on. I understand that the NRC is only looking at environmental impact until the year 2032, but that doesn't do much good for those of us who live in this area, and I think more and more are coming to grips with the fact that the waste that's being generated is going to be stored here, in our backyard.

And it's going to be incredibly dangerous for thousands of years. So, unless the NRC can promise us that we aren't going to be the ones who

monitor that material, then we're going to have to insist that the effect of that material be included in any environmental scoping review.

(Applause.)

MR. MACARTHUR: As I said earlier, I can't imagine any greater environmental impact, and I can't

imagine any greater environmental impact, and I can't imagine the NRC extending the license if there's any possibility of this happening.

I was interested, the person before me was going through the benefits of nuclear energy, but, as we all know, there are many, many hidden costs included in producing energy from nuclear power.

One of them being that there is a sizeable payroll at the Federal level, paid for by our taxes, which is specifically for the purpose of seeing that nuclear energy continues to operate fairly cheaply.

So just think of that. The people who are here today getting paid by us, the citizenry, we're paying for that in our taxes, but it's really a cost that should be associated with the electric costs of nuclear power.

Now somebody asked earlier, how many people are here from the NRC. And it occurred to me and I think this is the reason that you're all here today, is to try to establish some sort of comfort

1	level with those of us who live here, with the fact
2	that there is in fact a good and a quality oversight
3	of this process.
4	I, my question is this. There are
5	approximately 25 people here who work for the NRC now.
6	Of those 25 people, and I was at all of the previous
7	meetings and I heard distinguished scientists stand up
8	and say well I worked in the nuclear industry, and now
9	I work for the NRC.
10	Of the people here today, who work for the
11	NRC, how many people have been in the nuclear industry
12	and are currently working for NRC? I wonder if we
13	could have a show of hands on that?
14	MR. CAMERON: Dan, I'm sure that some of
15	our people have worked for the nuclear industry,
16	others have not. But we're not going to conduct a
17	poll right now, okay?
18	So if you could finish up with your
19	comments, we'd appreciate it.
20	MR. MACARTHUR: I don't think I need to say
21	anymore. That seems to have said it very well,
22	thanks.
23	(Applause.)
24	MR. CAMERON: I don't think it did say it
25	fairly well, but I did have a question for you, to
	1

1 make sure that your request, formal request that Marlboro be considered in the Emergency Planning Zone. 2 3 I want to make sure that doesn't get lost, and you 4 said you had filed a Petition to Intervene and that 5 there would be perhaps something other coming in as a formal request. 6 7 Should we, should we consider comments today the formal request, or is there another 8 9 written request that's going to follow? I quess 10 that's my question for you, just so that I know what, we know what to respond to. 11 MR. MACARTHUR: Yeah, thanks. 12 I will ask that you include my today's comments as a follow up to 13 14 that request. I also understood that having petitioned by the 27th of May, or whatever it was, 15 16 that we wouldn't need to follow up. 17 Just today's comments are just to reinforce our official request, which I believe has 18 19 already gone in. So if there's more needed, let me know. 20 MR. CAMERON: Okay, and the reason that I 21 wanted to distinguish this, is that your request to 22 participate in the Hearing and the request to be part 23 24 of the Emergency Planning Zone, can also be treated

separately, so that if your Petition to Intervene, is

1	not granted, that your request is still before the
2	agency to be part of the Emergency Planning. John,
3	and okay. John, do you have something to say on that?
4	John Eads.
5	MR. EADS: Sure, let me just acknowledge
6	first that by letter dated April 27 th , the town of
7	Marlboro submitted a request, as they put it a
8	Petition for a hearing.
9	That request was postmarked by envelope,
10	I think it was May 15 th . I don't know the two week
11	time difference there, but we did receive your
12	request.
13	It did not specify that it was submitted
14	in accordance with 2.309, which is the formal hearing
15	request process. I know that it was addressed to the
16	Secretary for their review, and I believe it's under
17	the review process as we speak.
18	I don't know that it fell under the formal
19	Petition for Hearing Process, submitted in accordance
20	with 2.309, which was specified in the Federal
21	Register Notice.
22	But we did receive your letter dated April
23	27 th , and it is being processed.
24	MR. CAMERON: Okay, and we heard your
25	additional request today. Okay. Is Claire Chang with

1	us? Okay, let's go to, how about Sunny Miller and
2	Ischa Williams next. Sunny Miller? Ischa Williams?
3	(No response.)
4	MR. CAMERON: Okay, Elizabeth Wood? And
5	let's go to, let's go to Bill Burton. Bill?
6	MR. BURTON: Good afternoon. My name is
7	Bill Burton, I'm not an expert on energy, but I have
8	had some experience dealing with energy.
9	I'm a retired educator. I taught Physics,
10	Chemistry, Environmental Science, and a course
11	entitled Energy Economics and the Environment, for
12	about 35 years.
13	I taught in the public schools in Bellows
14	Falls(Phonetic), Vermont. I also did some teaching in
15	the Vermont State College System, and have been a
16	visiting lecturer at the University of Massachusetts,
17	Lowell.
18	I'm probably one of the few people here
19	from Windham County that endorses the re-licensing of
20	Vermont Yankee, and its, and hopefully looks upon with
21	the environmental issues, favorably.
22	In my experience as an energy teacher, I
23	probably visited almost every conceivable form of
24	electrical energy generation that exists. I've been
25	to large nuclear plants, coal-fired plants, oil-fired

1 plants, wood chip, solar, wind. You name it, I've 2 been there to learn more about the issues. 3 I feel that in any electrical generation, 4 no matter what type of process you are using, there 5 are benefits and risks. And I firmly believe that the benefits of nuclear power, greatly exceed the risks. 6 7 I know a lot of you are in disagreement. 8 The main reason that I feel this way is other than 9 hydro-electric power, all of the other forms of electrical generation involve carbon fuels. 10 Either coal, oil, natural gas, biomass, 11 All of these are going to produce gases you name it. 12 that are going to be harmful to the environment. 13 14 are going to produce greenhouse gases. 15 And I know some people don't believe in 16 global warming, certainly the President of the United States doesn't agree about global warming, but it does 17 exist. And I originally came from the state of Maine, 18 19 where we used to go fishing a lot in northern lakes. Now there are no fish. Acid rain from 20 coal-fired plants. In those coal-fired plants there 21 is also -- I heard a comment from someone? 22 Would you like to come up and make, I 23 24 don't believe I bothered you while you were making your comments, right, sir? 25

