

BLUE RIBBON COMMISSION ON AMERICA'S  
NUCLEAR FUTURE

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PUBLIC MEETING TO SOLICIT FEEDBACK ON  
THE DRAFT COMMISSION REPORT

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WEDNESDAY,  
OCTOBER 12, 2011

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The Commission convened at 8:00  
a.m. in the Amphitheater of the Joseph B.  
Martin Conference Center at 77 Avenue Louis  
Pasteur in Boston, Massachusetts, Connie  
Lewis, Moderator, presiding.

COMMISSION MEMBERS PRESENT:

ALLISON MacFARLANE  
PER PETERSON\*

ALSO PRESENT:

KEVIN BRYAN, Meridian Institute  
JAMES CONNELL, Maine Yankee Atomic Power  
Corporation  
PATRICK EDWARDS, Pennsylvania Public  
Utility Commission  
CHRISTOPHER GERWITZ, Town of Ashford,

New York and West Valley Citizen  
Task Force

JOHN GIARRUSSO, Massachusetts Emergency  
Management Agency

LISBETH GRONLUND, Union of Concerned  
Scientists

SARAH HOFMANN, Vermont Department of

Public Service and NARUC

MARGE KILKELLY, CSG-ERC and Maine Yankee  
Community Advisory Panel

ALSO PRESENT(cont'd):

JOHN KOTEK, BRC Staff Director

PAUL KRANZ, Erie County Department of  
Environment and Planning

MARY LAMPERT, Pilgrim Watch

SANDRA LEVINE, Conservation Law  
Foundation of New England

CONNIE LEWIS, Meridian Institute

LAWRENCE MASSARO, Federal Railroad  
Administration

MATT MILAZZO, BRC

RICHARD PINNEY, New Jersey DEP

ROBERT PORTER, Seneca Nations of Indians

CORT RICHARDSON, CSG-ERC Northeast  
High-Level Radioactive Waste  
Transportation Project

DANIEL H. THOMPSON, Maine Yankee  
Community Advisory Panel

SETH P. TULER, Social and Environmental  
Research Institute

RAYMOND C. VAUGHAN, West Valley Citizen  
Task Force

EDWARD L. WILDS, Connecticut Department  
of Energy and Environmental  
Protection

SUSAN D. WILTSHIRE, Consultant

PUBLIC COMMENTERS:

DAVID AGNEW

DANNY BROWN

GAILANNE CARIDDI

NED CHILDS

ELIZABETH GERLACH

DEBBIE GRINNELL

RICH JANATI

STEPHEN JARRETT

MICHAEL KELLI

GUNTRAM MUELLER

ED PERRY

REBECCA RAMSAY

SUSAN SHAPIRO

RAY SHADIS

LISSA WEINMANN

NANCY WRENN

\* Present via telephone

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2 8:09 a.m.

3 MODERATOR LEWIS: Okay, folks.

4 We're going to go ahead and get started. My  
5 name is Connie Lewis, and I'm a facilitator  
6 with the Meridian Institute. And I'm going to  
7 be helping to moderate the meeting today, and  
8 I'd like to start by turning things over to  
9 Dr. Allison MacFarlane.

10 MEMBER MacFARLANE: Thank you,  
11 Connie. Good morning, everyone. We have an  
12 early start here today. These guys are really  
13 efficient, and so they're going to keep us on  
14 time, keep us going.

15 I am Allison MacFarlane. I'm  
16 Associate Professor of Environmental Science  
17 and Policy at George Mason University, and a  
18 commissioner on the Blue Ribbon Commission on  
19 America's Nuclear Future.

20 As you all probably know, the  
21 Commission issued a draft report at the end of  
22 July this past summer, and we have been

1 seeking comment on that draft report.

2 The co-chairmen have asked the  
3 staff to work with regional government groups  
4 to hold a number of public hearings around the  
5 country. We held the first public hearing  
6 last month in Denver, and today we are here.  
7 It's our second meeting.

8 We are grateful to the Council of  
9 State Governments - Eastern Regional  
10 Conference for co-hosting today's meeting here  
11 and for working with us and providing a lot of  
12 assistance in getting this meeting together.

13 Primarily, we are here today to  
14 listen, all of us, the staff and myself, and  
15 we want to hear your reactions to the draft  
16 and discussions about the draft.

17 And then I will - we will go and  
18 share these comments and views with the rest  
19 of the commissioners in developing our final  
20 draft, which is due at the end of January.

21 I believe that another  
22 commissioner, Professor Per Peterson from UC



1 Berkeley, is actually on the phone.

2 Per, do you want to say hello?

3 MEMBER PETERSON: Yes, I'm here.

4 And I also look very - I'm looking forward  
5 very much to the opportunity to listen today.

6 And I will be on the phone through the course  
7 of the different panel sessions.

8 Thank you, Allison.

9 MEMBER MacFARLANE: Thanks, Per.

10 Thanks for joining us. And it's kind of early  
11 for you, isn't it, Per? So, really, thank -

12 MEMBER PETERSON: Pretty early,  
13 yes.

14 MEMBER MacFARLANE: We'll excuse  
15 you if you're in your PJs.

16 So, let me just close by thanking  
17 all of you for coming today and participating,  
18 taking time out of your schedules. This is  
19 really valuable feedback for us.

20 I found the meeting in Denver to  
21 be especially valuable. I learned a lot. We  
22 learned a lot about what we - what else we

1 should be covering, what we should be  
2 addressing, and I look forward to really  
3 fruitful discussions today.

4 So, thank you all.

5 MS. KILKELLY: Good morning. I'm  
6 Marge Kilkelly. I'm the Deputy Director of  
7 the Council of State Governments, Eastern  
8 Office. And I am - also, I spent 14 years as  
9 chair of the Maine Yankee Community Advisory  
10 Panel. So, I have two hats kind of juggling  
11 here today.

12 But as the Deputy Director of the  
13 Eastern Region, we work with the states from  
14 Maine to Maryland, Virgin Islands, Puerto Rico  
15 and six eastern Canadian provinces. And much  
16 of our work is really focused on creating  
17 opportunities for discussion to move public  
18 policy forward in many areas.

19 To that end, one of the programs  
20 that we sponsor is the Northeast High-Level  
21 Radioactive Waste Transport Task Force, which  
22 I can't say without looking at the words in

1 front of me. I just want you to know.

2 And I really want to thank Cort  
3 Richardson and his board for the work that  
4 they have done in terms of putting this  
5 meeting together and organizing this event.

6 I also want to take a minute to  
7 especially commend and thank the Blue Ribbon  
8 Commission and their staff for their  
9 willingness to go beyond simple listening, to  
10 come out in the field and actively seek ideas,  
11 opinions and challenges.

12 We often hear in the news about an  
13 issue that's the issue of the day or the issue  
14 of the year, the issue of the decade or maybe  
15 even the generation. But, frankly, the public  
16 policy that's framed around the issue of  
17 storing spent nuclear fuel is going to shape  
18 energy policy for hundreds of years in this  
19 country.

20 So, thank you again to the  
21 Commission, to the staff, and to all of you  
22 for being here to participate in this very

1 critical public policy discussion. Thank you.

2 MR. GIARRUSSO: Good morning. On  
3 behalf of Governor Deval Patrick, Lieutenant  
4 Governor Tim Murray, Secretary of Executive  
5 Office of Public Safety and Security,  
6 Secretary Heffernan, and Secretary Sullivan of  
7 Energy Environmental, I'd like to welcome  
8 everyone to Boston and the Commonwealth of  
9 Massachusetts.

10 My name is John Giarrusso. I'm  
11 the Planning and Preparedness Section Chief  
12 with Massachusetts Emergency Management  
13 Agency. And I'm also the co-chair of that  
14 long title that you heard Marge talk about,  
15 the Northeast High-Level Radioactive Waste  
16 Transportation Task Force.

17 This public meeting is intended to  
18 provide feedback for the Commission about its  
19 essential mission to find a solution to a  
20 national dilemma while we're managing the  
21 back-end of the nuclear fuel cycle,  
22 particularly the disposition of high-level

1 radioactive waste and spent nuclear fuel.

2 Everyone here today is a  
3 stakeholder whose future is affected by this  
4 challenge. The Commission laid out its draft  
5 report on July 29th, 2011, and needs to hear  
6 public comment about its proposed  
7 recommendations.

8 This is a great opportunity for  
9 state, local and public to express their views  
10 on this important issue. I'm looking forward  
11 to the discussions concerning the issue of  
12 disposal for high-level radioactive waste  
13 which are being stored in nuclear facilities  
14 all around the region and the rest of the  
15 country with no permanent solution in sight.

16 Before I close, I just want to  
17 personally thank on behalf of the Commission  
18 and the Task Force, Pete Stroup who is the  
19 Director of Facilities at Harvard Medical  
20 School and was able to arrange for us to get  
21 this beautiful facility. And also thank the  
22 Commission and Cort Richardson for everything

1 they did to set this up.

2 So, I hope everyone has a good  
3 day, and thank you.

4 MODERATOR LEWIS: Thank you all.  
5 And, again, I'm Connie Lewis with Meridian  
6 Institute, and I'm just going to quickly walk  
7 through the agenda so that you know what  
8 you're getting yourselves into for the day.

9 Everybody should have picked up an  
10 agenda as you came in the door, hopefully.  
11 And you'll see that we've got a jam-packed  
12 day.

13 We are going to start with a walk-  
14 through of key recommendations from the report  
15 that John Kotek, who's the BRC staff director,  
16 will provide us with. And that will be  
17 followed by sequentially four panels that are  
18 going to take up some of the key issues that  
19 are dealt with in the report.

20 So, you'll see on the agenda that  
21 those panels deal with the stranded waste  
22 dilemma, consent-based siting process,

1 transportation policy and planning, and the  
2 West Valley example; mixed federal and  
3 commercial high-level waste.

4           Each of those panels is  
5 approximately an hour. And they're comprised  
6 of people who will be reacting and commenting  
7 on - reacting to the report, commenting on the  
8 recommendations that are relevant to their  
9 topics, and really seeding some ideas for you  
10 all to have in mind as you then later in the  
11 afternoon go into breakout sections to provide  
12 your own feedback and to build on the ideas  
13 that you hear in those morning panels.

14           The way the panels are structured,  
15 we've given people about seven minutes each to  
16 speak. We have a timing device that will help  
17 us to stay on track. And the purpose of doing  
18 that is to allow plenty of time for Q&A.

19           We want this to be an interactive  
20 day to get - this is a day for you all who  
21 have taken the time to come to - not only to  
22 listen to what others have to say, but also to

1 have plenty of time to ask questions and to  
2 offer your own reactions and feedback, and to  
3 explore with others your thoughts on the draft  
4 report.

5 We'll break for lunch at about  
6 12:00, come back for that final panel at one  
7 o'clock. And then starting at 1:45, we will  
8 have interactive breakout sections. And if  
9 you look on your name tags, you'll note that  
10 there are dots, colored dots on every name  
11 tag. And that is your assignment to a  
12 particular breakout group.

13 We've worked to establish  
14 breakouts that are diverse so that you'll be  
15 in a room with people that you might not  
16 normally interact with. And it's - the  
17 purpose of the breakouts is to give you a  
18 chance to provide your feedback on the draft  
19 report, but also to engage with people from  
20 other perspectives, explore what some of the  
21 implications might be for the recommendations  
22 around the room. And you'll find that the BRC



1 staff, Commissioner MacFarlane, will be in  
2 those rooms and part of the conversation with  
3 you.

4           Following the breakouts, we'll  
5 take a break. And then there will be an  
6 opportunity for comment in a traditional  
7 public comment period. If you want to  
8 present, if you want to deliver comments at  
9 that time, you need to sign up by one o'clock.  
10 So, by following the lunch period in that so  
11 that we can make an allocation of time.  
12 Depending on how many people sign up, we'll  
13 then know how much time each speaker would  
14 have.

15           And so it's important if you do  
16 want to participate in that, that you sign up  
17 by one o'clock. We'll close the meeting by  
18 5:00.

19           Any questions on the agenda?

20           (No response.)

21           MODERATOR LEWIS: Okay. Well,  
22 thank you very much, and let me turn it over

1 to John.

2 MR. KOTEK: Okay. Good morning,  
3 everyone. Thanks for being here. I'm John  
4 Kotek. I'm the Staff Director for the Blue  
5 Ribbon Commission on America's Nuclear Future.  
6 I'd also like to point out I'm a Wayland High  
7 School grad. So, it's great to be back in the  
8 area. I wanted to walk you all through an  
9 overview of the draft commission report to  
10 start the day so that everybody's got some  
11 context when we start hearing feedback from  
12 state and local and other officials and  
13 commenters later in the day.

14 As was mentioned earlier, of  
15 course the purpose of the Commission was to  
16 conduct a review of what we call the back-end  
17 of the nuclear fuel cycle, which I'll talk  
18 about a little bit more in a minute, and to  
19 recommend a new strategy for the United  
20 States.

21 The genesis of the review is  
22 direction from the President to the Secretary

1 of Energy back in January of 2010 to establish  
2 a commission. The Commission was required by  
3 its charter to prepare a draft report for  
4 public feedback, which of course was issued at  
5 the end of July, and then owes a final set of  
6 recommendations to the Secretary of Energy in  
7 January of 2012.

8 I won't go through all the members  
9 of the Commission. You've of course heard  
10 from Commissioner MacFarlane. We've got  
11 Commissioner Peterson on the phone. The co-  
12 chairs of the Commission are former  
13 Congressman Lee Hamilton who - I think he's a  
14 17-term congressman from Indiana. Many of you  
15 will know him as the vice-chair of the 9/11  
16 Commission. And then General Brent Scowcroft,  
17 who was National Security Advisor to  
18 Presidents Bush, Sr. and Ford.

19 I will point out we've got here on  
20 our second page, we've got a couple of folks  
21 actually from Massachusetts who are on the  
22 Commission; Dr. Ernie Moniz from MIT, and

1 Jonathan Lash who recently took over as  
2 President of Hampshire College out west of  
3 here. Unfortunately, both of them are out of  
4 the country right now and aren't able to be  
5 with us.

6 The other thing I wanted to point  
7 out about the commissioners, it's a volunteer  
8 commission. This isn't a paying gig for the  
9 commissioners. They're here doing this  
10 because they believe this is an important  
11 public policy issue that needs to be  
12 confronted. And we appreciate them doing  
13 that.

14 When I talk about the nuclear fuel  
15 cycle for those of you who might not be  
16 familiar with it, the engineers tend to refer  
17 to the front-end and the back-end of the  
18 cycle. The front-end is simply the steps  
19 involved in getting uranium out of the ground  
20 and into a nuclear fuel form to go into a  
21 reactor. When we talk about the back-end,  
22 what we're referring to is those steps that

1 occur after the fuel comes out of the reactor.

2 In all cases, the initial step is  
3 to put the fuel in the interim storage. When  
4 it comes out of a reactor, it's extremely  
5 radioactive and thermally hot and needs to be  
6 shielded and cooled. In some nations after  
7 the fuel has cooled for some period of time,  
8 the fuel is reprocessed to remove plutonium  
9 and uranium and potentially other elements  
10 that are reusable. But in any case, there  
11 ultimately needs to be a final disposition  
12 path for the wastes that are left over.

13 So, that's what the Commission has  
14 been asked to look at. What do we do about  
15 the back-end of the fuel cycle in the United  
16 States? Again, for those of you who might not  
17 be terribly familiar with it when we talk  
18 about nuclear fuel, what we're referring to is  
19 typically the fuel elements like this picture  
20 here on the left. For a commercial reactor,  
21 they're typically 12 to 14 feet long. The  
22 fuel is inside some metal tubes which are put

1       into an array typically eight to 12 inches on  
2       the side. Like I said, 12, 14 feet long.

3               This is fresh fuel, of course,  
4       before it goes into a reactor. It's mildly  
5       radioactive because natural uranium is  
6       radioactive, but natural uranium has a very  
7       long half-life, which means the intensity of  
8       the radioactive isn't very high. You can  
9       handle it without much in the way of personnel  
10      -- personal protection equipment.

11              Fuel will stay in a reactor about  
12      five years. When it comes out of the reactor,  
13      it's extraordinarily radioactive. Like I  
14      said, a high radiation field, very thermally  
15      hot, would give off a lethal dose of  
16      radiation. Somebody that close to a spent  
17      fuel assembly would be dead within minutes.  
18      And so, you have to protect it. All right,  
19      you have to isolate the radiation from people  
20      in the environment.

21              In the near term, what happens is  
22      the fuel goes into a pool like the one in the

1 picture at the top right. A water-filled pool  
2 40 feet deep or thereabouts. The water  
3 provides the cooling and the shielding so that  
4 people can work around the pool.

5 After some period of time at an  
6 increasing number of power plants here in the  
7 United States, fuel is being moved into dry  
8 storage. As the fuel pools fill up, they  
9 can't put any more fuel in the pool. They're  
10 starting to put it into dry storage.