1	MR. CAMERON: Okay.
2	MR. BURTON: Okay, thank you.
3	MR. CAMERON: All right.
4	MR. BURTON: All right. I knew the people
5	when they were called the Clam Shell Alliance, way
6	back.
7	All right, now getting back to the issues
8	that I want to deal with, I've been involved with a
9	lot of environmental issues. I'd like to consider
10	myself an Environmentalist.
11	Many of my students lived off the grid.
12	I've had students that have driven in wood-fired cars.
13	I have students who are living in straw houses. So
14	I've seen it all, and I believe that we have to have
15	nuclear power in order to exist, especially here in
16	the Northeast.
17	When I started teaching, oil was \$2.00 a
18	barrel, now it's \$70 something. When I was heating my
19	house with oil, it used to be 16 cents a gallon. I
20	pre-bought for \$2.76 the other day. So the cost of
21	these fossil fuels that we use here in the Northeast,
22	are increasing so that I feel this year, many people
23	in Vermont, are going to freeze to death.
24	It's just going to be pretty bad when you
25	have to burn 1,000 gallons of oil in your house and

it's going to cost almost \$3.00 a gallon. 1 Who is 2 going to be able to afford it? 3 We've had no national energy policy. 4 We're talking about 20 years down the road. 5 short-term, 40 years down the road is short-term. started out dealing with energy in 1962, and one of my 6 7 students made a hydrogen fuel cell, that's how I got 8 enlightened in this thing. 1962, that's a lot of years ago. And I've 9 10 been involved in learning about energy for all these years. All right, now, what's going to happen? 11 really feel we not only need to re-license Vermont 12 need more 13 Yankee, but we nuclear power 14 throughout the country. fossil 15 fuels Because are going China wants them, everybody else wants 16 17 them. They're polluting the atmosphere. They're going to kill the earth in just a very, very few 18 19 decades. Now with nuclear power we have the ability 20 to get the fuel right here in North America. 21 use nuclear power to generate electricity. 22 We can use nuclear power to electrolyze water and get hydrogen. 23 24 And hydrogen is going to be the fuel of the future.

And granted, there's a lot of things about

getting hydrogen from the source, the production, to its use. It's a very small molecule, but we can drive cars with hydrogen. We can heat with hydrogen, you can do a lot of things.

So once we get a long-term energy policy, it doesn't matter if you're a Republican or Democrat, I don't know when it's going to come down the road, but we need a long-term energy policy with nuclear power, and hydrogen replacing gasoline.

Because I know, right here in town, we have soybean oil for diesel and people are burning it. That's fine, you're not using gasoline, but you're polluting the atmosphere, just the same, with those greenhouse gases.

So I'm convinced that we need a long-term policy and I hope that some, it won't be in my lifetime, but I guaranteed if you can look forward, 150 years from now, you're going to be driving around in your hydrogen cars.

That's all I have to say, oh, by the way, concerning fishing and so forth. I spent the last weekend stocking salmon in the tributaries of the Connecticut River, so I'm not, you know, a polluter. I'm an Environmentalist, I'm a Fisherman, but I am concerned about our energy future, not only in Vermont

1 but the United States. Thank you. MR. CAMERON: Okay, thank you very much, 2 3 Mr. Burton. How about Mr. English, then Bernie 4 Buteau, and Dan Jeffries. Is Bob English here? Okay, 5 this is Mr. Robert English. 6 MR. ENGLISH: Hello. About 30 years ago 7 the Union of Concerned Scientists developed a program 8 that provided the way that the United States could be 9 70 percent solar-powered by the year 2000. Well, here 10 it's 2006, and we're talking about energy problems and energy shortages. 11 Well, for the last 25 years, I've lived in 12 a solar home that I built, and I've lived off the grid 13 14 with solar electricity from portable tag panels. 15 you came into my house, you wouldn't notice much 16 difference from your house. 17 I have computers, I have monitors, I have televisions, I have a microwave. I have a washing 18 19 I cook on electric hot plates in the summer machine. and I cook on a wood cook stove in the winter. 20 don't use any oil to heat my house. 21 So when people tell you that we need to 22 risk the very ground that we stand on, that we need to 23 24 risk making it uninhabitable for 15 generations,

order to heat our homes and have electricity,

1	simply isn't true.
2	(Applause.)
3	MR. ENGLISH: Technologically we can solve
4	energy problems, we can do it without destroying the
5	environment. The problem is political and social. We
6	need to say we want renewable energy, we are not
7	willing to pay the price of the destruction of the
8	earth, to heat our homes.
9	We do not need to do that. Thank you.
10	(Applause.)
11	MR. CAMERON: Thank you, Mr. English. Is
12	Bernie here, Mr. Buteau, I'm not sure I'm pronouncing
13	that correctly.
14	(No response.)
15	MR. CAMERON: Okay, how about Mr. Jeffries,
16	Dan Jeffries? And Ted Sullivan? John Dreyfus?
17	(No response.)
18	MR. CAMERON: Okay, Carol, Carol Boyer. I
19	think Carol is here, isn't she? Carol, do you want to
20	come down and talk to us?
21	MS. BOYER: Hello, everyone, can you hear
22	me. This is my first experience attending a hearing
23	of this sort, and I had actually not planned to speak.
24	What I would like to say is to build on
25	what the last speaker described, which is his

experience living with a solar home.

I'm imagining how good it must feel to know that you're meeting your basic needs without adding anything to the debt that we, as humans, have accumulated in our attempts to meet our needs, and also in our, really, we're so full of ideas and we can do so many things, we seem to have lost track of our relationship to the larger circle of life.

And I would like to suggest that we follow up and that each of us become responsible for learning that, for example, our own Department of Energy has very firm studies that clearly tell us that if we exerted the political and social will, we would have no need for any of the risky enterprises that we use now to meet our needs for energy and heat.

I'm not going to repeat what was just said about the time table on this, but I would like to say, say it this way. That we need to be forward thinking. And my sense is that nuclear power is kind of passe.

We've all looked at this. We see what the risks are, and there are huge chunks in Russia that have been, in their terms, withdrawn from public use, for the foreseeable future because of an accident.

And, as far as I know, nobody has repealed Murphy's Law. So I'd like to suggest that we be

responsible and that we get this message today that we are asking all of you to look beyond what has become an old mantra, and make use of the truly up-to-date technology, that could allow all of us to feel good about living our lives without adding to the environmental burdens. Thank you.

(Applause.)

MR. CAMERON: We thank you, Carol. Nancy, Nancy Nelkin.

MS. NELKIN: Hi, I'm Nancy Nelkin, I'm from Western Mass, I'm an educator. I guess I wanted to start out with the comment, I think it was Rich. He said something about us being, referring to us as the public experts.

That was flattering, however, I think there are really only a few true experts among us, like Ray Shadis. I think part of the problem is, as taxpayers, we're paying the NRC as our employees, to be the knowledgeable representatives of public interest.

The NRC is responsible for overseeing the nuclear industry. And when they do a poor job, they risk our health and well being, when you do not rigorously and objectively evaluate the impacts of nuclear power on us.