11 Roughly speaking, about a quarter  
12 of the commercial spent fuel in the U.S. is in  
13 dry storage casks like the one you see in the  
14 lower right here. About three-quarters of it  
15 still sits in the pool. All told, there's  
16 about 65,000 metric tons of spent fuel in the  
17 commercial inventory in the United States.

18 People ask what, you know, give me  
19 a frame of reference, people will tell you  
20 that's a football field stacked 20 feet high  
21 with spent fuel. So, that's what we've got.  
22 That's the inventory of the material around

1 the country that needs to be disposed of from  
2 commercial operations.

3           Where is it? All right. This is  
4 a map of the 104 operating commercial nuclear  
5 power plants in the United States. We've also  
6 got ten shutdown commercial reactors at nine  
7 sites around the country that I'll talk about  
8 in a little bit. But as you can see,  
9 principally the reactors are located in the  
10 eastern part of the U.S., several here in New  
11 England.

12           There of course is another element  
13 of the problem, and that is government-owned  
14 wastes. So, we just talked about the  
15 commercial waste. The government's wastes  
16 take several forms. The Department of Energy  
17 is responsible for management of a diverse  
18 inventory of spent nuclear fuels. Most of  
19 which is still up at the Hanford site in  
20 Washington state, which is leftover production  
21 reactor fuel, fuel that was used in the  
22 production of plutonium for the nuclear



1 weapons program. You also had production  
2 reactors down at the Savannah River site in  
3 South Carolina.

4 While I'm a Massachusetts native,  
5 I actually live in the state of Idaho now,  
6 which is where the Idaho National Laboratory  
7 is located. There's been a number of  
8 experimental reactors operated on the site  
9 there that there's spent fuel from.

10 When our nuclear Navy is ready to  
11 de-fuel a vessel, the fuel from those reactors  
12 is taken out of the vessels here on the east  
13 coast, but it's shipped to Idaho. So, we  
14 receive the fuel out there, a few shipments  
15 each year. There's also DOE - fuel that the  
16 Department of Energy is responsible for at the  
17 Fort St. Vrain reactor in Colorado and at a  
18 few other sites around the country, but that  
19 gives you a sense of the scope of the spent  
20 fuel challenge with the Energy Department.

21 The Energy Department also is  
22 responsible for high-level wastes. Now, high-

1 level wastes are wastes left over from the  
2 reprocessing operation that I talked about  
3 earlier. There has been a small amount of  
4 commercial reprocessing in the United States,  
5 but the vast majority of the reprocessing that  
6 we've done has been for the weapons program.

7 All right, the wastes that come  
8 out of a reprocessing plant are a liquid.  
9 They need to be put into a solid form for  
10 disposal, for storage and disposal. The  
11 picture there on the top left shows a  
12 representative, what we call vitrified glass  
13 log, which is essentially taking the high-  
14 level waste and putting it into a glass form  
15 to stabilize the waste.

16 That material is then put into a  
17 canister and then stored in a facility like  
18 this one here on the right. These are  
19 actually pictures from facilities in the UK,  
20 but we've got facilities like that here in the  
21 United States.

22 Where is the high-level waste?

1 Again, the high-level waste is primarily at  
2 the Hanford site and at Savannah River left  
3 over from the nuclear weapons program. We've  
4 got some in Idaho. In Idaho, they actually  
5 reprocess fuel to recover highly enriched  
6 uranium that was left over and still valuable.

7 And then you've got some high-  
8 level waste up at the West Valley site in New  
9 York. That was a facility that was set up to  
10 do commercial reprocessing back in the 1960s  
11 and '70s. Actually reprocessed some  
12 commercial reactor fuel and some government  
13 reactor fuel as well, and that needs to be  
14 taken care of. So, that's the scope of, by  
15 and large the scope of the challenge.

16 What has the Commission done thus  
17 far? Well, it started last year digging into  
18 the problem and digging into different aspects  
19 of the problem. I won't go through all the  
20 meetings that the Commission has had last year  
21 and then on into 2011, but they've had between  
22 the Commission and subcommittees that the

1 Commission formed to investigate different  
2 aspects of the challenge here, I think they've  
3 held about two dozen public meetings.

4 Small groups of commissioners have  
5 also paid visits to facilities here in the  
6 U.S. and facilities abroad, because of course  
7 other nations are confronting the same  
8 challenge we are here in the United States.  
9 So, the commissioners went out and tried to  
10 learn from the experiences of communities and  
11 facilities here in the U.S., and around the  
12 world.

13 What that all led up to, of  
14 course, was the draft report that the  
15 Commission issued in July of this year. The  
16 report recommends a new strategy that's got  
17 seven key elements that I'll walk you through  
18 now.

19 The first element of that strategy  
20 is looking forward, the Commission believes we  
21 need a new approach to siting and development  
22 of future nuclear waste management facilities

1 in the United States. And with the experience  
2 not just with Yucca Mountain in the United  
3 States, but with other nations in their  
4 efforts to try and site nuclear waste storage  
5 and disposal facilities has told the  
6 Commission trying to impose a nuclear waste  
7 facility on an unwilling host state is not a  
8 recipe for success, all right.

9 And we've seen that the state of  
10 Nevada has fought against the Yucca Mountain  
11 project tooth and nail since Yucca Mountain  
12 was selected in the Nuclear Waste Policy Act  
13 of 1987 as the only site to be studied for  
14 hosting a nuclear waste repository.

15 Now, on the subject of Yucca  
16 Mountain, the Commission was not asked to take  
17 a position on the Administration's decision or  
18 request to withdraw the Yucca Mountain license  
19 application and to start over. That's not  
20 part of the Commission's review. What the  
21 Commission has been asked to do and has  
22 endeavored to do, is recommend a new strategy.

1 And the Commission has tried to recommend a  
2 strategy that will work regardless of what  
3 happens with Yucca Mountain.

4 What the Commission believes,  
5 again, based on successes that other nations  
6 have had with facility siting, is you need a  
7 process that's adaptive, staged, consent-  
8 based. I think the words we have in the  
9 report are you're trying to develop a willing  
10 and informed host community, okay. The  
11 process needs to be transparent and it needs  
12 to be based on good, solid technical standards  
13 and science.

14 I put this picture in here as just  
15 an example. This is actually a photograph we  
16 picked up on our visit to Sweden. The  
17 gentleman on the right is the manager of the  
18 Swedish Nuclear Waste Management Program. The  
19 folks on the left and center of the picture,  
20 they are - we'd consider them mayors. They're  
21 municipal officials that were both willing to  
22 host a nuclear waste repository in their areas

1 after a lot of twists and turns that I won't  
2 go into now, but they got to the point where  
3 they actually had a competition between two  
4 communities.

5 And the unhappy-looking gentleman  
6 there on the left just found out he's not  
7 getting the nuclear waste, okay. All right,  
8 the smiling gentleman in the center has just  
9 found out that they've been selected for the  
10 repository site. I should say that one of the  
11 distinguishing features of the communities  
12 that these gentlemen represent is they both  
13 host commercial nuclear power plants.

14 And when the commissioners went  
15 and paid a visit to these areas and heard - we  
16 heard from the gentleman in the center. We  
17 heard from the deputy of the gentleman on the  
18 left. They both had the same message which  
19 was their communities felt like they had  
20 benefitted from having a commercial nuclear  
21 power in their area, the jobs and tax base and  
22 what have you that went along with it.

1                   They were responsible for helping  
2                   to create this problem. And, therefore, they  
3                   had a responsibility to help solve it, all  
4                   right. Now, I think that was a -- that was a  
5                   particularly, I think, impactful statement  
6                   that we heard from those folks. There was a  
7                   great deal of, I think, responsibility that  
8                   the communities felt like they had to be part  
9                   of the solution.

10                   The second key element of the  
11                   Commission's recommendations is we need a new  
12                   single-purpose organization focused on nuclear  
13                   waste in the U.S. This recommendation  
14                   basically says get the program out of the  
15                   Energy Department where it is now. Not that  
16                   the Department of Energy can't achieve some  
17                   successes, and we've seen - I worked at a  
18                   Department of Energy facility out there in  
19                   Idaho where the cleanup has been accelerated  
20                   and pretty successful over the last 15 years.  
21                   The Department of Energy got the Waste  
22                   Isolation Pilot Plant open, which is a



1 facility for disposing defense - certain  
2 defense wastes left over from the weapons  
3 program.

4 DOE has been able to get some good  
5 things done. But when you get right down to  
6 it, the waste program was something like a 250  
7 to \$500 million a year program inside of a \$25  
8 billion a year agency. And so, you just  
9 didn't have the senior management attention  
10 day in and day out that really successfully  
11 executing a program like this requires.

12 So, what the commissioners have  
13 included in their draft recommendations is a  
14 recommendation that an independent federally-  
15 chartered corporation be set up. Something  
16 along the lines of the Tennessee Valley  
17 Authority. That the scope of that  
18 organization be transportation, storage and  
19 disposal of spent fuel. That the organization  
20 not get into things like spent fuel  
21 reprocessing that may at some time be  
22 desirable.

1           That the organization still needs  
2 congressional oversight that would be carried  
3 out in several ways. One of which, for  
4 example, the Commission recommends that the  
5 Board of Directors be nominated by the  
6 President and confirmed by the Senate. That  
7 there be a regular -- a routine submittal of  
8 a program plan to Congress for review and  
9 approval.

10           And that there be - of course  
11 there's money required to be paid in to  
12 dispose of - I call them defense wastes here,  
13 but the government wastes that I talked about  
14 earlier. That money will still need to come  
15 from the taxpayer. I'll talk about the money  
16 situation here in just a minute.

17           So, there's still - the Commission  
18 is recommending several ways for Congress to  
19 still maintain some oversight of the program.  
20 On this question of funding, one of the  
21 challenges that the program has had over the  
22 years is they haven't had access to the

1 funding that we all as ratepayers have been  
2 paying for nuclear waste disposal. So,  
3 chances are if you live in New England,  
4 there's a decent chance you're paying part of  
5 this, the Nuclear Waste Fee. The Nuclear  
6 Waste Fees established under the Nuclear Waste  
7 Policy Act of 1982, right now it's set at one-  
8 tenth of a cent per kilowatt hour and it's a  
9 charge placed on nuclear-generated  
10 electricity.

11 The money collected each year from  
12 that fee totals about \$750 million, all right,  
13 which today is just paid into the Treasury.  
14 Funds that aren't used in a given year to pay  
15 for program costs, go into the Nuclear Waste  
16 Fund. The Fund now has a balance of about \$25  
17 billion in it with excess collections in  
18 interest that have accrued over the years.

19 The Nuclear Waste Program does not  
20 have assured access to that money. Right now  
21 the way - it's sort of arcane budget-speak,  
22 but the collection of the fee is on what they

1 call the mandatory side of the budget, which  
2 means the money has to be paid in each year.  
3 The program costs are on what they call the  
4 discretionary side of the budget, which means  
5 the waste program has to compete with every  
6 other federal program for money even though  
7 there's funds that were theoretically set  
8 aside just for that program.

9 So, getting access in the short  
10 term, assured access to the Nuclear Waste Fee,  
11 and over the longer term, access to the  
12 Nuclear Waste Fund, is going to be very  
13 important for the nuclear waste program to  
14 actually be able to do its job. And so, the  
15 Commission makes some recommendations as to  
16 near-term steps that could be taken to provide  
17 that assured access to the fee and make it  
18 easier to get to the fund over the longer  
19 term.

20 Recommendation Number 4 comes out  
21 of questions that the Commission was being  
22 asked very early on in its review. In fact,

1 the Secretary of Energy came to a commission  
2 meeting and said one of the things he'd like  
3 for the commissioners to look at is have there  
4 been technology developments over the last 25  
5 or 30 years that would fundamentally change  
6 the nature of the nuclear waste challenge  
7 maybe even to the point of not requiring a  
8 long-term disposal facility, because you can  
9 somehow turn this into a - use technology to  
10 turn it from a long-term to a short-term  
11 problem.

12 What the Commission has concluded  
13 is, no, there are no sort of technological  
14 silver bullets out there either available  
15 today or on the horizon that would eliminate  
16 the need for at least one and possibly more,  
17 geologic disposal facilities for spent fuel.  
18 So, the Commission is recommending that the  
19 U.S. get started promptly with a nuclear waste  
20 repository development program.

21 Sort of going along with that,  
22 while it's working on a repository program,

1 the Commission also recommends that  
2 consolidated interim storage be established as  
3 a way to provide options for spent fuel  
4 management and to start dealing with fuel from  
5 what we call stranded fuel, all right, from  
6 shutdown plants.

7 Remember I mentioned earlier there  
8 are ten reactors at nine commercial reactor  
9 sites that have been shut down? In most  
10 cases, the plant's been green-fielded, all  
11 right. The reactor is gone. The turbine hall  
12 is gone. All the structures are gone.  
13 You've got a concrete pad with spent fuel  
14 storage casks on it. You've got a guard shack  
15 and security building. And you've got guns,  
16 guards and gates. That's it, all right.

17 The arguments for establishing  
18 consolidated interim storage and moving fuel,  
19 the Commission felt, were strongest for the  
20 fuel at shutdown plants for a lot of reasons,  
21 and that that fuel should be first in line and  
22 moved off the shutdown plant sites.

1 All right. Recommendation Number  
2 6 has to do with R&D. While the Commission  
3 didn't see any technological silver bullets  
4 that make the problem go away, they did think  
5 that there is merit in continuing an R&D  
6 program focused on both advanced reactor  
7 fuel-cycle technologies, and on developing the  
8 workforce that's going to be needed to operate  
9 nuclear systems and run the nuclear waste  
10 program, what have you, over the long term.

11 In part, this recommendation again  
12 goes back to this question of options.  
13 Provide options for future generations to deal  
14 with, you know, to deal with nuclear energy  
15 and the waste that arises from it. And then  
16 Recommendation Number 7 has to do with  
17 international leadership. And there of course  
18 are significant concerns in the U.S. about the  
19 threat of global nuclear weapons proliferation  
20 and about nuclear safety worldwide. And the  
21 Commission makes some recommendations that  
22 sort of urge the U.S. to remain engaged in

1 those areas.

2           So, those were the seven key  
3 recommendations. There are a few other kind  
4 of lower-level ones that I'll walk through  
5 here a little more quickly. One has to do  
6 with the division of regulatory  
7 responsibility. The Commission heard a lot of  
8 feedback early on about the performance of the  
9 Nuclear Regulatory Commission and of the  
10 Environmental Protection Agency as it pertains  
11 to repository standard setting and licensing.

12           The Commission looked at that and  
13 decided that the current division of  
14 responsibilities is appropriate, and that the  
15 agencies should work together as new site-  
16 independent safety standards are developed.  
17 But that the agencies really need to work  
18 better together, and they need to do a better  
19 job, I think, of soliciting input from all  
20 relevant constituencies as they go through  
21 that process.

22           We talked a little bit about -



1 little bit more about the roles,  
2 responsibilities and authorities of local,  
3 state and tribal governments. This has been  
4 another big issue. And of course when you get  
5 right down to it, maybe the biggest part of  
6 the problem is a federal-state relations  
7 problem in trying to get nuclear waste  
8 repositories sited.

9 Those of you who have been with  
10 this program for a while may recall that Yucca  
11 Mountain wasn't even the first effort, the  
12 first trip down this path. There was an  
13 effort back in the late '60s/early '70s to  
14 site a high-level waste repository in Lyons,  
15 Kansas.

16 Who remembers that? Okay. I see  
17 a few hands going up, right? And that that  
18 program really died because the state got more  
19 and more concerned about the geologic  
20 integrity of the site and some other issues.  
21 And, ultimately, pressure from the state  
22 caused the government to back away from the

1 Lyons, Kansas site. And that sort of set the  
2 wheels in motion that led us to the Yucca  
3 Mountain - the Nuclear Waste Policy Act and  
4 Yucca Mountain.

5 What the Commission is calling for  
6 is a stronger role for state, local and tribal  
7 governments, and that role ought to be  
8 negotiated. In the draft report, the draft  
9 talks a lot about leaving a lot of these  
10 issues open for negotiation between the  
11 federal entity and the state and other units  
12 of government.

13 One of the things that the  
14 commissioners were interested in hearing more  
15 was feedback from state and local and tribal  
16 government officials as to should the  
17 Commission say more and be more specific in  
18 that area? I think at the Denver meeting, I  
19 think the Commission heard a lot of  
20 suggestions. Lot of folks felt like, yeah,  
21 the Commission's final report ought to be more  
22 specific in this area.

1 I know what - I didn't hear a  
2 whole lot of agreement as to what that  
3 additional specificity ought to be. There are  
4 a lot of different ideas out there as to how  
5 the federal entity ought to work with a state  
6 in particular on how to make this program  
7 successful, but I didn't hear folks coalescing  
8 around one particular idea. I'll be very  
9 interested to hear what sort of feedback folks  
10 have to offer today.

11 Another thing on - a couple other  
12 things on the siting process and working  
13 effectively with state and local units of  
14 government. The Commission felt like the same  
15 process that's used for siting repositories  
16 should be sited for - or should be used for  
17 establishing consolidated storage facilities.  
18 Again, we ought to develop a willing and  
19 informed host, it ought to be an open process,  
20 and that the siting process needs to include  
21 flexible and substantial incentives going  
22 forward.

1           I mean, this is communities and  
2 states that are willing to step up and at  
3 least have the conversation about being part  
4 of the solution at the back-end of the fuel  
5 cycle, should receive benefit from that and  
6 that flexibility is key.

7           That's one of the things that the  
8 commissioners, I think, picked up on some of  
9 their trips to other nations is you can't  
10 predict in advance what a community is going  
11 to think is going to make participating in a  
12 program like this worthwhile. And so, you  
13 just need to be open. So, the Commission has  
14 recommended maintaining that sort of  
15 flexibility.

16           On the question of interim storage  
17 even if a repository were open tomorrow,  
18 interim storage at reactor sites is going to  
19 continue for many years. The Commission  
20 looked at the current methods of storage, pool  
21 storage and dry storage, and felt that there  
22 weren't unmanageable safety or security risks,

1 but that active research is going to be needed  
2 over the long term because, let's face it,  
3 fuel is being stored at reactor sites and  
4 other sites much longer than was originally  
5 envisioned. We need to make sure we keep a  
6 research agenda program going so that we can  
7 ensure the safety of spent fuel storage over  
8 the long term.

9           Particularly on the accident at  
10 Fukushima, which of course happened during the  
11 Commission's review, what the Commission has  
12 included in its draft report is a  
13 recommendation that the National Academy of  
14 Sciences be charged with going off and looking  
15 at the accident, the lessons learned from  
16 that, and to go back and revisit, in  
17 particular, a report the Academy issued back  
18 in 2006 that looked at the safety of spent  
19 fuel storage, and to pass judgment on whether  
20 they would change any of their recommendations  
21 or add new recommendations in light of what's  
22 happened in Japan.

1                   On the issue of transportation, I  
2 talked a little bit about that earlier. The  
3 Commission felt like the current system of  
4 standards and regulations governing transport  
5 actually functions pretty well, but of course  
6 we're not moving a lot of spent fuel around  
7 the country right now.

8                   There's a fairly large  
9 transportation campaign going on in the  
10 western part of the United States shipping  
11 transuranic waste from my home state of Idaho  
12 and other states that host DOE facilities in  
13 the west, down to this waste isolation pilot  
14 plant in southeastern New Mexico. I think  
15 they received their 10,000th shipment earlier  
16 this year of waste.

17                   So, there's been a high degree of  
18 coordination and cooperation and, I think,  
19 success in the transportation there. But when  
20 it comes to moving spent fuel and high-level  
21 wastes, we don't have a big experience base  
22 with the volumes of shipments that would be

1 required, so that what the Commission really  
2 feels is that the planning for the  
3 transportation really needs to begin at the  
4 start of the project.

5           Even if you don't know where your  
6 final site is, for example, you know the  
7 states the waste is going to be coming from.  
8 You can get out and you can start working with  
9 those states now and get your transportation  
10 protocols and plans in place.

11           On R&D, the Commission really felt  
12 like the U.S. needs to maintain a position as  
13 a leader and a big player in innovation with  
14 nuclear energy. The particular areas of focus  
15 that were deserving of attention in the R&D  
16 portfolio were the safety and performance of  
17 today's reactors. Because as we've seen,  
18 there's certainly opportunities for  
19 improvement there, and with storing and  
20 disposing of spent fuel and high-level waste  
21 along with what they call game-changers,  
22 things that could fundamentally advance the

1 state of the technology, and that a portion of  
2 the R&D resources really need to be set aside  
3 for the regulator.

4 Those of you who are familiar with  
5 the Nuclear Regulatory Commission know of  
6 course they play a key role in the  
7 commercialization of any new technology that  
8 some funds need to be set aside so that they  
9 can accelerate the development of regulatory  
10 frameworks and anticipatory research that may  
11 be needed to increase confidence in new  
12 systems for commercial investment either,  
13 again, for today's plants, or things in the  
14 future.

15 Where do we go from here? Again,  
16 we're in the midst of an outreach effort at  
17 the direction of the Commission co-chairman to  
18 host meetings -- co-host meetings with  
19 regional/state government groups. We're also  
20 doing a lot of invited talks to get the word  
21 out to folks who are interested in the issue.

22 The comment period ends the end of



1       October.  So, if you have comments you want to  
2       share with the Commission, please try and get  
3       them in by then.  The Commission will conduct  
4       other visits or meetings as necessary to get  
5       its final report ready to go to the Secretary  
6       of Energy at the end of January of next year.

7                 If you've got feedback that you  
8       want to provide to the Commission on the draft  
9       report on this meeting or what have you,  
10       brc@nuclear.energy.gov will get the  
11       information to us.  You can also see what's  
12       been provided to the Commission, all of the  
13       comments that the Commission has received, the  
14       presentations we've received, the papers that  
15       the Commission commissioned to help  
16       investigate different issues, video archive,  
17       you name it.  All this stuff is available on  
18       the BRC webpage.  So, if you're interested in  
19       learning more about a particular issue, check  
20       that out.

21                 So, that's where the Commission  
22       stands right now.  Appreciate everybody being

1 here. Look forward to hearing the feedback  
2 that folks have to offer on what the  
3 Commission has had to recommend thus far and  
4 hear your thoughts on how that ought to be  
5 improved in the final report.

6 So, thanks for your time.

7 MODERATOR LEWIS: Thanks, John.

8 Can we get the people who will be  
9 on the first panel to come forward? And please  
10 bring your name placards with you so we can  
11 put those on the table.

12 We've got Sarah Hofmann, James  
13 Connell, Dr. Gronlund, Mary Lampert, and go  
14 ahead and just if you can take your places?

15 (Pause.)

16 (Off-record comments.)

17 MODERATOR LEWIS: So, we're giving  
18 the panelists an option of either just staying  
19 at the table and using the microphone at the  
20 table, or coming to the podium. So, either  
21 way, and we will start with Sarah.

22 We're going to go through all five

1 panelists, and please hold your questions.  
2 We're anticipating getting through with the  
3 panelists with plenty of time for Q&A. So, jot  
4 down questions as they're speaking.

5           And just a reminder, we've  
6 allocated approximately seven minutes each for  
7 the panelists to speak. And we do have  
8 somebody who's going to be monitoring the  
9 time.

10           And if you want to refer to this  
11 little suite of lights up here, it will be  
12 green - and, Kevin, help me out here. It will  
13 be green for the first five minutes of your  
14 time. And then it will turn to flashing - or  
15 to yellow for the two-minute mark. And then it  
16 will turn to - at the one-minute mark, it will  
17 start blinking. And then it makes a really  
18 obnoxious noise when it hits the seven-minute  
19 mark.

20           And, again, we're not trying to be  
21 rude. We just want to make sure that we have  
22 lots of time for audience Q&A. So, if you want

1 to avoid the obnoxious noise, pay attention to  
2 the light and be ready to conclude your  
3 remarks shortly after it starts blinking.

4 So, we'll start, please, with  
5 Sarah Hofmann. We're going to let the  
6 panelists introduce themselves as they go  
7 through their sequence.

8 MS. HOFMANN: Okay. Thank you very  
9 much. When the yellow light starts blinking,  
10 I'll start talking really, really fast.

11 I assume somebody down there is  
12 changing the slides. And I do have a  
13 PowerPoint. And do you know - there we go.  
14 Thank you very much.

15 I'm Sarah Hofmann. I'm here on  
16 behalf of the Vermont Department of Public  
17 Service. I'm actually the Deputy Commissioner  
18 there, and we regulate public utilities.

19 I'm also here as a - representing  
20 the National Association of Regulated Utility  
21 Commissioners, NARUC, of which all public  
22 utility regulators are members.

1                   If you could go to Slide 1,  
2                   please? First, we wanted to make sure and say  
3                   "thank you" to the Commission for its service  
4                   in evaluating ways to get the nuclear waste  
5                   program back on track and for holding these  
6                   meetings to elicit reactions to your draft  
7                   report.

8                   NARUC did provide comments on the  
9                   subcommittee reports in June, and is preparing  
10                  comments on the draft commission report. The  
11                  Blue Ribbon Commission will also hear from  
12                  various NARUC commissioners at the different  
13                  sites throughout the country as you go from  
14                  place to place. So, we appreciate having the  
15                  chance to actually address the Commission.

16                  While we understand the  
17                  Commission's adherence to the guidance given  
18                  to you by the Secretary and the statement in  
19                  the report that all your recommendations can  
20                  and should be implemented regardless of what  
21                  happens with Yucca Mountain, we believe the  
22                  Commission should have recommended that the

1 NRC be required to fulfill its obligations to  
2 complete the Yucca Mountain license review in  
3 the interest of science, to inform public  
4 policy, and also to comply with the law.

5 We agree that the nuclear waste  
6 program has come to an impasse and needs  
7 forward momentum. I know the draft report  
8 addresses that.

9 I won't say anything further, but  
10 I think everybody in the room probably agrees  
11 that we really haven't done very well in this  
12 area and we need to do something to move it  
13 forward. And I think the Blue Ribbon  
14 Commission report does that by talking about  
15 consolidated storage.

16 Next slide, please. So, I tried to  
17 go through and talk about the consolidated  
18 storage pluses that we agree with in the  
19 report, and also things that we have concerns  
20 about.

21 If you have any - I'm not sure  
22 "pluses" is actually a word. I had a real

1 problem, and Cort helped me get the correct  
2 spelling.

3 The idea of centralized interim  
4 storage isn't new. It's kind of talked about  
5 as though it's new in the report, but it's  
6 really - the advantage of the Blue Ribbon  
7 Commission is it's the first time it's being  
8 proposed at this level, and we really  
9 appreciate this idea of at least something to  
10 go away from the long-term interim storage  
11 that really is the default position right now.

12 Right now we actually see the only  
13 option is that it's going to be sitting at  
14 sites throughout this country at 60 plus  
15 sites, and that is not a good way to proceed.

16 And so, NARUC and Vermont both  
17 agree that the idea of not having long-term  
18 interim storage on site is the way to go, and  
19 that we need to move to some sort of  
20 consolidated storage as a way to - as the  
21 interim to geological repository.

22 NARUC supports the need to

1 relocate the stranded spent fuel from the nine  
2 decommissioned sites in centralized - into a  
3 centralized location. Obviously, that's been  
4 something where you have all these small sites  
5 sitting out there and we need to at least give  
6 them priority for consolidated storage.

7 We also believe the Blue Ribbon  
8 Commission should review the inventory that's  
9 out there and identify other priority  
10 categories for prompt movement to centralized  
11 storage.

12 We will have other plants  
13 decommissioning, and there will be other  
14 stranded ISFSIs out there with fuel on it.  
15 Obviously as Vermont when we're talking about  
16 decommissioning Vermont Yankee, we would like  
17 to see that fuel be next in line.

18 The report, the Blue Ribbon  
19 Commission report, really doesn't talk about  
20 that scope and what the priorities are going  
21 to be after the first nine decommissioned  
22 sites.



1                   It is clear that centralized  
2 interim storage will provide economies of  
3 scale, benefits and security enhancements. We  
4 totally agree with that and support the idea  
5 of the consolidated storage, and agree with  
6 the consent-based approach to siting.

7                   And from NARUC's perspective, that  
8 actually also includes using some of the  
9 Nuclear Waste Fund to help with those  
10 incentives to get communities to want to be  
11 the site for this kind of storage. So, that is  
12 one place where we agree that the Nuclear  
13 Waste Fund should be used.

14                  In terms of this consent-based  
15 approach, right now there is this ballpark not  
16 far from here, Fenway Park. It doesn't seem to  
17 be being used for anything. And after the  
18 terrible end to the season, perhaps Boston  
19 would consent to having it used for storage.

20                  Next slide, please. So, here are  
21 some of the concerns we have about the  
22 consolidated storage. First of all, we want to

1 make clear that we agree with the report that  
2 a deep geological repository is needed.

3 The concern is that once you have  
4 consolidated storage, that it's going to be  
5 kind of the de facto - oh, I better start  
6 talking faster. It will become the de facto  
7 problem solved, and we want to make sure that  
8 doesn't happen. Consolidated storage is just  
9 a step on the way to a geological repository.

10 Next slide. And our other concern  
11 is about the financing of consolidated  
12 storage. I think there needs to be more in the  
13 Blue Ribbon Commission report. The report  
14 talks about the purposes of consolidation as  
15 preserving options, which we totally agree  
16 with.

17 It also has this language in it  
18 about reducing government liabilities. We're  
19 not sure that that's where the Nuclear Fund  
20 should be used, and actually want to make sure  
21 that is teased out so ratepayers don't end up  
22 paying for DOE's liability or the government's

1 liability. So, the idea is protect the Nuclear  
2 Waste Fund and ratepayers.

3 Final slide. Just to summarize,  
4 consolidated storage will be an improvement  
5 from the ad hoc dry cask storage that we have  
6 in place. Standalone decommissioned sites  
7 should be first in line.

8 There does need to be more  
9 definition from the Blue Ribbon Commission on  
10 what's next, what's the scope, and also cost  
11 estimates. There's not a lot of cost  
12 estimates.

13 There are some reports cited about  
14 how it will pay for itself. We do need to see  
15 more detail on that in order to provide  
16 accountability for moving forward and  
17 protecting the Nuclear Waste Fund at the same  
18 time.

19 And we need, finally, the clear  
20 direction that consolidated storage is not  
21 going to be problem solved. So, thank you very  
22 much for allowing me to speak, and I will turn

1 to our next panelist.

2 (Off-record comments.)

3 MR. CONNELL: Thank you.

4 Distinguished commissioners, ladies and  
5 gentlemen, my name is Jim Connell. I'm the  
6 Vice-President and Independent Spent Fuel  
7 Storage Installation Manager for Maine Yankee  
8 Atomic Power Company in Wiscasset, Maine.  
9 I've served as an engineer there in a variety  
10 of capacities for over 30 years.

11 Additionally, I have professional  
12 responsibilities at Connecticut Yankee Atomic  
13 Power Company in Haddam, Connecticut, and  
14 Yankee Atomic Electric Company in Rowe,  
15 Massachusetts.

16 Those three separate entities are  
17 known informally as the Yankee Companies, but  
18 are linked through their oversight and shared  
19 management services.

20 We commend the Commission for its  
21 draft recommendation that spent nuclear fuel  
22 at decommissioned reactor sites should be

1 first in line for transfer to a consolidated  
2 interim storage facility.

3 We agree this finding makes good  
4 policy sense from an economic and equity  
5 perspective.

6 Further, we strongly support the  
7 Commission's draft near-term action  
8 recommendation for the U.S. Department of  
9 Energy to use existing authority to begin  
10 implementing consolidated interim storage and  
11 the transportation planning necessary to  
12 accomplish that.

13 I'm grateful for the opportunity  
14 to participate in this discussion on the  
15 issues of stranded spent nuclear fuel and  
16 greater-than-Class-C wastes stored at our  
17 independent spent fuel storage installations.

18 The continued burden on the  
19 ratepayers of New England and our local host  
20 communities is substantial.

21 All that remains at each of these  
22 former nuclear power plant sites is an ISFSI

1 storing spent nuclear fuel and greater-than-  
2 Class-C wastes which was generated during the  
3 years of operation.

4 As U.S. Nuclear Regulatory  
5 Commission licensees, it's our responsibility  
6 to store the waste safely, securely, and in  
7 accordance with all applicable regulations  
8 until the federal government fulfills its  
9 obligation to remove the material from our  
10 sites as required by contract and the Nuclear  
11 Waste Policy Act.

12 The federal government was  
13 obligated to begin removing material from our  
14 sites in January of 1998, and we are now  
15 nearly a decade into dry cask storage of this  
16 material at the three Yankee sites.

17 At Maine Yankee, there are 60  
18 canisters loaded with spent nuclear fuel, and  
19 four with GTCC waste.

20 At Connecticut Yankee, there are  
21 40 canisters loaded with fuel, and three with  
22 GTCC waste.

1                   And at Yankee Atomic, there are 15  
2                   canisters loaded with fuel, and one with GTCC  
3                   waste.

4                   I would suggest that Table 1 on  
5                   Page 40 of the Blue Ribbon Commission's July  
6                   29th, 2011 draft report be revised to more  
7                   accurately state the total number of canisters  
8                   at each of our sites, as well as the total  
9                   number of canisters loaded with GTCC waste.

10                  We encourage you to make this  
11                  factual adjustment to the chart in the final  
12                  report.

13                  The current annual cost to operate  
14                  our three ISFSIs is approximately \$24 million.  
15                  We're concerned the annual cost to our  
16                  ratepayers will only increase the longer the  
17                  spent fuel and GTCC remain stranded at our  
18                  sites.