1 And my understanding with this license renewal process, there's a safety review. And you're 2 3 talking about looking at aging management. 4 still ask when will you determine when a nuclear plant 5 is not environmentally or otherwise, fit to continue. I get the feeling that as long as you can 6 7 put a band aid on this or tighten a screw here, that 8 you will continue to run the nuclear reactors, which 9 really has more benefits for the corporations that run them, than for us, as the people who live in the area. 10 Because we have to live with the effects 11 on the Connecticut River. We have to live with the 12 effects on our health, increased cancers. 13 14 things that need to be looked seriously, by the NRC, in this process. 15 Not to mention the nuclear waste that's 16 17 stored in our backyard. It's bad enough that it's already there, it's at risk by an accident. It's at 18 19 risk by criminal act. 20 company is resisting taking And the measures to make that more safe. I want that to be 21 considered in this process. And if we continue to re-22 license the plant, we will have that much more nuclear 23 24 waste.

In fact, it will be, the nuclear waste

1 will reach its capacity and go beyond. I want to add 2 that I question this assumption that we need more and more energy and that the only choices are centralized 3 4 forms of energy that use fossil fuels, coal that uses, 5 uranium. This is not an automatic assumption. 6 7 aspect of this renewal, as I understand it, is to 8 consider alternatives. And I want to ask my 9 neighbors, who live in this area, to really look seriously at alternatives. 10 There are so many renewable options. 11 There's solar, there's wind, and people have a way of 12 making it sound like, oh, well you know you really 13 14 can't do that, that's not practical. That's not true. 15 It's very practical, it's very doable. This is an article that's very low researched. 16 17 being done in other countries. It's being done in Western Europe. 18 19 People are putting solar panels on their homes and getting paid by the utility for producing 20 that electricity. So we need to open our minds and 21 not get into an either/or situation where people 22 saying well coal plants are so bad for the environment 23 24 and it's making, causing global warming.

So we have to run the other way

1	nuclear. You have to really think hard about all of
2	the nuclear waste that's going to be with us forever.
3	And will Entergy be with us forever.
4	Will they be footing the bill to take care
5	of that, forever. As long as it takes for the
6	radiation to dissipate.
7	So I just, I'm pleading with the NRC to
8	take a really objective and rigorous approach to this.
9	I think that, you know, all of the areas that we have
10	to look at are out there. Thank you.
11	(Applause.)
12	MR. CAMERON: Thank you, Nancy. Is Mike
13	Hame here, by any chance? Or a Mr. Peyton?
14	(No response.)
15	MR. CAMERON: Let's go to, Sally, Sally
16	Shaw, do you want to talk?
17	MS. SHAW: (off mic.)
18	MR. CAMERON: Thank you, Sally, for
19	sending, you're going to send the comments and then
20	we'll go to Sally, Sally Shaw, thank you.
21	MS. SHAW: In the interest of full
22	disclosure, I work for New England Coalition, but I'm
23	speaking here today as a Resident of the ten mile EPZ.
24	I live in Gill, Massachusetts.
25	As an ecologist, I'm compelled to point
	I and the second

out that environmental impacts are multi-variate impacts. They are not generic. Life is not generic. And although biological systems are resilient and they recover from damage, radiation exposure causes genetic impacts that will change life forever.

Genetic damage can be passed on to our offspring and theirs. It can change biological communities forever. I submit that the very idea of a GEIS is sheis. In NRC's Executive Summary of their Generic Environmental Impact Statement, which I consider an oxymoron.

They state that among the 150 million people who live within 50 miles of a U.S. Nuclear Power Plant, I prefer to call it a reactor, not a plant. About 30 million who will die of spontaneous cancers.

That's one in five people, by their calculations. And they say that since we can't prove a one of them was caused by radiation, therefore the NRC doesn't have to worry about them, note bene.

They admit that five calculated fatalities associated with nuclear powered induced cancers will occur. So I ask which one of us, or our children, living within 50 miles, will die of radiation induced cancer, over the lifetime of this plant.

1 That's the cost of progress. Tough luck, Most of the people who die of radiation 2 3 induced cancers, will live within ten miles. Thus, there's a very good possibility that 4 5 we will know, we in this room, will know some of them. At last count, my husband and I counted, between us, 6 7 28 people we know who have died or are living with 8 cancer, in our extended community. 9 prove that their cancers are 10 radiation related? No. Therefore, the effects, the impact of these deaths, on our life, is considered by 11 the NRC to be of small significance. 12 The Executive Summary of the 600 some odd 13 14 page Environmental Impact Statement, is full of little items like that. Here's another. The staff concludes 15 16 that the generic analysis of a severe accident, 17 applies to all reactors. The probability weighted consequences of 18 19 atmospheric releases fall out onto open bodies of water, groundwater releases and the societal and 20 economic impacts are of small significance, for all 21 22 reactors. That, with the stroke of a pen, wipes out 23 24 all concerns. They also conclude that the environmental impacts of design-basis accidents, are 25

82 1 of small significance for all plants. 2 And, because additional measures to reduce such impacts would be costly, don't worry, they won't 3 4 burden the Licensee with extra mitigations. 5 At a recent ACRS hearing in Rockville, Maryland, NRC staff, I think maybe it was NRR staff, 6 7 testified that in a design-basis accident or loss of cooling accident, under upgraded conditions, which 8 9 they're not looking at, of course, with this re-10 licensing thing. The entire quantity of the core would be 11 released in about 30 seconds. And accident impacts 12 after uprate, are greater than the 20 percent uprate, 13 14 they may approach 40 percent, maybe more. And this might result in a 500 roentgen 15 exposure at the limiting location, which happens to be 16 17 very near a residence, which happens to be on the plant perimeter. 18 I submit that such an accident would have 19 a significant impact on the person or family living 20 there. So I would ask the NRC to recalculate. That 21 goes on and on, I'm going to skip. 22 23 In the Appendices of the GEIS,

estimates of risk quantities, for early fatalities,

normalized doses and cost, were made using an aptly

24

named crack code. We know about cracks.

Our steam dryer has 62 of them, at last count. And it uses the middle year of current license, or the flat part of the bathtub curve that nuclear scientists know represent the stability or the stable running of nuclear plants.

Experience shows that Vermont Yankee exceeded radiation release limits, several times during the early part of its life. Theory predicts, as it ages, it will release more again.

NRC variances, such as doubling the allowable main steam line leak rate, exempting Entergy from doing the ten-year primary containment leak rate test that was supposed to have been done in 2005.

All of that implies to me that the theory is correct, and they don't want to find out. And then there's the small fact that Entergy is negotiating with Vermont and the NRC to mask their actual releases, with a 29 percent discount.

That's been discussed at other meetings.