19                  In addition to the future costs  
20                  associated with the inevitable changes and  
21                  additions to existing ISFSI regulatory  
22                  requirements, we are concerned about the

1 increased cost to New England ratepayers from  
2 extended storage issues involving canister re-  
3 licensing and ultimate transportation of spent  
4 nuclear fuel and GTCC waste that is the  
5 responsibility of the federal government to  
6 remove.

7 In December 2010, the NRC  
8 finalized changes to its Waste Confidence Rule  
9 finding that spent nuclear fuel can be safely  
10 stored for at least 60 years beyond the  
11 licensed life of a reactor.

12 NRC staff is now engaged in a  
13 process at the direction of the Commission, to  
14 analyze the safety of spent nuclear fuel  
15 storage at plant sites or interim storage  
16 facilities for up to 300 years.

17 The longer the spent fuel and GTCC  
18 waste remains at the three Yankee sites, the  
19 more costly it will become for the region's  
20 ratepayers. Indefinitely stranding the  
21 material at the Yankee sites makes little  
22 sense.



1 Centralized interim storage, as  
2 your draft report suggests, addresses this  
3 issue with our full support.

4 In closing, I want to thank  
5 members of our Community Advisory Panel, local  
6 communities and state and federal-elected  
7 officials for remaining engaged over many  
8 years in the effort to have spent nuclear fuel  
9 and GTCC waste removed from our sites so that  
10 the property can be returned to beneficial use  
11 and the burden on ratepayers lifted.

12 I also want to thank again the  
13 Commission's Transportation and Storage  
14 Subcommittee for meeting in Wiscasset in  
15 August 2010, to learn firsthand about the  
16 issues of stranded spent nuclear fuel.

17 You listened to us then, and we  
18 appreciate the opportunity to continue that  
19 conversation today. Thank you.

20 MODERATOR LEWIS: Who's next?

21 Next up we have Dr. Lisbeth  
22 Gronlund.

1 (Off-record comments.)

2 MS. GRONLUND: Oh, I see. Okay.

3 Technical difficulties.

4 So, I'm a senior staff scientist  
5 and the co-director of the Global Security  
6 Program at the Union of Concerned Scientists.  
7 And I will be talking on behalf of the Union  
8 of Concerned Scientists today.

9 So, the first principle finding of  
10 the Subcommittee on Transportation and  
11 Storage, is that the storage of nuclear  
12 materials at sites where these materials have  
13 been generated, including at commercial power  
14 plants and federal defense production sites,  
15 will continue for many years.

16 So, regardless of whether we have  
17 consolidated spent fuel storage or not, it is  
18 key that the safety and security of onsite  
19 spent fuel storage be dealt with. So, that  
20 will be the focus of my remarks today.

21 So, there are two options for  
22 spent fuel storage currently in use in this

1 country. One, is we saw a photo earlier of a  
2 spent fuel pool where the fuel is removed from  
3 the reactor, put in a pool of water to keep it  
4 cool. The other is after a certain period of  
5 time it's cool enough that you could put it  
6 into dry casks, and these are sitting on a  
7 concrete pad.

8 Now, in Fukushima there was a lot  
9 of concern about the spent fuel pools there.  
10 It's a little unclear what ultimately  
11 happened, but there was a concern that due to  
12 a loss of active cooling in those pools, that  
13 the spent fuel would be damaged and could  
14 release radioactivity.

15 There were also at Fukushima dry  
16 casks which we didn't hear a lot about,  
17 because there were no concerns about the  
18 safety of the fuel in the dry casks.

19 Now, in the United States we also  
20 have spent fuel pools, but they tend to be  
21 overcrowded because they weren't designed to  
22 hold as much spent fuel as now has been placed

1 there. And as a consequence, there is an  
2 increased heat load.

3 In other words, the more spent  
4 fuel you have in there, the warmer it is. It  
5 increases the chance that a loss of active  
6 cooling will result in damage to the fuel and  
7 the release of radiation.

8 A second problem with overcrowded  
9 spent fuel pools is that you have more  
10 radiation to be released if there is a problem  
11 and the spent fuel is damaged.

12 So, what does the BRC subcommittee  
13 say about this problem? It says that it  
14 believes the issue of pool storage, and the  
15 potential for fires in pools that lose water  
16 through natural or manmade events, must be  
17 carefully reexamined in light of the Fukushima  
18 disaster. That sounds reasonable.

19 And then it goes on to say that  
20 the NRC and industry are working appropriately  
21 to identify the solutions to this problem.

22 So, what is the NRC doing? Is

1 this actually - should the BRC - is the BRC  
2 justified in assuming that the NRC is doing  
3 its job?

4 Well, in July the NRC released a  
5 90-day task force, and there is no mention of  
6 spent fuel pools versus dry casks and the  
7 advantages of one over the other.

8 On October 5th, they released a  
9 second staff report that prioritized the  
10 recommendations in the first report. In that,  
11 they said the transfer of spent fuel to dry  
12 cask storage warrants further consideration  
13 and potential prioritization. In other words,  
14 we're going to study it some more.

15 What else does the BRC  
16 subcommittee say about spent fuel? It notes  
17 that in 2006, the National Academy of Sciences  
18 did a study in which they recommended, or in  
19 which they stated, that dry cask storage has  
20 inherent security advantages over pool  
21 storage.

22 And then the subcommittee goes on

1 and recommends, as we heard earlier, that the  
2 National Academy redo that study and reassess  
3 the - its recommendations in light of  
4 Fukushima.

5 So in other words, the Blue Ribbon  
6 Commission urges that there be prompt efforts  
7 to develop a new permanent geologic disposal  
8 facility, that there be prompt efforts to  
9 develop one or more consolidated interim  
10 storage facilities, but the problem, as they  
11 identified themselves, that there will be  
12 onsite storage for many years, they punt.

13 They punt to the Nuclear  
14 Regulatory Commission and the National Academy  
15 of Sciences. And where are we? This is very  
16 disappointing, to say the least.

17 So, what I would like to see in  
18 the final report, is that there be a  
19 recommendation about transferring spent fuel  
20 from spent fuel pools after a period of five  
21 years when it's cool enough to move it to dry  
22 casks.

1                   We'd also like to see a  
2                   recommendation that those dry casks, which are  
3                   far better than storage in spent fuel pools,  
4                   but, nonetheless, in the configuration they're  
5                   in, they're vulnerable to potential attacks by  
6                   terrorists using, for example, rocket-  
7                   propelled grenades, that they be surrounded by  
8                   earthen berms. This is something called  
9                   hardened onsite storage.

10                   We would like to see both of those  
11                   in the final BRC report, and what else did I  
12                   want to say?

13                   And I think that's where I will  
14                   end. That's what we hope to see in the revised  
15                   version of the report. Thank you very much.

16                   (Applause.)

17                   MS. LAMPERT: All right, good  
18                   morning. I'm Mary Lampert from Pilgrim Watch,  
19                   and Lisbeth and I are singing the same song.  
20                   I will focus on the prioritization.

21                   We're against the interim idea.  
22                   It's kicking the can down the road. A waste of

1 time and money. It saves money for the  
2 companies that have it on site, I appreciate  
3 that, but you're going to have the  
4 transportation hassles, et cetera.

5 So, there are two options. One,  
6 the geologic repository, which we're in favor  
7 of. The second is safer onsite storage.

8 That is the issue of the day,  
9 particularly with the GE Mark 1 Boiling Water  
10 Reactors that are storing the fuel outside  
11 primary containment, in the attic of the  
12 reactor, with a thin roof overhead. These  
13 pools are overcrowded.

14 My focus has been on Pilgrim.  
15 Same thing could be said about Vermont, Oyster  
16 Creek down the road. The point being that it  
17 was designed for 880 assemblies, they approved  
18 3,857 or nine, whatever it was, all jam-packed  
19 together.

20 What's their plan for the next 20  
21 years? Pull out only the amount that is  
22 required to squeeze in the next load. In other



1 words, keep it densely packed.

2 We know it is vulnerable. None of  
3 these reactors are designed, the pool, to  
4 protect against an air attack. You cannot have  
5 air security, or you'd shut down the east  
6 coast.

7 A small airplane loaded with  
8 explosives can do the job. I know that,  
9 because I see these yo-yos, well, I live right  
10 near it, flying over it- okay?

11 I know also having a few boats,  
12 that they have a few markers in the water that  
13 are No Trespassing signs. I don't think a  
14 terrorist is going to say, whoops, we aren't  
15 supposed to be here. It is vulnerable, period.

16 And the consequences were analyzed  
17 for the Mass Attorney General for both Pilgrim  
18 and Vermont, of a spent fuel fire which were  
19 at risk from either an act of malice, or human  
20 error, or equipment malfunction as lessons  
21 learned in our sister reactors at Fukushima.

22 What would be the consequences?

1 Release of cesium-137 was analyzed, up to \$488  
2 billion of damages, 24,000 latent cancers.  
3 The National Academy's study that you referred  
4 to, hundred miles downwind contaminated.

5 In my books, that's serious. That  
6 says prioritize safer spent fuel storage  
7 onsite demanding to go to open-frame, low-  
8 density storage. And dry cask as we saw as she  
9 mentioned, the previous speaker, in Fukushima,  
10 the earthquake of human history, tsunami, they  
11 were fine.

12 And we know with climate change  
13 coming up and these reactors on the water,  
14 that they are subject and we are all subject  
15 to increasingly larger storms, et cetera, that  
16 place us at risk.

17 It makes no sense to not  
18 prioritize safety first. And, frankly, I don't  
19 give a damn how it's paid for.

20 I would think the Nuclear Waste  
21 Policy Act, some of that money should be  
22 allowed to go to immediately going to this

1 hardened onsite storage as long as conditioned  
2 upon that is what the licensees do.

3           When you consider the  
4 vulnerability, let's stop kidding ourselves.  
5 When you consider, in addition, there is no  
6 radioactive waste fairy, I don't think you're  
7 going to find a lot of people begging to have  
8 a deep geologic repository tomorrow. It is  
9 going to take a very, very, very long time.

10           The NRC recognizes this. All  
11 grownups recognize this. So, therefore, deal  
12 with the immediate problem first. And I was  
13 disappointed that it's again being kicked -  
14 the can being kicked down the road. Let's  
15 study it more, et cetera.

16           Also, there are other factors to  
17 consider - whoops. Fuel that is at Maine  
18 Yankee, Yankee Atomic, et cetera, what I would  
19 like to see is a requirement for emergency  
20 planning to continue while fuel is on site.

21           It is certainly far less likely to  
22 be a problem. The risk is reduced, but it's

1 not eliminated. Therefore, there should be  
2 some type of emergency planning required.

3 Also, there should be monies  
4 allocated for states and local governments for  
5 monitoring, so they can be assured that there  
6 are no releases.

7 And also, the recommendations in  
8 the October 3rd SECY on the prioritization of  
9 lessons learned from Fukushima, whatever it  
10 was called, had some very important  
11 recommendations of the need for monitoring -  
12 water monitoring equipment to be available so  
13 you know how much water is in these pools.  
14 And also, a dedicated backup power.

15 That should be a fast-forward  
16 priority, not something to occur sometime in  
17 the future.

18 So, that's what I have to say to  
19 you today, and I hope the focus will be on the  
20 very real risks with horrendous consequences  
21 that we're being faced with. Thank you.

22 (Applause.)

1 (Off-record comments.)

2 MR. WILDS: I'd like to thank the  
3 Blue Ribbon Commission for giving me the  
4 opportunity to speak this morning.

5 I'm Dr. Edward Wilds. I'm with the  
6 Connecticut Department of Energy and  
7 Environmental Protection. And I'm also the  
8 representative for Connecticut to the  
9 Northeast High-Level Radioactive Waste  
10 Transportation Task Force.

11 I have a hard time saying it too,  
12 and I'm a past co-chair of that. So, I  
13 shouldn't be that bad at it.

14 In Connecticut we are an  
15 executive-branch agency, and we are  
16 responsible for assuring the public safety and  
17 addressing issues relevant to ionizing  
18 radiation for the state of Connecticut. And  
19 my division is specifically tasked with that  
20 activity.

21 This morning I'm going to limit my  
22 comments to basically three topics. The first

1 being partners, states being partners, long-  
2 term solutions in the federal government  
3 needing to meet its obligations.

4 With regard to partnership, issues  
5 related to the routing, security, storage,  
6 final disposition, they all will be  
7 challenging, that's not unknown, but they're  
8 not insurmountable. States must be involved as  
9 partners in this solution-solving process.

10 If you want to look at involvement  
11 where we have true partners, if you look at  
12 the Department of Energy's former  
13 Transportation External Coordinating Working  
14 Group, there we were true partners in solving  
15 transportation issues which related to spent  
16 fuel.

17 That doesn't mean that we all  
18 agreed on everything, and it doesn't mean we  
19 had 100 percent consensus, but I believe we  
20 did find workable solutions to some of those  
21 problems.

22 If you want to look at a

1 partnership where it failed easily, that would  
2 have been where we were basically consulted  
3 and asked to cooperate with regards to  
4 Fukushima and the U.S. response.

5 Many times when the federal  
6 government uses that process, they consult  
7 with us by making us a member of the group.  
8 And then they ask us to cooperate after  
9 they've decided what they're going to do once  
10 they go back somewhere else and make a  
11 decision.

12 To be a true partner, they have to  
13 listen to the state's concerns and they also  
14 have to be willing to work with us in finding  
15 those solutions. Sometimes we can find  
16 solutions outside of the box that the federal  
17 government doesn't think of.

18 And, also, if we're partners in  
19 this process, that means we have a stake in  
20 the process from the beginning, and we're not  
21 being viewed as just being consulted and then  
22 asking to cooperate with whatever the final

1 decision is.

2           So, I think that's one of the  
3 things I would like to see changed in the  
4 report is that not refer to having cooperation  
5 and consulting with states, but having the  
6 states be a true partner in the process.

7           For long-term solutions, you know,  
8 there are land-use issues, indefinite onsite  
9 storage associated with that, redevelopment,  
10 economic, and I'm discussing primarily at the  
11 single-site decommissioned facilities where  
12 stranded fuel - these sites were  
13 decommissioned several years ago under the  
14 existing idea that the federal government  
15 would accept its responsibility and the fuel  
16 would have been removed.

17           All of the infrastructure has been  
18 totally removed. If we ever have to reload a  
19 cask whether it's the cask degrades or it  
20 doesn't receive re-certification or it must be  
21 put into something else, that's going to  
22 require infrastructure to be built up.



1                   And to do that, the economic  
2                   redevelopment of the sites is basically put on  
3                   hold. There is - the towns, the local towns  
4                   and the state don't know what their options  
5                   are going to be and how they're going to  
6                   address these issues in the future.

7                   So, I would suggest that those are  
8                   issues that we need to have. And they have to  
9                   be long-term solutions.

10                  Environmental issues, I spoke  
11                  about cask reloading. Any time you're moving  
12                  fuel at multiple locations at multiple times,  
13                  there is increased level of a possibility for  
14                  some type of an accident to occur.

15                  Also, if you're reloading these  
16                  casks and moving this fuel around, now a  
17                  facility that has been through a complete  
18                  decommissioning process, has to go through a  
19                  second decommissioning process just to address  
20                  all the new possible contaminations that we  
21                  have.

22                  And our position is that with all

1 of these increased movement of fuel at these  
2 locations, is an increased environmental  
3 impact that we really shouldn't have to deal  
4 with on a second go-around.

5 If we had interim spent fuel  
6 storage at a consolidated facility, the cask  
7 could be moved. These sites could then be  
8 redeveloped, would not have to go through  
9 further decommissioning, and the towns could  
10 move forward.

11 And the final one is I believe  
12 that the decommissioning sites must be first  
13 in line. And, also, the solution, the federal  
14 government must figure out a way, when it  
15 comes to the final decision, and to meeting  
16 its obligations under the Nuclear Waste Policy  
17 Act.

18 The credibility of whatever  
19 recommendations come from the Blue Ribbon  
20 Commission and are implemented, will be  
21 dependent upon how well those recommendations  
22 address the existing obligations that must be

1 met. Because if they don't address the  
2 existing obligations, what confidence does the  
3 public have that these new recommendations,  
4 this new process, will actually be followed  
5 through and carried out and we will not be  
6 back on this process another 20, 30 years from  
7 now?

8 And with that, I'd like to thank  
9 the subcommittee members again for allowing me  
10 to speak today, and hope that I've provided  
11 some information for your deliberation. Thank  
12 you.

13 (Applause.)

14 MODERATOR LEWIS: Thank you. We're  
15 going to go to Q&A now. And just a couple of  
16 notes. Dr. Peterson is on the phone. And any  
17 time you want a question virtually, raise your  
18 hand and just jump in there. And we do have  
19 that connectivity so that he can ask  
20 questions.

21 And for the panelists, I want to  
22 encourage you to just ask questions among one

1 another. Before we do that, I want to mention  
2 for people in the audience who would like to  
3 ask questions, we'll ask you to raise your  
4 hand. We'll get a microphone to you. A couple  
5 of Meridian staff are available to walk mics  
6 around. We do need you to use a microphone.