I think the jury is still out on that one, but I can take a really good guess how it will go. I propose to the NRC that you come up with a more realistic way to model dose, since the bathtub is overflowing and with the uprate and the license extension, you're going

1 beyond the rim of the bathtub. So your middle year of current license 2 criteria, seems to me, flawed. New and significant 3 4 information. 5 I would like to submit the BEIR 7 Report of the National Academy of Sciences. 6 The biological 7 effects of ionizing radiation. The National Academy 8 of Sciences told us that, in fact, there is not a 9 threshold dose phenomenon. 10 The GEIS presupposes a threshold dose Therefore, it claims that it does make 11 phenomenon. sense to normalize early fatalities. 12 That's based on the BEIR 5 Report, not BEIR 7. 13 14 would like to suggest that you recalculate using the conclusions of BEIR 7. 15 What does BEIR 7 say about radiation risks to workers under 16 17 exposure of one REM per year. That was another little nugget in the Appendices of the GEIS. 18 19 I'm just curious. I would love to see that calculated. I think your Appendix E.4.1.2 is 20 faulty, also based on BEIR 7, because it's based on 21 the notion of a threshold of effects. That does not 22 seem to be the case. 23 24 Your Appendices E.8.2, these Appendices show the tables and the calculations behind a lot of 25

1 their conclusions in the GEIS. 2 Quantities and units, assumes not occur 3 stochastic effects will if the dose 4 equivalent from internal and external sources 5 combined, is less than 50 rems or fewer in a year. This, too, contradicts the conclusions of 6 7 the BEIR 7 Study. Your cost estimates also use BEIR 8 5, not 7, and the costs are based on 1980 costs, or 9 maybe they were updated to 1994, 12 years ago. In my experience, prices have changed 10 quite a bit in that 12 years. The other thing, 11 quarrel I have with your cost estimates, is that you 12 skip Indian Point, hypothetical accident costs for 13 14 Indian Point. I don't blame the NRC for skipping Indian 15 Lots of folks live down there. The cost of an 16 17 accident would be astronomical, but it's not good science to leave out a big outlier like that, in this 18 19 case. I would just like to pause for a second, 20 say this is really crazy. No other power 21 generation source comes close to having to expend so 22 much money and so much energy, just to convince us 23 that it won't kill thousands of us. 24

Entergy, Excelon and others

Ιf

1 invested in wind and solar, none of this would be 2 necessary. 3 (Applause.) MS. SHAW: I do hope that you will consider 4 5 possibility in your NEPA required look at alternatives to re-licensing ENVY. 6 7 The tax-funded labor costs of the NRC, ACRS, ASLB, etcetera, etcetera, would be eliminated. 8 9 Please, save our tax dollars, we need them. 10 Appendix E, I think it was Page E-43, we talk about ALARA limits. 11 That stands for As Low As Reasonably 12 These are radiation exposure limits for 13 Achievable. 14 workers. And they were derived using analytic 15 techniques to identify the approximate point at which the cost of providing additional protection, would 16 exceed the risk averted. 17 You see, it sounds like apples and oranges 18 19 to me, so I'm just curious what, this is a question, I guess I missed the question part, I should have 20 asked it then. 21 But what dollar value do you place on a 22 workers life? I'm just curious. I quess I'll 23 24 conclude with saying that it seems to me that your

Generic Environmental Impact Statement is fatally

1	flawed, in many ways.
2	Recalculations of early fatalities and
3	latent fatalities, are biased. They are based on old
4	information, BEIR 5, not BEIR 7, and I humbly request
5	that you recalculate them based on the most currently
6	available knowledge on the effects of radiation.
7	Particularly, low level radiation. Thank
8	you, Chip.
9	MR. CAMERON: Thank you, Sally.
10	(Applause.)
11	MR. CAMERON: Could we, could we have
12	someone from the NRC staff answer Sally's question?
13	Not right now, but at the end of the meeting. She has
14	a question, if anybody can answer that for her, I
15	would appreciate it.
16	Our next speakers are going to be, first
17	we're going to go to Mandy Arms, then to Sally Kotkov,
18	and then to Bill Wittmer. Mandy? Okay, how about
19	Sarah, Sarah Kotkov? And then we'll go to Mr.
20	Wittmer.
21	MR. KOTKOV: Hi, I'm on the Board of New
22	England Coalition, but my comments are my own personal
23	views. At the outset, Rani said that, apologized for
24	the weather. And I like to say that I don't think the

that the weather is the reason that a larger number of

people have not come out this afternoon.

I think that many of us are quite disgusted by the fact that the Atomic Safety and Licensing Board has recently refused to hear, or refused to accept the contentions, the new contentions of New England Coalition, based solely on their lack of timeliness in filing.

And yet, in a few weeks, we'll have another one of these public meetings. We think that these decisions, the decisions on uprate and on relicensing, are based, and should be based on science and engineering, and to have a show of soliciting the views of the citizens, many of us believe is a sham and a travesty and I think that is why people have not shown up today, not because it's a little bit rainy.

As a citizen living here in Guilford, frankly I didn't think much about the power plant until 9/11, and then I thought a lot about the fuel pool and the risk of terrorism here.

Frankly, my only hope is that a terrorist would find this area too boring. The NRC, I think, thinks that the low population density here is a reason not to pay more attention to the safety of this outdated and aging structure.

The Mark 1 containment requires that the

fuel pool be high up in the air, where it is not shielded by being below grade, as some other plants are. Here it's 70 feet in the air and it's, of course, highly vulnerable to attack by aircraft. When this plant was built, it was intended to hold the fuel, what's called spent fuel, which is, of course, highly, highly radioactive and dangerous.

It was intended to hold this fuel for six months. Now, of course, there's 33 years of fuel in the pool, there will be another seven by the time the license expires.

And now we are looking at the prospect of another 20 years beyond that, of fuel. And, of course, when the fuel, after the fuel is in the pool for five years, and then it's cooled sufficiently to put in dry casks, we're looking at the prospect of many, many more casks on the banks of the Connecticut River, where this, of course, also a terrorist target.

Especially if Entergy gets its way and does not even have to provide berms around the casks. And, of course, there's also a flooding danger. In 1991, there was a study regarding the construction of a low-level waste repository down on the plant grounds, and it was deemed not wise.

Now we're, of course, looking at high

1	level waste on the plant grounds. I think that's all
2	I have to say, thank you.
3	(Applause.)
4	MR. CAMERON: Thank you. We're going to go
5	to Mr. Wittmer, then Joyce Morin, then Linda Madkom.
6	Is Mr. Wittmer still here?
7	(No response.)
8	MR. CAMERON: Okay, how about Joyce Morin?
9	Mr. Madkom?
10	(No response.)
11	MR. CAMERON: Gary? Gary Sachs. And then
12	after Gary we'll go to Ann Elizabeth Howes. Gary
13	Sachs.
14	MR. SACHS: Nuclear is not cheap
15	electricity. Protect the waste for 100,000 years,
16	tell us how much that's going to cost. Spend some of
17	that money to protect that waste, and then tell us
18	it's cheap, affordable or inexpensive electricity.
19	I challenge you on that. To anyone who
20	claims that there was a benefit to nuclear power,
21	please show me this cost benefit analysis, including
22	the price of dealing with this waste.
23	Because the rate we're given as for the
24	power purchase agreement, from 2002, does not tell us
25	the true cost of the economics behind this.