7 The questions and responses are  
8 being transcribed. And if we don't have the  
9 mics in use, then that won't happen.

10 And when you do ask a question,  
11 we'd ask you just to introduce yourself,  
12 initially.

13 So, why don't I start with, you  
14 know, if there's some additional, any comments  
15 or questions reacting on the panel to one  
16 another or asking questions of one another,  
17 please.

18 MS. LAMPERT: Yes, I have a  
19 question to Ed Wilds. So, it spins off. You  
20 mentioned the prioritization of sites that are  
21 closed.

22 What hasn't been mentioned, and I

1 think the Commission ought to be looking at,  
2 is the current ability for licensees to sell  
3 or trade their place on the shipping schedule.  
4 And I think that's a problem, because I think  
5 decisions once a site, hopefully a permanent  
6 one, is chosen, that it is based upon  
7 environmental and safety concerns, as opposed  
8 to making an extra buck for a licensee.

9 Any comments on that?

10 MR. WILDS: I agree that the final  
11 movement of the fuel has to be based upon the  
12 environmental and safety concerns and that,  
13 you know, that standard contract needs to be  
14 re-looked at because a decommissioned  
15 facility, as I understand it, under the  
16 standard contract, could sell its spot to an  
17 operating site. And that would be of concern  
18 to Connecticut.

19 MODERATOR LEWIS: Any other - are  
20 there panel reflections on that question?

21 (No response.)

22 MODERATOR LEWIS: Okay. Any other

1 questions among panelists right now? I mean,  
2 certainly they'll have the opportunities  
3 through the rest of the Q&A period. Go ahead.

4 MS. LAMPERT: Well, I didn't get  
5 any feedback or response on my suggestion that  
6 there be some type of emergency planning in  
7 place while waste is on site.

8 Does anybody have a comment on  
9 that?

10 MR. CONNELL: Decommissioned  
11 facilities that store spent fuel that retain  
12 their NRC license, are required to have  
13 emergency planning resources available.

14 However, the scope of emergency  
15 planning is greatly reduced from the operating  
16 plant environment, because of the  
17 significantly reduced risk.

18 So, all the potential accidents  
19 are analyzed, and emergency planning to a  
20 level to address the postulated accidents is  
21 in place.

22 MS. LAMPERT: On site, or off site?

1 MR. CONNELL: On site with offsite  
2 support.

3 MS. LAMPERT: But for the people  
4 off site. I'm talking about emergency planning  
5 for people who live off site like myself, six  
6 miles from a reactor.

7 And that is what I understand is  
8 not there, and should be. I could be  
9 incorrect, and I see John Giarrusso who could  
10 respond.

11 MR. GIARRUSSO: Thank you. John  
12 Giarrusso with Mass Emergency Management.

13 Mary, as a matter of fact, today  
14 we're having a drill at Yankee Rowe, exactly  
15 what you're talking about. We do have a  
16 response plan. It's the highest level that a  
17 decommissioned site could go to, Jim, I  
18 believe, as an unusual event.

19 MR. CONNELL: That's correct.

20 MR. GIARRUSSO: For the protection  
21 of the people, Mary, we have the communication  
22 set up today as an actual response that state

1 police - it's basically a hostile-action  
2 exercise today that would be responding to the  
3 site along with Mass Emergency Management and  
4 others.

5 But we don't have, as in the  
6 operating plants, where we have a ten-mile  
7 EPZ, we have evacuation plans, we do not have  
8 that set. We would rely on the town's plans.

9 If there were any kind of release  
10 from that decommissioned site, we would work  
11 closely with the people at Yankee Rowe, and  
12 Rowe, Mass' Emergency Management, and also  
13 state and local.

14 MS. HOFMANN: John, can you tell me  
15 who - I don't know. But in your instance, who  
16 pays for the emergency exercises that you're  
17 doing right now?

18 MR. GIARRUSSO: It would be Yankee  
19 Rowe.

20 MS. HOFMANN: Thank you. And so, in  
21 other words, it's very, very minimal and it's  
22 leaving it up to the communities, you said?



1 MR. GIARRUSSO: It's leaving it up  
2 to the state working with the local community,  
3 Mary.

4 MR. WILDS: Yes, Connecticut does  
5 the same thing for Connecticut Yankee. And  
6 that activity is paid for by Connecticut  
7 Yankee.

8 MODERATOR LEWIS: Okay. Thank you.  
9 Any questions from the audience?  
10 Stand up, and then we'll get a microphone to  
11 you.

12 MR. SHADIS: Thank you. This is Ray  
13 Shadis speaking. Just a point of clarification  
14 here.

15 I think with respect to Ms.  
16 Lampert's question, what I'm hearing is a  
17 confusion of emergency response as in moving  
18 people, or whatever that response may be, and  
19 police response to some malevolent act or  
20 accident at the plant. They are quite two  
21 different things.

22 The Nuclear Regulatory Commission,

1 in its security regulations, Part 73, and in  
2 the licensing, Part 72, depends upon the  
3 security people at these sites as being  
4 nothing more than a trigger, a trip-wire, to  
5 be able to bring in police to remove  
6 intruders, or mop up, whatever it may be. And  
7 that's my comment.

8 MODERATOR LEWIS Okay, thank you.  
9 Questions? Other ones? How about right here,  
10 and then I'll come back there.

11 MS. WEINMANN: Hi. My name is Lissa  
12 Weinmann. I am a resident of Vermont, and I  
13 had a question for Sarah Hofmann.

14 Is it my understanding, then, that  
15 the state of Vermont does not see the removal  
16 from the spent fuel pool into dry cask storage  
17 as a clear and present need for the state,  
18 that the state is advocating more for the  
19 interim storage facility?

20 MS. HOFMANN: Thank you. Today we  
21 are talking about consolidated storage, which  
22 we definitely believe in. But, yes, we believe

1 that more fuel should be taken out of the fuel  
2 pools and put into dry cask storage.

3 Fukushima really - I forget who  
4 talked about that today, but the casks did  
5 exceedingly well compared to the pool.

6 MS. WEINMANN: Then is it the state  
7 of Vermont's position that the prioritization  
8 in the Blue Ribbon Commission report should be  
9 increased to those clear and present dangers  
10 posed by the spent fuel pools, as opposed to  
11 waste at previously closed facilities that  
12 have already, theoretically, been safeguarded?

13 MS. HOFMANN: Well, we actually  
14 believe that the nine stranded decommissioned  
15 plants actually should have priority in terms  
16 of consolidated storage.

17 To us, having nine little ISFSIs  
18 out there with nothing else actually doesn't  
19 make a lot of sense in terms of enhanced  
20 security.

21 But then as Vermont, and I'm not  
22 speaking as NARUC now, but as Vermont, we

1 believe that the plants that are coming up  
2 upon decommissioning, like Vermont Yankee,  
3 that have full fuel pools, should begin  
4 moving, and then there should be priority.

5 The Blue Ribbon Commission doesn't  
6 really talk about who's next in line in terms  
7 of scope. And we're saying that from both  
8 NARUC's position and Vermont's position, the  
9 Blue Ribbon Commission needs to talk a little  
10 bit more about the scope.

11 Everybody talks about those nine  
12 plants. What happens after that? Who has  
13 priority?

14 And I would also agree with Mary  
15 that we don't want to see those places in line  
16 traded off either. If the priority then goes  
17 to the next decommissioning plants, we want to  
18 see that fuel moved to consolidated storage.

19 MS. WEINMANN: Thank you very much.

20 MODERATOR LEWIS: Okay, back there.

21 MS. SHAPIRO: Hi, I'm Susan Shapiro  
22 from the Indian Point Reactor Community. And

1 going to the issue of the emergency planning  
2 and the cost of emergency planning.

3 In New York State, Entergy only  
4 pays a portion of the emergency planning.  
5 It's an incredible burden on the reactor  
6 communities for emergency planning for the  
7 reactor, and now for the new use of the land  
8 which is this dry cask storage.

9 The states never agreed to this  
10 use of our lands for interim storage. It's now  
11 becoming long-term interim storage.

12 And so at this point, we only have  
13 emergency plans for the ten-mile radius. And  
14 we would like, first of all, Entergy to fully  
15 pay, for the operator to fully pay for all  
16 costs related to that and that that burden  
17 should not fall on the taxpayers when it's a  
18 private company that's making a profit. And  
19 that's something that should absolutely be  
20 done. And it should be expanded to a 50-mile  
21 radius.

22 Because currently, the limitation

1 of liability is only up to \$12 billion based  
2 on the Sanderson Act. But in our situation,  
3 the property values of the 50-mile radius are  
4 over \$8.5 trillion.

5 So, we as ratepayers and  
6 stakeholders think there's a gross inequity,  
7 because they're not covering the insurance for  
8 operating this plant, or for the new added  
9 storage, for the dry cask storage.

10 So, answering the question of we  
11 are - and on top of it, our local communities  
12 say our evacuation plans don't work. They  
13 don't certify them every year.

14 SEMO, our State Emergency  
15 Operating Management Organization, does not  
16 certify every single year since 9/11, but FEMA  
17 and the NRC rubber-stamp it and say it's fine.

18 So, if you're going to rely as the  
19 gentleman over there said on local plans, we  
20 know our plans don't work. We know we can't  
21 get 20 million people out of our region.

22 So, at this point having interim,

1 long-term storage additionally at Indian Point  
2 with the densely-packed spent fuel pools that  
3 are leaking, is just not acceptable to our  
4 community.

5 MODERATOR LEWIS: Okay. Anybody on  
6 the panel want to respond? Please, Mary.

7 MS. LAMPERT: Well, actually, no, I  
8 wasn't going to respond. I think she said it.  
9 So, I was going to ask another question.

10 MODERATOR LEWIS: Go ahead.

11 MS. GRONLUND: I just have a  
12 comment on that.

13 During the Fukushima crisis, the  
14 U.S. government advised American citizens in  
15 Japan within 50 miles of the plant, to  
16 evacuate. And so, it does suggest that the  
17 current ten-mile emergency planning zone is  
18 inadequate.

19 And UCS agrees that it's something  
20 that needs to be expanded. So, we would agree  
21 with your concerns about that.

22 MS. LAMPERT: And now I will

1 respond. I agree even though this isn't  
2 focused solely on emergency planning, only as  
3 it relates to spent fuel storage.

4 But I will respond to the fact  
5 that at Indian Point, the fact that the  
6 emergency planning assumptions are based upon  
7 a straight-line Gaussian plume, but in  
8 reality, because of the river, or because of  
9 the variable winds along the coast or  
10 topography, particularly at Indian Point, as  
11 your attorney general's expert testimony from  
12 Dr. Bruce Egan indicated, that the winds are  
13 channeled down the Hudson River towards the  
14 densely populated area of New York City and  
15 the metropolitan areas.

16 And so, that makes this whole  
17 question of emergency planning has to be  
18 redesigned based on revised assumptions of  
19 meteorology, how a plume goes, et cetera, et  
20 cetera.

21 My question was going to be to the  
22 panel on lessons learned from Fukushima. Are



1 you readjusting the PRAs? Is there somebody on  
2 the panel that is looking into probabilistic  
3 risk assessment? Because, certainly, the  
4 experience at least with Unit 4 at Fukushima,  
5 real-world experience will affect your  
6 probabilities and, hence, prioritizations.

7 MODERATOR LEWIS: Others on the  
8 panel, any response?

9 MS. LAMPERT: Or on the Commission,  
10 or you? The Commission, like that Mr. Kotek  
11 over there, I bet he knows.

12 MS. HOFMANN: The only thing I  
13 would add is I do think that's something the  
14 Blue Ribbon Commission needs to look at. They  
15 did look at some of the Fukushima pieces. But  
16 the probabilistic risk assessment should be  
17 looked at further in terms of the difference  
18 between the cask and the pool.

19 MODERATOR LEWIS: I see Dr.  
20 MacFarlane nodding her head.

21 Any other responses to that right  
22 now? Anybody on the panel or anybody in the

1 audience who has a particular expertise in  
2 this area?

3 MR. JANATI: Could I ask a question  
4 on -

5 MODERATOR LEWIS: Can you want to  
6 introduce yourself, please?

7 MR. JANATI: Yes, Rich Janati.  
8 Pennsylvania DEP.

9 The issue with Unit 4 reactor at  
10 Fukushima, you have to be very careful.

11 Recently, TEPCO has indicated that based on  
12 the review they have conducted so far, that  
13 the explosion at Unit 4 might not have been  
14 caused by the spent fuel issue at Unit 4.

15 Unit 4 and Unit 3 share the same  
16 exhaust pipe. And the explosion at Unit 3  
17 might have caused the back-fill of hydrogen  
18 into Unit 4 and caused the explosion.

19 So, be very careful as far as  
20 coming to a conclusion that the hydrogen  
21 explosion at Unit 4 was caused because of the  
22 situation with the Unit 4, the spent nuclear

1 fuel.

2 MS. LAMPERT: I appreciate -

3 MR. JANATI: And at this point,  
4 you're right. There is absolutely no  
5 probabilistic risk assessment as far as the  
6 spent fuel pool is concerned. That's  
7 something that the industry is going to have  
8 to look at.

9 But as it relates to Fukushima,  
10 we're still learning. We're still learning.  
11 So, we can't come to any conclusion at this  
12 point. So, we're going to have to be very  
13 careful with that.

14 MODERATOR LEWIS: Okay, thank you.

15 MS. LAMPERT: I appreciate your  
16 point, because I did bring up that issue at  
17 Unit 4 where all lessons have not been  
18 learned.

19 But one lesson - well, there are  
20 many that have been. And one that has been  
21 learned is the - what has been overlooked  
22 before, the interaction between a reactor

1 accident and then a spent fuel pool accident,  
2 and you can have it reversed.

3 And so, that is an issue  
4 particularly in the type of reactors I focus  
5 on, the sister reactors here, the boiling  
6 water reactors, Mark 1s, that this seems to  
7 have been neglected as one of the key  
8 vulnerability points of the migration back and  
9 forth.

10 MS. HOFMANN: And thank you. My  
11 only other comment would be that my - please  
12 take my comment as the most simplistic, which  
13 is that I was just comparing in terms of just  
14 results, which is the dry cask came through  
15 the Fukushima accident very well as opposed to  
16 the pools that did experience problems.

17 I'm not going to even - I'm not  
18 even technically qualified to talk about what  
19 happened in those pools. Just the simple  
20 observation that after it was all over, those  
21 dry casks did well.

22 MS. LAMPERT: And also the pools at

1 Fukushima unlike ours, were not, thank God,  
2 densely packed. And so, that is also a lesson  
3 learned.

4 MODERATOR LEWIS: Okay. We have  
5 three hands up here right in a row. Why don't  
6 we start with you, sir.

7 MR. CHILDS: Yes, Ned Childs with  
8 the New England Coalition. I live in  
9 Dummerston, the reactor community for Vermont  
10 Yankee.

11 And let me tell you folks, remind  
12 you about a lesson we learned because these  
13 plants were designed and sited, and the spent  
14 fuel pools placed in the attic back in the  
15 '60s and '70s and a priori, which means apart  
16 from the evidence, a decision was made that  
17 these spent fuel pools did not need to be  
18 guarded against hostile intent, because it was  
19 assumed that no one would be so mean as to  
20 want to cause the U.S., a freedom-loving  
21 country, any harm.

22 We learned the lesson that that

1 was not a valid position to take ten years ago  
2 when the Twin Towers in New York were  
3 attacked. That, in fact, there were people  
4 out there that might, in fact, want to cause  
5 us harm.

6 And it was not in some anti-  
7 nuclear coven that I learned that these  
8 nuclear power plants are weapons of mass  
9 destruction prepositioned for our enemies to  
10 use against us, the spent fuel pools as a  
11 massive dirty bomb and Gordon Thompson laid  
12 all this out ten years ago.

13 We don't need a Blue Ribbon  
14 Commission to tell us this that, in fact,  
15 these spent fuel pools were never designed to  
16 hold all this waste. And we've learned the  
17 lesson that there are people, there are forces  
18 out there that would do us harm.

19 And I don't understand why ten  
20 years after 9/11, the NRC and Barack Obama and  
21 Deval Patrick and everybody in this room seems  
22 to be fine that, oh, well, we'll just do

1 another commission, study it some more.

2           Where the hell is the political  
3 will to get those spent fuel assemblies out of  
4 those pools, the full pools, and into  
5 canisters?

6           I mean, we're going to wait until  
7 next January to tell us that, oh, yes, well,  
8 there was an attack and we - I used to fly a  
9 little Beechcraft Bonanza, and I could have  
10 run it into the spent fuel at Vermont Yankee  
11 or the Capitol Building or any other goddamn  
12 place if I had wanted to just like the guy in  
13 Austin that ran his plane into the IRS  
14 Building.