1 It was great for you to hear Ms. Banfield refer to the Department of Public Service Studies. 2 3 intend tonight, at tonight's meeting, to bring more 4 economic data on how that Department of Public Service 5 Study breaks down and to actually how much per person that will cost, if we didn't have Vermont Yankee 6 7 starting in this year or in a couple of years. 8 And one of my concerns, when I hear the 9 NRC at this meeting, in regard to the data that they use for their studies, is that they take much of their 10 not from their own sources, but from the 11 Licensee. And, in my opinion, that's poor practice. 12 (Applause.) 13 14 MR. SACHS: For those people here, who have 15 less experience than some of us who live locally, 16 who've been following this issue for quite a while, 17 this re-licensing issue is actually about no moving 18 parts. 19 It's not about dry cask storage. It's not about the uprate. It's not about the evacuation plan. 20 And it's not about any moving parts in the reactor 21 22 itself. Just so you know. And to relate to that man who spoke 23 24 earlier, who was the teacher in Bellows Falls.

order for nuclear to cover the carbon-based emissions,

1 better used in coal and in natural gas plants, etcetera, we would have to have a new nuclear power 2 3 plant built every two weeks, between now and 2050. 4 don't think that's going to happen, sir. 5 Last Friday, the Ninth Circuit Court in 6 California stated the NRC, in doing these 7 Environmental Impact Statements, must take into 8 account risk of terrorism. And here at Vermont Yankee we have a 9 10 radioactive water pond, that is 60 feet up, covered by basically an aluminum, corrugated aluminum roof that 11 has a breakaway roof with a pound and a half pressure 12 13 per square inch. 14 To me that, I'm not sure what level of 15 containment we have at Vermont Yankee, and I'd like that addressed in whatever this Environmental Impact 16 17 Study is that you all are planning. Richard Monson of the Harvard School of 18 19 Public Health stated, quote, the scientific research base shows that there is no threshold below which low 20 levels of ionizing radiation can be demonstrated to be 21 harmless or beneficial. 22 I'm going to repeat that. There is no 23 24 threshold below which low levels of ionizing radiation

can be demonstrated to be harmless or beneficial.

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The

1 health risks, particularly the development of solid cancers in organs, rise proportionately with exposure. 2 3 At low doses of radiation, the risk of inducing solid 4 cancers is very small. 5 As the overall lifetime exposure increases, so does the risk. Every nuclear reactor 6 7 emits small amounts of radiation. Even, supposedly, 8 zero-emission reactors. On March 31st, 2004, the NRC arrived in 9 10 Vernon, Vermont to inform us that they would not be performing the independent engineering assessment that 11 had been a requirement, put on the uprate by the State 12 Public Service Board. 13 14 For anybody who knows that they did do the independent engineering assessment, in my opinion, the 15 16 NRC is not to be trusted. 5-4-04 the NRC changed its 17 tune and announced that it had long been planning such an independent engineering assessment. 18 19 You, the NRC, say that Three Mile Island was a wake up call for the industry. That was March 20 28th, 1979. That same year the NRC publicly stated 21 that there was no such thing as a safe amount of 22 radiation. 23 24 Since 1979, I'm going to list some of the

events that have occurred. February 11

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1981,

1 Tennessee Valley Authorities, Sequoia One Plant in Tennessee. A rookie operator caused a 110,000 gallon 2 3 radioactive coolant release. January 25th, `82, the Ginna Plant near 4 5 Rochester, New York, a steam generator pipe broke. Fifteen thousand gallons of radioactive coolant 6 7 spilled. Small amounts of radioactive steam escaped into the air. 8 January 15th and 16th, 1983, Brown's Ferry 9 Nearly 208,000 gallons of low level 10 radioactive contaminated water was accidently dumped 11 into the Tennessee River. 12 1981, `82, and `83, Salem One and Two in 13 14 New Jersey. Ninety seconds from catastrophe when the plant was shut down manually, after the failure of an 15 16 automatic shut down system. A 3,000 gallon radioactive water leak in 17 June of `81. A 23,000 gallon leak of mildly 18 19 radioactive water, which splashed onto 16 workers by -the-by, in February of `82. 20 And radioactive gas leaks in March of `81, 21 and September of `82. Then, in 1996, NRC Chairperson 22 Shirley Jackson, speaking of Millstone in Time 23 24 Magazine, quote, clearly the NRC dropped the ball. won't do it again. 25

1 1997, Yankee Rowe, 20 miles of here. In 2 the process of closing it, they determined they had 3 found that they had dumped, for 30 years, radioactive 4 water into the Deerfield River. Many people swim 5 downstream from that river. February 15th, 2000, New York's Indian 6 7 Point Two, aging steam generator ruptured, venting 8 radioactive steam. The NRC initially reported no radioactive material released. 9 They later changed their report to say 10 there was a leak, but not enough to threaten public 11 safety. Wait, didn't the NRC in 1979, say there's no 12 such thing as a safe amount of radiation? 13 14 2004, new NRC Chairman Nils Diaz, about 15 Davis Besse, said the Agency, quote, dropped the ball A lot of balls getting dropped by the 16 Hmm. NRC. 17 If Three Mile Island was a wake up call, 18 19 were you guys asleep at the control panel during these other events, or just napping. I heard someone refer 20 earlier to the fact that Mr. Emch has been involved 21 with the NRC for 30 years. 22 That means he's been involved since before 23 24 you guys knew what you're doing to apparently the mid

to late `80s, when you claimed to have a handle on

1 these events and not be making mistakes any longer. 2 Okay, so here we are in a NRC meeting. Please tell me how the NRC does not stand for nobody 3 4 really cares? The environmental impact of Vermont 5 Yankee. We have an ineffective evacuation plan, 6 7 which has been untested in its entirety. What about 8 those people who don't have vehicles? What about the 9 daycare centers and all the schools being tested 10 together? What about the transient local members in 11 community who are in hotels? A worst case 12 scenario accident at Vermont Yankee would lead to an 13 14 area the size of western Mass, Vermont and New 15 Hampshire, being uninhabitable for possibly 30 or more 16 years. 17 The plumes from the National Aeronautics and Atmospherics Administration, shows plumes going as 18 19 far north as deep into Canada, over Montpelier. far south as North Carolina, and as far east as over 20 Cape Cod. 21 Getting the Ninth Circuit Court's decision 22 last week, it appears that the NRC has some excuses to 23 24 In 2001, just a month before 9/11, Vermont

Operational

Yankee

failed

the

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Response

Safety

1 Evaluation Drill of the NRC. In this drill, mock attackers, who work 2 3 for the NRC, tried to enter the Control Room by 4 getting over the fence and past security at Vermont 5 Yankee. Prior to the test, the time and where the 6 7 mock attackers would be coming from, was told to the 8 Security. The mock attackers were able to enter the 9 Control Room, got past the Security and VY won the notoriety, calling itself the least secure nuclear 10 station in the country. 11 Needless to say, the NRC no longer does 12 I have a question that comes up, that I 13 14 didn't ask in the beginning of the meeting, which is, 15 on what do you base radiation exposure? Is it the 16 International Committee on Radiological 17 Protection? Or is it on the European, on the European 18 Thank you. 19 Committee on Radiation Risk? MR. CAMERON: Okay, thank you, Gary. 20 (Applause.) 21 MR. CAMERON: So that we can go on with 22 other speakers I would just ask, again, if any of the 23 24 NRC staff has the information about, that Gary is

asking about, please talk with him.

1 We have a few more speakers and then I'm 2 going to ask one of the Senior NRC people to close out 3 the afternoon meeting. And I believe this is, this is 4 Ann Elizabeth Howes, and then we're going to go to 5 David McElwee, Debra Reger, and Cora Brooks. Elizabeth. 6 7 MS. HOWES: I'm a common citizen with relatively low technical education. And I haven't 8 9 pursued the subject at all. 10 I guess it was last week when we had the 17 low level warning system and we had to replace the 11 But, you know, I rarely stay up late and I 12 was watching movies, and at about 5:00 I went upstairs 13 14 and I could see the dawn approaching and I thought, 15 well, I mean it was probably 4:00. I was feeling, it's dark out. 16 Like we've 17 lost power somewhere, it's very quiet and still. that's kind of like a tiny, little feeling of fear, 18 19 but that the experts are taking care of it, and I went to bed as I usually do. 20 And I really think I probably will, I 21 don't really think that I'm an important member of the 22 experience. I kind of compare it to the feelings I 23 24 had when the World Trade Towers collapsed, that I sort

of felt as though I was an American adult and, you

1 know, with nothing to stress my life. 2 I was experiencing stress, and when the Towers collapsed I felt something has been shut off. 3 4 And when experiencing a profound natural peace. 5 And I run on little dreams, every once in a while, like an indication in my house, I have a 6 kitchen leak. And I think we had cracks in the blower 7 or something like, cracks in the towers that we had to 8 think about. 9 And I'm like, just a little animal out 10 there and I'm getting the same poetic feeling that 11 there's, you know, stretch marks in the towers and 12 people are concerned about the foundation. 13 14 And this afternoon I hear, you know, it's sitting on the Connecticut River, and I have an odd 15 That the Connecticut River runs on top of a 16 little shell that is a dirt shell. 17 And that a disruption the size of Vermont 18 19 Yankee, would cause the river to disappear into a gorge and emerge further downstream. I haven't 20 that, though Ι do think 21 verified that we're technologically capable enough to check on that. 22 This afternoon is the first time, maybe 23 the second time I've heard that the reactor is 70 feet 24

in the air, which is a decision as to whether or not

any kind of explosion would suck water and dirt into the air and emit, you know, to the hills, but it would probably be buffeted. Like there is a higher rate of survivor-hood, on the other side of the mountains from Hiroshima.

That it's at, you're buffeted by the earth. There's one other detail. I feel as though we have gotten excited to secure the strength of the foundation.

But I also feel as though it's in our own, honest, personal assessment, as animals working in the reactor, that it's an older, radioactive installation.

And my feeling is that we would experience a kind of removal of the radioactive jewelry.

A reduction of the vin diagrams of overloaded electromagnetic force fields that is causing a depression of our circulatory systems, our blood chemistry.

But if we were to stop the creation of nuclear waste, and stop our mental dependence on extremely bright street lights. Over, hugely over air-conditioned environments and brought our electrical usage, personally at home, down to seriously conservative levels, that we would feel some relaxation of social economic status stress, that is

1 the equation of the success of industrial America. And it's, you know, you're at that big 2 3 decision point in your life, where you straighten up 4 and start respecting incredible simplicity, and really 5 learn solar panel. Really contemplate wind farms and harness 6 7 the hydro-electric potential in the rivers and streams and waterfalls. And gauge down to accepting that as 8 9 the amount of electricity that you can look at and 10 use. I grew up in the automotive industry, I 11 I haven't gotten it together. don't drive a car. 12 I know that I have to respect the integrity of the 13 14 industry, the transport of food, I mean, dependent on 15 stores and supermarkets and the refrigeration factor. But I had also another dream. 16 17 sort of coming around to, you know, this last week of level low emergency, that there is a metallic fatigue 18 19 that's like you know you have an automobile, and you have seen three of them in ten years. 20 Because you have a job, you can shift out 21 of one automobile into another one, but there's that 22 rest factor that's going on all the time. 23 24 MR. CAMERON: I hate to interrupt you, but

could you finish up for us, please, so we can get in

1 all the speakers. MS. HOWES: So my fear, my point is to get 2 3 behind security as the fun end that you're capable to 4 cope with that puzzle. 5 MR. CAMERON: Thank you. Thank you very much, Ann Elizabeth. We're going to go to David 6 7 McElwee, at this point, and then we have Debra Reger, Cora Brooks and Beth Adams. 8 9 MR. MCELWEE: My name is David McElwee and, 10 in this spirit of full disclosure tonight, I'm an Engineer at Vermont Yankee, and I also live in the ten 11 mile EPZ. 12 I could talk about the safe operation of 13 14 the plant, as an Engineer at Vermont Yankee. 15 today I'd like to talk as a resident of the area, not as an employee of Vermont Yankee, but to talk a little 16 17 bit about 20 additional years of the operation of Vermont Yankee. 18 19 Because 20 years in the future, we need to do something about the environment, about greenhouse 20 gases. My wife and I have lived in West Brattleboro 21 for nearly 30 years. 22 We own and operate a small business in 23 24 town. I've raised two children here and feel very

lucky that we have been able to join the rural country

1 setting and lifestyle that's been afforded to us. 2 Prior to working at Vermont Yankee, I 3 taught school in a public school system in a local 4 high school. Part of my teaching was in the area of 5 science, where my students and I would look at the environment and the effects that fossil fuels had on 6 7 it. 8 Greenhouse qas emissions are а 9 problem and we need to do something about it. 10 to stop relying on fossil fuels for the generation of electricity and turn more towards nuclear energy. 11 Nuclear energy is safe, clean and readily 12 available for use in this country, and it does not 13 14 contribute to the greenhouse gas emissions and helps 15 keep our green mountains green. To not allow Vermont Yankee to operate an 16 17 additional 20 years, would be a significant impact on our environment. I'm very proud to be a member of 18 19 this community, and also to have spent the last 25 years working at Vermont Yankee. 20 Vermont Yankee is a safe, well run plant 21 and is a great asset to the area. It provides good 22 paying jobs, provides an infrastructure to attract new 23 24 businesses to the area.