15           This is just like a silly, sad  
16 joke, really farce, that we're ten years  
17 sitting around with all our neckties and our  
18 Ph.D.s and going, well, oh, yes, well, you  
19 know, where is Forsberg from MIT who told us  
20 after the attack, after the Fukushima  
21 incident, that, oh, all we need is a  
22 repository and we'll be fine.

1                   And I was going to ask Mr. Kotek's  
2 presentation, you didn't include the WIPP  
3 facility in Carlsbad. And then we went  
4 through and, oh, we're moving the dispensed  
5 waste to New Mexico. New Mexico wasn't even  
6 shown on the map.

7                   But the point being that these  
8 people are out there saying, oh, we just need  
9 a repository and we'll be fine. And this can  
10 take ten years or a hundred years of interim  
11 storage.

12                   What the hell is going on that we  
13 don't have today at every one of these boiling  
14 water reactors, crews offloading those spent  
15 fuel assemblies into these concrete canisters  
16 which we know work? And where is Gordon  
17 Thompson on this commission? Have you ever  
18 heard the name?

19                   He came to Brattleboro and told us  
20 that you could have spontaneous ignition in  
21 the spent fuel pool from a zirconium fire if  
22 you lose the water, and there's no known way



1 to fight it. It would release all that  
2 radioactivity over a period of two to three  
3 months in every direction of the compass, and  
4 nothing has been done.

5 There is no barrage balloons,  
6 there are no fixed pieces of metal sticking up  
7 into the air that you could shear off the  
8 wings of airplanes headed for those spent fuel  
9 pools, there's no anti-aircraft assemblies on  
10 the roofs. There's nothing, nothing being  
11 done. And, really, why? Why?

12 MS. LAMPERT: Gordon Thompson, by  
13 the way, is in India.

14 MR. CHILDS: Okay.

15 MS. LAMPERT: And he, I understand,  
16 did go out to Denver, or not, or he sent his  
17 material, but clearly you are absolutely  
18 right.

19 There have been studies by the NRC  
20 going way back about the vulnerability of  
21 densely-packed pools, susceptibility to  
22 aircraft, and that's particularly an issue.

1                   We have Raytheon here that has  
2                   developed weapons that I know about it from a  
3                   pacifist background on my side of the family.  
4                   If I know that Raytheon has weapons that can  
5                   penetrate 18 feet through concrete, and I know  
6                   it's about a foot through the wall to the pool  
7                   at Pilgrim and what that roof looks like, and  
8                   then you go to Seabrook, the same  
9                   vulnerability, you're absolutely right.

10                   You've had Bob Alvarez doing  
11                   studies, Dr. Frank von Hippel doing studies,  
12                   you've got Gordon Thompson. They're all  
13                   there.

14                   And so, what do we do? Kick the  
15                   can down the road. So, we are begging this  
16                   commission to prioritize safer onsite storage,  
17                   hardened onsite storage.

18                   And by the way, I don't believe  
19                   you want the canisters lined up on the  
20                   equivalent of a basketball court that reminds  
21                   me of bowling ready for a strike. It makes no  
22                   sense.

1                   9/11 happened. 3/11 happened.

2           Why does it have to happen here first for  
3           people to get off their rear-ends? I'm with  
4           you.

5                   MODERATOR LEWIS: Okay. Thank you.  
6           Go ahead, please.

7                   MS. HOFMANN: Thank you. This is a  
8           tangent to what Ned said, obviously. But one  
9           of the things that comes to mind is that until  
10          we have somewhere - obviously, there can be  
11          all the onsite storage and I do believe in dry  
12          cask.

13                   But we do need going back to the  
14          purpose of the Blue Ribbon Commission, we need  
15          a consolidated, centralized storage to  
16          actually have one incentive for companies to  
17          get fuel out of their pools, into casks, and  
18          finally to somewhere that's at least an  
19          interim solution.

20                   MS. LAMPERT: Well, I'll ask you  
21          this question: What will the incentive be to  
22          get the fuel out of the pools?

1                   How is the interim - we can't even  
2                   find a low-level waste dump in any state. So,  
3                   when is this going to happen, number one? And  
4                   number two, how does an interim solve the  
5                   problems that we have recognized from  
6                   Fukushima? How does it solve the security  
7                   problems?

8                   How much -- as the reactors are  
9                   being re-licensed one after another to go  
10                  another 20 years, why is the same game going  
11                  to continue unless there is a requirement?

12                  MS. HOFMANN: I think at this point  
13                  that we have two problems. One is beyond what  
14                  the Blue Ribbon Commission is looking at, and  
15                  you're talking about that, Mary, which is the  
16                  need to have more - to unpack our fuel pools.  
17                  And that is probably a different issue than  
18                  what the Blue Ribbon Commission is -

19                  MS. LAMPERT: Well, that's the  
20                  problem that they are not prioritizing it.  
21                  That's the problem.

22                  And so, I think we're here to tell

1       them, hey, there are these solutions.  There's  
2       the long term which my children will not see  
3       accomplished, and there's the very real threat  
4       now.

5                   And so, instead of simply kicking  
6       that can down the road by recommending more  
7       and more studies, to switch the priorities.  
8       Deal with the problem now.

9                   I have high blood pressure.  Guess  
10       why.  Therefore, I deal with that by taking  
11       medication.  That is the immediate problem.

12                   Then we deal also with the longer-  
13       term solutions like yoga or a drink before  
14       dinner, okay?  And so, I'm saying the same  
15       thing.

16                   MODERATOR LEWIS: Okay.  And,  
17       again, these are great issues to be bringing  
18       up, and I expect there's going to be a lot of  
19       exploration of the sequencing, the  
20       prioritization, et cetera, as we get into the  
21       breakouts further.

22                   I do want to see if there's just

1 any other questions or topics perhaps that  
2 haven't already been raised. Yes, sir.

3 MR. PERRY: I'm Ed Perry, and I'm a  
4 news reporter for WATD in Marshfield,  
5 Massachusetts. And that's reasonably near the  
6 Plymouth nuclear plant.

7 I got here late, and I have a  
8 naive question which has probably already been  
9 asked, but I'll ask it anyway.

10 In the Commonwealth of  
11 Massachusetts if you bring your car into a  
12 garage to get the oil changed, they sell you  
13 the oil and then they take the old oil away.  
14 And there's a law that says if you bring in  
15 your car and they put new oil in, that they  
16 got to take the old oil away. The guys who  
17 sell you the oil, have to take it back and  
18 recycle it.

19 Now, every so often a big truck  
20 arrives at the Pilgrim nuclear power plant  
21 with a load of brand new nuclear fuel. I'm  
22 wondering why there isn't a law in

1 Massachusetts that says when that truck  
2 leaves, it leaves with the spent fuel just as  
3 you have to do with the oil.

4 Now, I know that's probably a  
5 naive question, but it's one that I've wanted  
6 to ask for a long time. And thank you.

7 MODERATOR LEWIS: Does somebody  
8 want to take a shot at -

9 MS. LAMPER: Take it where? The  
10 question, Ed, is I'll ask you, where is it  
11 going to be taken?

12 MODERATOR LEWIS: Ed, can you use  
13 the microphone, please? Thank you.

14 MR. PERRY: I would assume that  
15 Westinghouse or General Electric or the people  
16 who deliver the fuel make a lot of money  
17 selling the fuel. And that in virtually every  
18 other question of something that is reusable  
19 and becomes necessary to remove, that the  
20 people who sell the stuff to you and make the  
21 money are responsible in some way financially  
22 for removing the stuff that they sold you when

1 it becomes dangerous or untenable at the  
2 location they delivered it to.

3 That's all I'm asking, really.

4 MS. LAMPERT: Well, what you're  
5 really talking about is reprocessing too.  
6 And, frankly, I'm opposed to reprocessing as  
7 is the Union of Concerned Scientists,  
8 Physicians for Social Responsibility, et  
9 cetera, because reprocessing doesn't get rid  
10 of the waste. It creates a very large waste  
11 stream that has to be dealt with,  
12 environmental hellholes around the  
13 reprocessing plants, et cetera, not to mention  
14 nuclear proliferation issues.

15 And so, this has been a pipedream  
16 that I think members of the industry, and some  
17 are very much in favor of the idea of  
18 recycling, is something that hasn't happened.

19 MR. PERRY: Well -

20 MS. LAMPERT: I see your point why  
21 - it's the old if the bathtub is overflowing,  
22 turn it off, but we aren't there and we've



1 already filled the bathtub.

2 MODERATOR LEWIS: One quick follow-  
3 up and then I do want - there's a few other  
4 hands up I want to try to get to before we  
5 close.

6 MR. PERRY: My follow-up would just  
7 be that I wasn't suggesting that the people  
8 who sell the fuel reprocess it. Simply that  
9 they take financial responsibility for the  
10 thing that they are using to make the money  
11 in.

12 If they have to dig a big cave  
13 like the government did out at Yucca Mountain  
14 and then decide they won't use it, they could  
15 do that. But the fact is they bring the stuff  
16 in, they make the profit on it. Why shouldn't  
17 they take it away and then take some of that  
18 profit and use it to store it safely instead  
19 of making the towns the recipients?

20 And, you know, the fact of the  
21 matter is that there is a lot of money sitting  
22 out there, because the government has

1 collected a fee for nuclear storage, as I  
2 understand it, from every user of electricity.

3 And so, why don't they take some  
4 of that money, give it to the people who sell  
5 - who take back the fuel, and help them build  
6 a place to keep it, but not in our towns.

7 I mean, that's my question.

8 MODERATOR LEWIS: Other questions  
9 that are - how about back here, please? And  
10 we'll have time for one or two before our  
11 break.

12 MR. BROWN: Hi, my name is Danny  
13 Brown. I'm with SECURAD, Incorporated from  
14 Canada.

15 First, in defense of the industry,  
16 I'd like to say that this is not a matter of  
17 disposing of a can of rotten peas. Nuclear-  
18 used fuel is the most serious and dangerous  
19 material in the world.

20 The people that are working on  
21 this problem are serious people. They're  
22 working in a system where every citizen in

1 this country has a say in the matter. They're  
2 all concerned.

3 So, people are trying to solve the  
4 problem. They're doing their best. The  
5 commissioners are all volunteers. I've been  
6 at almost all of their meetings. These are  
7 very serious people, and they really want to  
8 solve this problem, and they're doing the best  
9 they can. So, I wouldn't think that they're  
10 not trying.

11 The real problem here is that  
12 every solution including Yucca Mountain, has  
13 been a half-baked solution. It's been a less  
14 than good solution, and everybody knows it.

15 If a solution comes along that is  
16 a good solution where everybody can have  
17 confidence - and further, I'd like to mention  
18 that the MIT team who are probably the top in  
19 the industry, said we need to do this one  
20 time. We don't need to be putting it into  
21 intermediate storage and leaving it for 50 or  
22 a hundred years. We don't need to be leaving

1 it on site where it may be the legal  
2 responsibility of the Department of Energy,  
3 but in fact, it's a problem for the utility  
4 operators as well.

5 None of them can solve the problem  
6 on their own. They all have to do it as a  
7 team. But within five years, there's going to  
8 be a deep repository available as a permanent  
9 solution. We won't take it from the liquid  
10 pools and put it into - I'm serious.

11 MS. LAMPERT: Five years?

12 MR. BROWN: It won't be finished in  
13 five years, but it will be visible to the  
14 public within five years, and there's going to  
15 be a solution.

16 And at that point, everybody will  
17 say, okay, now, we can solve the problem and  
18 we can do it expeditiously. I think everybody  
19 agrees we can't wait 25 years or 50 or a  
20 hundred more years.

21 And the whole industry, we had a  
22 renaissance, everybody was excited, and then

1 Fukushima let the air out of the balloon. We  
2 need the industry to move forward. We need to  
3 have clean energy. We need to deal with  
4 climate change, and we need a deep repository.  
5 Everybody knows it.

6 So, the solution will be  
7 announced. There is discussions going on now  
8 privately and quietly, because everybody wants  
9 to build a consensus. And once that's been  
10 done, then a public announcement will be made  
11 and the problem will be dealt with. So, thank  
12 you.

13 MODERATOR LEWIS: Well, You've got  
14 everybody's attention. Any other questions?  
15 I think we have - let's take one more question  
16 back here, and then we'll stop for a break and  
17 come back -

18 MS. LAMPERT: Can I just say there  
19 is a Santa Claus?

20 MS. SHAPIRO: Exactly. In five  
21 years, we're going to have this wonderful  
22 solution. But one of the things that's

1 missing from the Blue Ribbon Commission's  
2 draft recommendations, is there's no mention  
3 of heat waste.

4           And if you look at the Yucca  
5 Mountain studies, the bottom line problem with  
6 any deep repository is accumulation of heat  
7 waste from all this hot, radioactive fuel  
8 that's going in there.

9           So, if you're Santa Claus and you  
10 have the magic solution, don't keep it a  
11 secret. Because at this point, really, one of  
12 the alternatives this commission didn't look  
13 at, and probably should be looking at, is  
14 stopping making this waste until we do have a  
15 solution.

16           And if we never come up with a  
17 solution, then let's just deal with the waste  
18 that we've already created and deal with that  
19 this was a mistake. This was a scientific  
20 error that it was a bad experiment. And we,  
21 this generation, can't continue it for the  
22 future generations.

1                   So, if you're really Santa Claus,  
2                   don't wait five years, because nobody believes  
3                   it. I don't believe it. I've heard, you  
4                   know, over the years it's always been five  
5                   years, ten years, 20 years down the line we'll  
6                   have a solution.

7                   They don't have a solution,  
8                   period. And there never will be because of  
9                   the waste heat. And that's really the bottom  
10                  line.

11                  MODERATOR LEWIS: Okay. Thank you,  
12                  everybody. I'd like to especially thank the  
13                  panelists who took the risk of getting up  
14                  there and talking.

15                  Great conversation. Great  
16                  questions. Great comments. And we're going  
17                  to go ahead and take a break now, come back in  
18                  about 15 minutes, and I think there's going to  
19                  be a lot of things to pick up on over your  
20                  coffee.

21                  So, we'll reconvene at quarter  
22                  after, please.

1 (Whereupon, above-entitled matter  
2 went off the record at 10:01 a.m., and resumed  
3 at 10:18 a.m.)

4 MODERATOR LEWIS: So, thank you.  
5 Okay. Well, thanks, folks, and we're going to  
6 turn now to our second panel dealing with a  
7 suite of issues around consent-based siting  
8 process, which is one of the core elements of  
9 the draft report.

10 So, I'm assured that it will be  
11 slightly warmer within a few minutes. So,  
12 we're going to start with Sandra Levine.

13 Okay, folks. Can we bring the  
14 room to attention, please? Is the mic on?

15 MS. LEVINE: Is that okay?

16 MODERATOR LEWIS: Great.

17 MS. LEVINE: I think we've got it.  
18 So, I'll start by saying "thank you" for all  
19 of you for being here. It's great to be here,  
20 and thank you for the Commission for  
21 organizing this, and the coordinators for  
22 putting it all together and bringing us all



1 here.

2 I'm Sandra Levine. I am an  
3 attorney with the Conservation Law Foundation.  
4 Next slide. This is just a brief background  
5 and perspective. As I said, I'm an attorney  
6 with the Conservation Law Foundation. We're  
7 a New England-based environmental advocacy  
8 organization focused on solving problems, to  
9 protect the people, natural resources, and  
10 communities throughout New England.

11 Just recognize that my comments  
12 here today come from my background and my  
13 perspective as an environmental advocate on a  
14 wide range of both environmental and energy  
15 issues.

16 Next slide. Okay. So, I'll start  
17 with the need for a solution. The focus of  
18 this panel is a better path forward. So, why  
19 do we need a better path forward? Why do we  
20 need a solution?

21 It seems obvious that these are  
22 long-term problems we'll be dealing with and

1 we need a long-term solution. And in many  
2 ways, that's no different than issues we face  
3 on a wide range and issues for the energy  
4 system.

5 It's a responsibility of the  
6 energy system to manage the waste that we  
7 produce, and we addressed this somewhat in the  
8 last panel.

9 And that goes to the carbon  
10 dioxide that's produced from fossil fuels, to  
11 the radioactive spent fuel from nuclear  
12 facilities.

13 I would also like to suggest that  
14 a significant impediment as to why this is not  
15 - why we haven't come up with a solution yet,  
16 is that it's not perceived as either an  
17 immediate or a pressing problem. It's not  
18 that it isn't. It's just simply not perceived  
19 as that.

20 And, in part, because it has not  
21 affected the licensing of nuclear facilities,  
22 it has not affected the economics of

1 commercial operation of nuclear facilities,  
2 and it's too easy to put off finding a  
3 solution.

4 And I think until we start dealing  
5 with those issues, we probably won't  
6 realistically find a solution.

7 So, finding a better path forward,  
8 in part, deals with providing for effective  
9 involvement for a diverse group of interests.  
10 And by effective involvement, we need to  
11 provide for both the ability and the means to  
12 affect the outcome.