To help, and help eliminate tons

1	pollutants that would otherwise be put into the air
2	that we breathe. And I look forward to another 20
3	years of operation at Vermont Yankee, and hope that
4	the NRC will approve the license renewal application.
5	Thank you.
6	MR. CAMERON: Okay, Debra Reger, I'm not
7	sure I pronounced that correctly. Is this Debra?
8	MS. REGER: Yes.
9	MR. CAMERON: Oh, good, okay. So we have
10	a duo or duet?
11	MS. REGER: Martha is part of my Affinity
12	Group and I asked her to just stand with me for
13	support, if that's okay.
14	MR. CAMERON: This is Leftover Affinity?
15	MS. REGER: Yes, we're leftovers and since
16	it's our turn to talk, I just want to have the
17	appropriate banner. Shut It Down Now, it says. I'm
18	from central Vermont, near Montpelier, and I think
19	this is so important that I drove two hours, with my
20	Affinity Group, to be here.
21	(Applause.)
22	MS. REGER: So, I did want to start with,
23	I really believe that we are trespassing with this
24	nuclear power plant on a fragile web of life on our
25	dear planet, the Mother Earth.

1 So I speak from my heart, with these 2 I think the uranium that's mined to operate 3 this nuclear power plant, is coming from native land, 4 from very, people that have lived for over 30, what, 5 40 years, with the tailings of the uranium mining. And why doesn't the environmental scoping 6 7 include the people that live, you know, with these 8 tailings, with the still births and the water, from 9 the water, from the polluted water, from the polluted air. 10 And now we're going full cycle with 11 storing of radioactive waste back on the Indian 12 Reservations. I don't think this is fair. 13 14 think there's been any, you know, where does the generic scoping, you know, where does that fit in. 15 16 (Applause.) 17 MS. REGER: You want to use coal. What is this group, Vermont Energy Partnership, you know, they 18 19 want to use coal that's that's taken from the Mother Earth. The water in the slurry. The Peabody Coal has 20 been doing this for like 20 years, using all that 21 We're running out of water. 22 precious water. You know here we have the threat of the 23 24 radioactive, you know polluting the Connecticut water.

You know they'd rather use coal but they're gonna, you

know transport it by coal slurry. You know, it's not fair that the corporations, you know get away with this.

I want to thank all the grandmothers, and the mothers, since November, have risked arrest here in Brattleboro, and have stood, you know in the lobby of Entergy* [phonetic], and have stood at the gates of Vermont Yankee, and where is it that we have to send our grandmothers and mothers to risk arrest? What does that say?

And maybe we don't have the auditorium full today, but I know that people don't want to live with this risk anymore, and it's really not fair. Okay. I want to speak to alternatives. In my home town of Corinth, we publish Northern Woodlands magazine. Last month--I want to give these, I don't have enough for all 25 employees, but I want to give you all a copy to read tonight in your hotel. "Energy From Wood: Turning Woodchips Into Power, Heat and Ethanol." We have the answers. We have the alternatives. We've listened to Amory Levans* [phonetic], Rocky Mountain Institute, and other experts. We can use energy efficiency.

Finally, Vermont just passed a bill that we will be selling appliances that really turn off

1 when you turn them off. You know it seems like a little thing but all this stuff will really add up. 2 3 We have the program in Vermont, Vermont Efficiency. 4 We can like use this and we don't need the 5 power from this nuke; we really don't. So I want to 6 give you all a copy of this to read tonight, and I guess in closing, I just want to thank my affinity 7 8 group for coming down, especially to Martha, this is --9 and Monica, and Sal. 10 MR. [off-microphone comment] MS. REGER: Yeah. It is really difficult 11 12 to--you know, workers do have a choice. We protested a lot, as the New Hampshire Women's Peace Network, at 13 14 Sanders, in New Hampshire, in Nashua, New Hampshire. 15 They were making parts for the cruise missile. 16 And, you know you do have a choice. 17 worker has a choice. I don't think it's our job to provide alternative jobs, but we can convert that 18 19 plant, we can still have a good economy, we can convert that plant, run it on gas, like I said we can 20 use alternatives and provide the same amount of 21 22 energy. I do feel that people need to look within 23 24 when--and all you guys that work for the Nuclear

Regulatory Commission, you know, I don't know how you

108 1 can sleep at night. I really don't. So that's all I'm gonna say. 2 MR. CAMERON: All right. 3 Thank you very 4 much. And thank you for the magazines too. 5 So we have Cora and Beth, and then we're going to have Rani Franovich close the meeting 6 7 for us. 8 Cora. 9 MS. BROOKS: I found a country journal from 1980, and I thought, well, I wondered why I had 10 saved it. There was a nice article about mushrooms in 11 And then I kept looking through it -- and I just 12 found it this week, and there's an article about 13 14 Vermont Yankee from 1980, about the town of Vernon, and how much anxiety--1980, we're talking about. 15 16 much anxiety exists in the communities around this 17 plant. And not only does this plant--let's say it--

People are in denial as much as possible, the way you are when somebody dies. In some religions, you come back a year later to make sure no one has seen that person. Because it's hard to believe when somebody dies. It's hard to believe that

causes cancer, causes cancer of unborn, yet unborn

heart attacks for the anxiety that people live with.

Not only does it cause cancer, it causes

children.

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the nuclear plant that's serving your community and the state of Vermont, and is giving jobs to a lot of the people that you know and care about, that's hard, to feel that it's a shaky situation.

Now Copernicus and Galileo suggested the most outrageous thing. They said, you know, the sun doesn't rise in the east and set in the west. The world turns around. Now we also know that the world wobbles. I'm not making this up.

The scientists. I have a New York Times headline that says the world wobbles, the sun rings like a bell. The scientists know that. We know that there are volcanoes that erupt. We know that there is lightning that strikes. We know that this year alone, there have been three or four significant coal mine operations that have faltered and killed people.

The light isn't very good for me here but I am going to try and read to you from this article that was written by David Riley in 1980.

Country Journal. A few of the Vermont Yankee, up until 1980, wobbles. High-pressure turbine leaks shut down 82 hours. That was in 1973. 4-27-74, following scheduled shutdown, plant restricted to 80 percent power output due to excessive radioactivity levels in off-gas system.

1	5-24-74. Leaks in drywall exterior,
2	containment vessel shut eleven days. Again '74.
3	Multiple lightning strikes, shut down 75 hours. That
4	was on 7-5-74.
5	3-23-75. Operator error, high reactor
6	water level, shut down three days.
7	6-5-75. Failure of start-up transformer,
8	power source for cooling tower fans, shut down ten
9	days.
10	1975. Vibration problems in nuclear
11	reactor, shut down 23 days. 9.1 million cost passed
12	on to consumers. This is our cheap electricity.
13	11-12-75. Vermont Yankee given seven
14	months to begin building a gamma radiation shield to
15	protect people at elementary school across the street
16	from plant.
17	1-27-76. General Electric company,
18	manufacturer of reactor, indicates that the torus
19	could lurch upward under pressure, causing major
20	damage. The torus is a donut-shaped pool inside the
21	containment vessel. Shut down 18 days.
22	5-14-76. Lightning causes fire and
23	radiation releases.
24	I don't care how good the workers are in
25	the plants. May they stay alive and not become

1 angels. I don't care how good they are. human stuff. It doesn't matter that we're on a world 2 3 that wobbles, lightning and earthquakes. 7-18-76. Plant releases 83,000 gallons of 4 5 water containing low levels of radioactive tritium into Connecticut River. Yankee settles with state of 6 7 Vermont for \$30,000. 8 Now it goes on. But I want to say that I 9 had a grandmother who was related to her sister, who 10 was once married to a governor of Vermont, and I came up here as a child because there was no electricity 11 when we came up to the place that we came up to, and 12 I loved that, and I came back, and my grandmother, the 13 14 sister of one of the governor's old wives, she died in 15 childbirth, but she said when you come to a place, she said, you take care of it and leave it a little better 16 17 than you found it. When you come to visit a place, you leave 18 19 it a little better than you found it. And what she said about her land in Vermont. She said this isn't 20 This isn't our land. This is land that we 21 take care of while we have it. And we take care of it 22 and make it a little bit better than it was. 23 24 So I'd like to ask the NRC to take a

really close look, and I would like to reverse the

1 understanding. You asked us to help you. I'm asking you to help us. 2 3 MR. CAMERON: Okay. Thank you, Cora. 4 actually have two speakers and then I'm going to go to And we have Beth Adams from Citizens Awareness 5 Network and then Jane Newton will be our final 6 7 speaker. I think this is Beth coming down now, all 8 9 right, and then we'll go to Jane. MS. ADAMS: Hi, there, how are you? 10 a new resident of Greenfield, which is ten miles away 11 I came down in February, not 12 from Vermont Yankee. really knowing about Vermont Yankee. So I must say 13 14 that I'm not up to speed on all the details, and I 15 appreciate all the research that people that have 16 spoken before me have shared. 17 I've been an anti-nuclear activist, however, since 1979, and at that time I opposed 18 19 nuclear power plants and I still any nuclear power plant, and I do not believe that Vermont Yankee should 20 be open one more day. 21 We need to close Vermont Yankee, not just 22 think about extending licensing for 20 years. 23 24 foolish is it to develop an energy that we don't know

what the waste, what we're going to do with the waste,

we're just going to let it sit there, and, in fact, others that have spoken before me have shared that this waste puts us in greater danger. Not only does it put us in greater danger. Not one of you yet has spoken about the people that have died already in Kosovo, in Vieques, in Iraq, in Afghanistan, having been poisoned by depleted uranium on the tips of the missiles that were dropped there, either by protests, in Vieques, or so that we could, corporations could control their profits. It is time, as others have shared before me, that we take a hard look at what we are doing. Taking a different course now, I'd like to go in a

direction of what we can do, and others have shared about this already as well.

We can, as Citizens Awareness Network well knows, we can develop the technology at a reasonable price, relatively much more reasonable price than creating nuclear, keeping this plant alive, create wind power, geothermal, which hasn't been mentioned. Geothermal energy and hydro energy to create sustainable energy resources.

I came from Maine. We closed Vermont They have a viable renewal energy plan in They have a dam that actually has little Maine.

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1 elevators that lift the fish uphill and people can buy energy produced by that type of energy. 2 There's a lot of hope in what that can 3 Geothermal. 4 do. 5 We have a heated core from the center of Earth, that we're not utilizing, we're not 6 7 resourcing ourselves with that yet, except in areas of--when I say "we" I'm thinking of this area. 8 9 other areas of the world and other parts of the 10 country rely on geothermal energy for electricity and fuel already. 11 So there are things that we can do and 12 that's what I think we should be focusing on, and it 13 14 should be a regional discussion since it affects 15 regional issues. Thank you. 16 MR. CAMERON: Okay. Thank you, Beth. 17 final speaker is Jane Newton. MS. NEWTON: I really didn't plan to speak 18 19 at all but I sort a can't help it. I have no real qualifications, except that I'm a really terrified 20 mother and grandmother, and I can tell, 21 recognize a corporate con, corporate lies, and what I 22 believe is a corporate crime against humanity, and for 23 24 the people who are trying to tell us that nuclear

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contribute

greenhouse gases, are not taking into consideration the amount of nonrenewable energy used to dig up and process the uranium, to make it into a fissionable form.

And as the person before me mentioned, the side product of making uranium fissionable is what's known as depleted uranium which is not depleted at all, and it's providing free, it has been providing free, since about 1990, the means for the U.S. military to fight a secret ongoing nuclear war. Therefore, nuclear energy is fueling war, which is just one more way to destroy the world.

MR. CAMERON: Okay. Thank you, Jane, and thank all of you for your comments today, and I'm just going to have Rani Franovich close the meeting for us.

Rani.

MS. FRANOVICH: Thank you, Chip. I just wanted to thank you all for coming again. I know a lot of you don't necessarily feel that the NRC takes your comments into consideration. I can assure you we do. Not all of you may be happy with how we change or incorporate the comments, depending on how they fit into the process, but I can assure you that we will respond to the comments that we receive at this meeting and in writing.

1	So thanks again for coming. Those of you
2	who registered and met our attendants at the front
3	table out here, they have meeting feedback forms, that
4	we're hoping you will out, if you have any suggestions
5	for how we can improve the conduct of our public
6	meetings, things we can do better, how we may serve
7	you better. Please let us know. The forms are
8	addressed, pre-paid. All you have to do is fill them
9	out and mail them in, or you can deliver them to a
10	member of the staff.
11	And I just want to remind everyone that we
12	will be receiving comments, in writing, until June
13	23rd, as Rich Emch mentioned, and he is the point of
14	contact for receiving those comments.
15	Any comments received after that time, we
16	will do our best to consider, and again, thanks for
17	attending our meeting.
18	One other thing. The NRC staff will be
19	around here for a few minutes, if there are any
20	questions that people have, that we weren't able to
21	discuss with you during the meeting. Thank you.
22	(Off the record.)
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