13 Those involved in coming up with  
14 solutions need to have the technical  
15 expertise, the financial and the political  
16 means to participate in the process going  
17 forward. The input they provide needs to  
18 matter at an absolute minimum that needs to do  
19 much more than to provide for just an  
20 opportunity to provide comment, and then  
21 provide for ignoring those comments going  
22 forward.

1 (Applause.)

2 MS. LEVINE: And a second piece of  
3 that is to involve a diverse group of  
4 interests.

5 Obviously, the matters that we are  
6 dealing with here will affect a variety of  
7 people and interests. And so, the decision-  
8 making also needs to include those diverse  
9 interests.

10 At a minimum, it needs to include  
11 the state and the tribal governments, the  
12 citizens, the local communities, the  
13 environmental interests and the health  
14 interests.

15 So, I thought about some sort of  
16 tools for effective participation. And  
17 obviously first is to provide those tools  
18 early on in the process so it's not coming up  
19 as an issue at the end.

20 One means is to provide for  
21 funding for citizen and public interest  
22 involvement in processes going forward.

1                   And third is to provide for and  
2 fund independent technical expertise to allow  
3 folks who are participating in the process, to  
4 effectively participate and thereby level the  
5 playing field.

6                   Let everybody participate. Let  
7 everybody have the technical and legal and  
8 political expertise that they need to  
9 participate.

10                  Some examples of this that I've  
11 been involved in, in other matters, and I  
12 think the Commission could take a look at, one  
13 involves the Federal Energy Regulatory  
14 Commission. The licensing proceedings that  
15 they have, for instance, for hydroelectric  
16 facilities.

17                  There are funds that are set up to  
18 provide independent technical expertise for  
19 stakeholder citizen involvement for states to  
20 be involved. And that's actually proved very  
21 helpful in allowing the process to move  
22 forward and to effectively engage a diverse

1 community of interests.

2 Similarly, a policy going forward  
3 now actually on national transmission-planning  
4 efforts, we're trying to figure out on sort of  
5 a national level where do we put transmission  
6 lines, how are we going to do that, how do we  
7 address all the interests? And again there  
8 the Department of Energy and others have  
9 provided for stakeholder involvement to fund  
10 their participation and to provide the  
11 technical expertise they need to participate  
12 going forward.

13 Third example, and these are  
14 examples from more state-level activities, are  
15 to provide for intervener funding, or to  
16 provide for independent public advocates.  
17 Again, effectively give the voice to the  
18 citizens and the interests that are involved  
19 in the outcome.

20 The next issue concerns expanding  
21 the decision-making authority. The current  
22 process and the problems that we've been

1       having so far comes, in part, from the process  
2       being too narrow.

3                 We've assigned basically all the  
4       decision-making to a small subset of the  
5       federal government. It's out of public view  
6       and it cuts off affected interests.

7                 There are a number of means to  
8       expand the decision-making process. One, is  
9       to simply eliminate many of the exemptions  
10      that are in place for the environmental laws,  
11      to amend the Atomic Energy Act, to give states  
12      and other agencies their traditional  
13      regulatory roles to protect health and  
14      environment that they have under federal  
15      environmental laws. That's absent now.  
16      There's an exemption now in the Atomic Energy  
17      Act.

18                Second piece is to narrow the  
19      scope as to what is actually preempted by  
20      federal law. States have been cut out of the  
21      process, tribal government has been cut out of  
22      the process, and citizens have been cut out of

1 the process by a narrowing of the scope of  
2 who's making the decisions.

3 And finally, I wanted to talk a  
4 bit about equity and fairness, which clearly  
5 needs to be part of any decision-making  
6 process. And that the equity involved needs  
7 to balance the benefits and the burdens of the  
8 decisions that are being made.

9 Ideally, those bearing the burden  
10 should be fairly compensated by those who have  
11 the benefits. And I think the equity issue  
12 needs to be looked at and considered in the  
13 scope of all as it is in all energy system  
14 decisions, and not simply an isolation of  
15 either just nuclear or just locational  
16 decision-making. So, it would account for  
17 those equities.

18 And I just provide as an example  
19 in the energy field, I live in the Northeast,  
20 we're in the Northeast now, we're certainly  
21 burdened by the acid rain and the air  
22 pollution from the coal plants in the Midwest.



1 I mean, that's a burden that we bear that  
2 should be addressed as part of energy system  
3 planning.

4 And going forward, that's a  
5 similar burden that we'll need to be dealing  
6 and addressing in terms of equity with where  
7 and how we dispose of the spent nuclear fuel.  
8 Thank you.

9 MR. THOMPSON: This is a story  
10 about the waste isolation pilot plant or pilot  
11 project in Carlsbad, New Mexico, which I had  
12 the privilege of being a tiny part of at a  
13 time when they were stuck. And they were  
14 cited by the Commission as being the first  
15 successful repository for permanent nuclear  
16 waste. And I think it's important that we  
17 understand what does a consent process mean or  
18 how it was done at Carlsbad.

19 Ten years ago, over a billion  
20 dollars were invested, and they were not  
21 getting anywhere. There was great disparity  
22 as to how things were going to be managed.

1 There was no joy in Mudville for those ten  
2 years.

3 So bad was it that the Carlsbad  
4 project had to be shadowed by another  
5 oversight position in Albuquerque set up by  
6 the Department of Energy in addition to the  
7 Washington, D.C. location of the Department of  
8 Energy.

9 These three locations, their  
10 communities both technically and community and  
11 public and official communities were at  
12 loggerheads.

13 The Department of Energy asked a  
14 small group of consultants that had a consent  
15 process all ready to use, to try to do  
16 something. They could not even agree to meet  
17 at one of the three sites. So, it had to go  
18 to a neutral location in St. Louis.

19 This consent-based process was  
20 applied with some agonizing - in one week, the  
21 process was applied. And over time as it was  
22 implemented, it was successful.

1                   Now, here are the principles  
2 behind the process that was used. And I would  
3 advocate that these are the general principles  
4 that should be in any consent-based process.

5                   First of all, you got to realize  
6 these are complicated subjects and human  
7 beings have very short memories. And  
8 institutions even have short memories. So,  
9 try to put together a process that will  
10 endure. Nothing will stick to you unless it  
11 affects you personally somehow.

12                   Unfortunately, this particular  
13 subject affects all of us. So, we need to be  
14 represented, but we have to be represented  
15 authentically.

16                   All stakeholders must be in the  
17 room if you can, or be represented in the  
18 room, so that you don't have the wicked fairy  
19 coming back and putting the kingdom to sleep.  
20 And then, wrestle through the contentious  
21 issues without using confrontation, and there  
22 is a process to do that. And that process

1 goes through a sequence, which I lay out  
2 before you.

3 It's, first, develop a detailed  
4 description of the best possible outcome that  
5 you would have. Not easy to do, but very  
6 worthwhile doing and very long term.

7 Think of all the ways to achieve  
8 that success and document all those ways. Set  
9 priorities. That was talked about in the  
10 earlier panel. And there is a methodology  
11 that uses the inherent ingenuity and knowledge  
12 of human beings to set those priorities.

13 Organize from that, an action  
14 agenda. Work that plan. Assign people,  
15 dates. Do it short term to get started toward  
16 the long-term detailed description of what you  
17 want eventually. And then repeat this process  
18 every six months or whenever change in  
19 circumstances demand.

20 There are sources for this  
21 process, and there are many other processes  
22 that are mentioned. One of the other

1 panelists here today will talk about an  
2 overall look at the various processes, and I'm  
3 looking forward to hearing about that, but I  
4 do know of documentation of the process I just  
5 described. It's in a book that's available  
6 from Amazon.com, *Recreating Democracy,*  
7 *Breathing New Life Into American Communities.*

8 We even have an organization, a  
9 nonprofit called Running Star Institute. Dr.  
10 Michael Kelly is the president of that. He  
11 happens to be in the room at the back of the  
12 room there, I think, with Marge Kilkelly.

13 And then the Department of Energy,  
14 Office of the Secretary should be asked about  
15 this process and how they have  
16 institutionalized it or not. And finally,  
17 just Google "consensual democracy," and you'll  
18 be amazed at the number of things that pop up.

19 So, that's basically the story of  
20 the waste isolation pilot project. And I'm  
21 eager to hear what the other panelists have to  
22 say.

1 MS. WILTSHIRE: I don't have  
2 slides. I'm Susan Wiltshire, and I don't have  
3 slides. But I think you can remember my  
4 points, because I have three points. You can  
5 keep track of three and make your own slide in  
6 your mind.

7 I got involved with radioactive  
8 waste first in 1978 with President Carter's  
9 Interagency Review Group, which was a massive  
10 review even larger than this one, of high-  
11 level folks interested in a problem they  
12 thought needed immediate attention in solving.

13 And there was a hearing in Boston.  
14 I was President of the League of Women Voters  
15 and I chaired the hearing. Never heard of  
16 radioactive waste. Spent all day listening to  
17 people from the Clamshell Alliance in New  
18 England down to the Palmetto Alliance in South  
19 Carolina.

20 And that review resulted in energy  
21 and some agreement, and eventually in the  
22 Nuclear Waste -- the Low-Level Radioactive

1 Waste Policy Act of 1980, and the High-Level  
2 Waste Policy Act of '82.

3 In the interim, as I - this is the  
4 tar-baby issue, we used to call it. You could  
5 put your hand in it once you get stuck, and  
6 you keep being involved. I was involved over  
7 time.

8 The Board on Radioactive Waste  
9 Management thought we needed another review.  
10 And they organized one themselves and resulted  
11 in rethinking high-level waste. Glenn Paulson  
12 was involved with that, and Tom Isaacs, who  
13 are involved with this one.

14 It didn't have much standing,  
15 because it was just an internal board effort.  
16 People who were there learned a lot and  
17 developed some new thinking, but it didn't get  
18 much further than that.

19 And I applaud having this one now  
20 that gets a broader look and a broader  
21 thinking and, perhaps, more attention. And I  
22 recommend that the program, whatever

1       eventuates, be subject to regular, periodic,  
2       open reviews like this one at a high level  
3       that gets attention to decide a couple of  
4       things.

5                   One, are we on the right track,  
6       still? All the pieces were there in 1978.  
7       Almost everything that's talked about now, was  
8       discussed then. How do you put the pieces  
9       together? And the Waste Policy Act said we're  
10      going to try putting them together in this  
11      way.

12                   They left a couple of things to be  
13      decided later. And I think the review, a  
14      really well-organized regular review five  
15      years, ten years would have helped. Maybe  
16      some of those decisions that were made in the  
17      interim, for instance, the decision not to  
18      pursue a second repository, was made in a  
19      fairly small group of decision-makers without  
20      the open review or understanding or chance for  
21      discussion. The same thing with suspending  
22      Yucca Mountain.



1 I think regular reviews can get -  
2 help us understand whether we've got the right  
3 pieces in place. And if we decide to change  
4 the pieces, there's more agreement among  
5 people and understanding about why those  
6 decisions are made. And the other is that we  
7 - whether we're implementing it in the right  
8 way, which is also being discussed here. So,  
9 have we got the right pieces? Are we  
10 implementing it in the right way? Regular  
11 review.

12 I agree completely that we need a  
13 separate organization to carry this out. That  
14 was one of the things that was contemplated  
15 earlier. And that the Waste Fund needs to be  
16 accessible to that organization.

17 But the organization needs to be  
18 put in place from the beginning to incorporate  
19 the institutional questions at the highest  
20 level, and the public involvement, and the -  
21 this sort of soft side at the top. Right from  
22 the beginning, it ought to be an organization

1 that values the need to understand and operate  
2 an open, accessible, accountable way that  
3 starts at the top at the staff always, in  
4 strategic planning, the public policy, the  
5 public involvement, the discussion among  
6 various levels of government aren't add-ons.  
7 They have to be integral. And also through  
8 the line management in the organization, they  
9 need to be part of the evaluation of all  
10 managers.

11 Now, Mary, you used a phrase that  
12 I don't like at all called "lessons learned,"  
13 because we don't learn them. People write  
14 lessons learned documents all the time after  
15 every process. And the people who wrote them,  
16 learned the lesson, the people who carried out  
17 the failed process, or maybe it succeeded,  
18 learned them, but the organization doesn't  
19 learn them.

20 So, we need an organization, a  
21 learning organization that's open and  
22 accountable and that is set up to be that way

1 from the very beginning, which leads me to the  
2 third point.

3 I was very disappointed when I  
4 came to the end of the recommendations of the  
5 Commission to see for immediate action,  
6 there's no recommendation to continue the  
7 discussion about what is a consensus building-  
8 based siting process. How is an organization  
9 design that's open and accountable? How  
10 should the federal system work in this case?  
11 What are the relationships between state,  
12 local, federal interests? We need to have  
13 Department of Energy fund an independent,  
14 consensus-building process, multiparty  
15 process, to flesh out some of the ideas that  
16 have begun in the report.

17 I read through many things that I  
18 have sort of hanging around the house. One of  
19 them is a report from the Conservation  
20 Foundation, Resolve. It was a 30-person,  
21 multi-interest discussion right after the  
22 Interagency Review Group meeting that talked

1 about the whole range of issues.

2           And I - the words are almost  
3 exactly like the words in the current report.  
4 The words are there. We didn't do it. We  
5 need to do it, and then to review it again,  
6 learn the lessons, get an organization that  
7 can put them in place. I want you to know  
8 that I admire the words in this report. I  
9 think it's very well written and I want to  
10 thank the author of the report. It's clear  
11 what they're saying, but we do need to have  
12 those three things. I think we clearly need  
13 to have a regular review. We need to have -  
14 okay, just summarizing.

15           We need to have a regular review.  
16 We need to have an organization from the first  
17 that's able to incorporate these kinds of  
18 interests in it, because it's part of the  
19 management structure and the accountability of  
20 management. And we need to continue this  
21 conversation in a well-designed, independent,  
22 consensus-building task that will not lose the

1 momentum that started with this commission and  
2 with these meetings. Thank you.

3 MR. TULER: Hi, I'm Seth Tuler.  
4 And I live in - well, near Greenfield,  
5 Massachusetts. And I work at the Social and  
6 Environmental Research Institute. I won't say  
7 much about myself. But if you want to find  
8 out more about what we do, you can look at the  
9 website.

10 I guess I'm going to follow up on  
11 several of the points that have been made so  
12 far. First, just when I read the report, the  
13 draft report, these are some of the things  
14 that I identify right away. And John went  
15 over these this morning, that many of the  
16 issues are social, institutional, economic,  
17 political. And maybe the technical issues are  
18 not as great.

19 And, actually, this is - I was on  
20 the National Academy Committee for  
21 Transportation of Radioactive Waste, and this  
22 is actually a full conclusion or finding that

1 we have, too, that it's the social kind of  
2 dimensions that are the most thorny and  
3 problematic.

4           There's a staged - to have a  
5 staged adaptive learning-based process is  
6 needed. A new organization should lead the  
7 effort. And then there's this host of kind of  
8 principles that should guide all aspects of  
9 waste management from equity, transparency,  
10 participation, consent. And so I'm like,  
11 great, good, I can agree with those  
12 principles, and I think probably most or the  
13 rest of us can. But what I want to sort of  
14 talk about is, well, what do these mean in  
15 practice?

16           And I have a finding and a  
17 recommendation right away for the Commission  
18 to consider. And the first - and this is an  
19 empirical finding that while there's a  
20 widespread agreement on universal principles  
21 like equity, fairness, consent, the rules for  
22 how to achieve those in actual practice,

1 there's not widespread agreement about those.

2 At the same time, I think that  
3 there needs to be some kind of minimal  
4 standards are needed to ensure that equity and  
5 consistency are achieved on a consent-based  
6 process. And that's important also for  
7 achieving legitimacy in any decisions.

8 And so, I think that what the  
9 Commission should do is they should also have  
10 a recommendation that there be generic - well,  
11 they use the - this is their language, generic  
12 standards or basic initial standards for what  
13 they mean by consent or what should be  
14 consent, fairness, participation and all these  
15 other sort of general principles or what some  
16 might even call platitudes. So, we need  
17 something like that. And they have already a  
18 recommendation in there about basic initial  
19 siting criteria, but it's not explicitly about  
20 what's consent. And I want to illustrate this  
21 by just a couple quick slides, what I mean by  
22 this. And this is a figure or a drawing about

1 - from some work that we did about what's a  
2 good decision-making process around  
3 environmental or risk issues? And this is  
4 just to illustrate a couple points.

5           We looked at the kind of  
6 procedural features that people thought were  
7 important to have around two dimensions. One  
8 is what's the role of science in making the  
9 decision, and what's the role of sort of the  
10 breadth of inclusion and representation and  
11 the deliberation that goes on in this.

12           And we looked at four kinds of  
13 cases; watershed management, forestry  
14 management, cleanup and public health issues  
15 around DOE's nuclear weapons facilities, and  
16 national parks, establishing national parks.

17           And what this is sort of  
18 representing is that there is - it's a smudge,  
19 right? People kind of agree in sort of  
20 general ways about the role of science, about  
21 how decisions should be made and who should be  
22 included, but that there was wide variation



1 around the kind of procedural features that  
2 people thought were important to defining what  
3 a good process would be. And we had 56  
4 procedural features that people ranked, and  
5 all of them were ranked high by some people,  
6 and all of them were ranked low by other  
7 people. So, there can be a wide distribution.

8 So, now when we talk about  
9 consent, you know, well, what does that mean,  
10 consent? Who gets to decide, right? Is it  
11 local officials, or the elected leaders? Is  
12 it a referendum of residents? Is it the host  
13 community? Is it the adjacent communities,  
14 the state, the tribe, you know? And how many  
15 people within those groups have to agree?

16 And I had - I chose three  
17 examples. The first one is Finland, okay. It  
18 was a vote of 20 to seven. The second one is  
19 the waste control specialist waste facility in  
20 Texas where there was a referendum. That's  
21 the plurality of three votes that sort of  
22 allowed the bond to go - measure to go

1 forward. And the third one is the private  
2 fuel storage facility in Utah where a small  
3 minority of the elected or the tribal leaders  
4 chose and that there's actually - there's a  
5 plurality of the tribal members that joined a  
6 legal lawsuit to oppose it, okay. But all  
7 those were agreements. Sort of consent,  
8 right?

9           What does it mean for informed  
10 consent - I'm not going to look at that - and  
11 when does a community get to say no or  
12 reconsider what they've agreed to, which is a  
13 feature that's in the notion of consent. So,  
14 what I want to lead to is that these decisions  
15 can't be made by experts. Maybe they can't  
16 even be made by just a vote. They should be  
17 instead based on the best possible - or the  
18 use of expert science information and the  
19 wisdom of laypeople to make - these are moral  
20 choices.

21           And what I would argue, and I  
22 think that the Blue Ribbon Commission has sort

1 of - well, my reading of it is they actually  
2 agree with this as you're not the right group  
3 to resolve this. But instead of - we talked  
4 about punting sort of down the road. Mary  
5 talked about that in the last session, and  
6 others. I'd like you to put a stick in the  
7 can and kind of push it in the path that you  
8 want it to go towards.

9           So, they have some recommendations  
10 about a proposed database for past experience.  
11 I would say that's inadequate to help push it  
12 very far down the road. There's some advisory  
13 boards and oversight. The Nuclear Waste  
14 Technical Review Board, the GAO Stakeholder  
15 Advisory Group, those are helpful, but also  
16 insufficient.

17           So, here's my second  
18 recommendation, is that the Commission should  
19 have a strong argument and proposal for how to  
20 structure this new organization and ensures  
21 that high-quality social science -- so,  
22 informing how to deal with these social

1 problems and challenges that include a social  
2 science and empirical evaluation to inform  
3 planning and management.

4 So, what does it mean for the  
5 public to be informed? Have they been heard?  
6 Are the best practices being followed, and  
7 what can we learn from elsewhere? And I would  
8 just point to, for example, the FutureGen  
9 process which was about carbon capture and  
10 storage. That was also a DOE process.

11 I'm almost done. Well, actually  
12 this is my last slide. Just some examples of  
13 how to achieve this and there's different  
14 techniques for doing participatory technology  
15 assessment, consensus conferences. They've  
16 been applied in the U.S. The Danes regularly  
17 use - routinely use consensus conferences to  
18 inform technological decision making.

19 There is recommendations for and  
20 experiences within the DOE, too, about how to  
21 gather evidence about what's working and  
22 what's not, and what people prefer and what

1 they don't prefer. And the second one here on  
2 that second bullet point is from the Food and  
3 Drug Administration, which has actually been  
4 working really hard on this issue.

5 And the second is the Nuclear  
6 Waste Technical Review Board, they don't have  
7 much to say about the social sciences. And  
8 so, I would like to either see that board  
9 expanded, or another board created that  
10 address these issues directly and  
11 specifically.

12 And the whole thing is we're  
13 trying to integrate what do people want and  
14 what do they care about in their specific  
15 situations, and merging that with what do we  
16 really know from practice and that we can  
17 demonstrate? And I also just finally say that  
18 this is really - if it's a learning-based  
19 process, you have to evaluate and it needs a  
20 broad input in terms of that evaluation.

21 So, that's my - thanks.

22 MODERATOR LEWIS: Thank you, all.

1 Very provocative presentations. Before I open  
2 it up generally to questions, Dr. Peterson has  
3 indicated that he has a question.

4 MEMBER PETERSON: Thank you very  
5 much. I hope people can hear me on the panel.  
6 First, I'd like to just discuss my  
7 appreciation. I have greatly enjoyed and  
8 learned from listening both to this panel and  
9 from the previous panel.

10 My specific question actually is -  
11 and I'm not sure if - maybe multiple people on  
12 the panel might want to contribute to answers,  
13 but the - ultimately, implementation of the  
14 set of changes that the Blue Ribbon Commission  
15 has recommended in this draft report and that  
16 we're seeking additional input on will require  
17 a fairly major amendment to - set of  
18 amendments to the Nuclear Waste Policy Act.

19 There's one specific area that I'm  
20 not sure has been touched on yet by the panel,  
21 but I think it's important. And the panel can  
22 probably provide some guidance on that. And

1 that relates to in the Nuclear Waste Policy  
2 Act, there are provisions that relate to how  
3 to assess and then provide compensation to  
4 local communities, counties and states that  
5 are impacted by - that experience the  
6 different types of negative impacts from the  
7 construction and operation of the various  
8 facilities that are needed in terms of  
9 disposal and consolidated storage.

10 The Commission reviewed those in  
11 its draft report. It says that it appears  
12 that the structure of how to approach this  
13 question of assessing and then providing  
14 compensation, you can think about a variety of  
15 things that would include, for example, bypass  
16 roads and other things to reduce impact,  
17 appears to be fairly well structured.

18 There's also the question of  
19 providing benefits to local communities and  
20 states. And there, actually, I think we've  
21 concluded that the current structures of  
22 what's provided in the Nuclear Waste Policy

1 Act is not sufficient, may even be  
2 counterproductive, and that changes are  
3 needed, but I appreciate thoughts.

4 And if not immediately, perhaps  
5 just in maybe some written input as to whether  
6 there's changes needed from the perspective of  
7 how compensation might be determined and then  
8 provided for negative impacts associated with  
9 taking on these burdens. And then also what  
10 the appropriate structure perhaps might be for  
11 benefits that might be provided for those  
12 communities and states that end up helping the  
13 nation to solve these major problems that we  
14 need to grapple with.

15 I appreciate thoughts from the  
16 panel on this.

17 MODERATOR LEWIS: Thanks, Per.  
18 Anybody on the panel like to respond?

19 MS. LEVINE: This is Sandra Levine.  
20 The report certainly recognizes that the  
21 Policy Act would need to be changed to address  
22 this.



1 I think it probably needs some  
2 further thoughts, but it needs to start with  
3 the assessment of what are the burdens that  
4 you're actually imposing on a community, and  
5 what does that - what is the compensation that  
6 that community both needs or desires in order  
7 to take on that burden.

8 It's a conversation that has not  
9 happened in the range of environmental matters  
10 or energy matters throughout America and  
11 throughout history, at least, for the last 50  
12 years.

13 So, I think you may be starting  
14 from scratch. But, gee, isn't this a great  
15 occasion or a great opportunity to figure that  
16 one out? And I look forward to doing that.

17 MODERATOR LEWIS: Others on the  
18 panel?

19 MR. TULER: This is Seth, so you  
20 know. I guess I would suggest - well, I think  
21 it was in the presentation about the report  
22 about needing to negotiate with the

1 communities about, well, what are the problems  
2 they foresee, what do they want compensation  
3 for, what would be adequate compensation?

4 I think that that has to happen at  
5 that level that it can't just be determined in  
6 advance, because each community will be  
7 different. And the kinds of impacts that they  
8 might be worried about most are going to be  
9 different.

10 Again, I don't have the answer for  
11 this, but I also think that there should be  
12 some process. I mean, it's like you have to  
13 start somewhere. You can't keep saying we  
14 should just sort of have these great concepts.

15 So, I do think that also there  
16 needs to be some kinds of standards about how  
17 that negotiation is going to take place, what  
18 might some of the minimal things be in terms  
19 of that.

20 I think that there's other  
21 examples from the FutureGen process and from  
22 Europe, other cases, too, where they talked

1 about different kinds of benefits that didn't  
2 really have to do with the waste specifically,  
3 but other benefits that the community wanted.  
4 And they would be willing to trade off for  
5 that.

6 So, I think those are important to  
7 look at. It's a vague answer, but -

8 MODERATOR LEWIS: Anybody else on  
9 the panel?

10 MEMBER PETERSON: Thank you.

11 MODERATOR LEWIS: Okay, if there's  
12 no other -

13 MR. TULER: Actually, I have one  
14 other thing I wanted to say.

15 MODERATOR LEWIS: Okay.

16 MR. TULER: Something that was put  
17 together in the report, was that there's  
18 compensation or benefits in joint hazard  
19 management, and they were kind of lumped  
20 together.

21 And I think that opportunities for  
22 communities to sort of participate in the

1 monitoring, just oversight evaluation of the  
2 facility's operation or other decisions that  
3 are made around that or the process leading up  
4 to it are also really important.

5 I think a sense of control can go  
6 a long way of helping communities feel more  
7 comfortable.

8 MR. THOMPSON: This isn't a direct  
9 answer to the question you asked, but I was  
10 very impressed with what Seth had to say about  
11 how to institute a process.

12 And I want to put some words in  
13 your mouth, if I may, Seth, by saying  
14 shouldn't the BRC report have criteria in it  
15 for a consent-based process? Actually be  
16 explicit about the criteria for what's going  
17 to be a successful process, and then apply  
18 that to determining compensation and focusing  
19 on long-term outcomes and so forth and so on?

20 So, that would be my  
21 recommendation to the BRC. And I think the  
22 same kind of thing could be applied to the

1 very first organization. The BRC is  
2 recommending an organization, but what's the  
3 criteria for them getting going with the right  
4 set of criteria for their consent-based  
5 process?

6 MODERATOR LEWIS: Since you've got  
7 the words put in your mouth, do you want to -

8 MR. TULER: Well, yes. I agree  
9 with part of them. Let me give an example.

10 I think that a criteria ought to  
11 be that the consent needs to come from more  
12 than just local officials, because I think  
13 that it's also - it's an empirical -  
14 demonstrated empirically that local officials  
15 and state officials, elected representatives,  
16 don't always represent the preferences of the  
17 communities they represent.

18 They are often concerned about  
19 other kinds of issues, economic issues, maybe  
20 not some of the other ones that people in the  
21 community care about.

22 And so, I think a standard for

1 achieving consent should be a process that is  
2 broadly participatory, inclusive and it  
3 balances input from both of those. And it's  
4 responsive to the kind of preferences of both  
5 of those groups.

6 How that is actually done, I think  
7 it depends a little bit on the community and  
8 how they want to talk about it and how they  
9 want to express their preference, and what's  
10 the best way to ensure that it's an informed  
11 preference.

12 MODERATOR LEWIS: Okay, go ahead.

13 MS. WILTSHIRE: A change in the  
14 conversation slightly. Seth mentioned - or  
15 someone mentioned the phrase that people use,  
16 it's not a technical problem, it's a political  
17 problem.

18 It is a technical problem, and it  
19 is a political problem. It's both. But in  
20 people that use that phrase usually mean, but  
21 we know how to tackle the scientific and  
22 technical ones, because that's a process we've

1 gone through a lot.

2           You go through siting a  
3 repository. They know how to approach it.  
4 They know how to make their plans. They get  
5 peer review. They've got the structures. But  
6 people who have worked in these areas  
7 frequently don't know how to approach the  
8 societal problems.

9           And I think what you've heard from  
10 the other members of the panel, people have  
11 thought a lot, and have also had a lot of  
12 experience. And we need to realize that it's  
13 just as approachable as scientific/technical  
14 problems. Just have to be taken seriously  
15 with the processes in place for the feedback  
16 and evaluation that Seth talks about, some  
17 analysis.

18           It's not terra incognita. We know  
19 how to tackle these. We've got experience.  
20 We just need to take it as seriously and get  
21 the learning organization in place that will  
22 allow it to be taken seriously and to hold the

1 organization accountable for this side, as  
2 well as for the scientific side. And maybe we  
3 do need an analogous social science,  
4 political, whatever to the TRB that will keep  
5 these issues examined carefully, learned about  
6 and at the front of the policy.

7 MODERATOR LEWIS: Thank you.

8 MR. TULER: Can I add one more  
9 thing about that? The report that I cited for  
10 the Food and Drug Administration, part of  
11 their argument is that it's not really that  
12 expensive compared to the engineering, for  
13 example.

14 And my little anecdote is somebody  
15 I worked for when I was in grad school, became  
16 the Chief Social Scientist for the National  
17 Park Service. And so, the National Park  
18 Service is filled with ecologists, not  
19 engineers. But he had to argue - he made the  
20 argument that at least seven percent of the  
21 budget on research should be for the social  
22 sciences.



1                   And he figured, well, the  
2                   ecologists couldn't - it would be a lot more  
3                   than there already was, a lot of them do a lot  
4                   of work, and how can an ecologist say with a  
5                   straight face that the social sciences  
6                   shouldn't get seven percent of the budget.

7                   But, I mean, the Commission's  
8                   report speaks about research and development,  
9                   but I don't recall it mentioning research and  
10                  development at all to deal with the social  
11                  kinds of problems and challenges. It's only  
12                  about engineering and technical issues.

13                  But you're saying that's not the  
14                  biggest problem, so -

15                  MODERATOR LEWIS: Let's go ahead  
16                  and open it up for questions from the  
17                  audience. How about right here, and then  
18                  we'll go over there. Let me start right here.

19                  MR. SHADIS: Starting here, okay.  
20                  Ray Shadis again, and I'd like to get the  
21                  panel's response on this.

22                  On the issue of lessons learned, I

1 don't know how many of you are familiar with  
2 the Seinfeld episode in which George's father  
3 founds the holiday of Festivus.

4           Festivus is a family gathering,  
5 holiday gathering. And just like the ones in  
6 my family, it begins with an hour of  
7 recrimination. And I'm going there because it  
8 strikes me that in your discussions, and they  
9 were brilliant - that there was not a great  
10 deal of focus on lessons learned. That we  
11 would not be here today, nor would the BRC be  
12 functioning, I think, and I may be  
13 oversimplistic here, if Yucca Mountain wasn't  
14 a complete technical, financial, scheduling,  
15 contractual bust.

16           And without a review in earnest  
17 with all the consensual trappings of the  
18 failure of Yucca Mountain, then we're starting  
19 without that tail stream or we don't have the  
20 momentum in any particular direction. It's  
21 like being born anew on this whole idea. And  
22 I think if that's the case, then it's a real

1 waste, a second waste of the 10 1/2 billion  
2 dollars that went into Yucca Mountain.

3 So in any case, if I'm missing  
4 something about your process that there is not  
5 included in it a review of where we've been,  
6 then I need correction on that. Maybe you  
7 could respond to that inarticulate thing.

8 MS. WILTSHIRE: I'm not going to  
9 directly respond to that part of the question.  
10 Although, someone else may want to. But  
11 frequently for a government to act, it takes  
12 some sort of forcing mechanism, an emergency,  
13 a catastrophe, something to concentrate the  
14 mind. And that's just the way people set  
15 priorities.

16 That's one reason I would like to  
17 see a regular, high-level, broad-based review  
18 schedule so you don't wait until you've got  
19 that failure-forcing mechanism to reassess.  
20 Because you can sometimes see, oops, the  
21 failure is coming upon us if we don't change  
22 directions, before you have the complete train

1 wreck.

2 I think if we took a look at the  
3 program regularly, it's going to be so long-  
4 lasting and so multifaceted that we need  
5 institutional memory, we need some  
6 consistency, we need reevaluation and that's -  
7 - I think this kind of review can help do that  
8 without having to have a failure before you  
9 get there.

10 MODERATOR LEWIS: Wait for the  
11 microphone.

12 MR. SHADIS: I'm sorry. At Yucca  
13 Mountain when they found that they could not -  
14 - on review, as you're suggesting, an interim  
15 review when they found they could not meet  
16 long-term geologic radiation release levels,  
17 they moved the goal post and made those levels  
18 just that much higher so that they could, in  
19 effect, claim to have reached them. And I'm  
20 just going to suggest to you that your  
21 proposition of constantly adjusting as you go  
22 forward in the process without a real

1       commitment to standards, will allow for just  
2       that. NRC does it every day. Every day they  
3       make life easier on the licensees and harder  
4       on the environment.

5                   MODERATOR LEWIS: And I'm just  
6       going to - there's quite a few hands that had  
7       gone up, and I want to ask people to try to  
8       get to your question quickly so I can get  
9       around to as many people as possible. We'll  
10      have about ten more minutes before we need to  
11      transition to the next panel. Thank you.

12                  MS. GRINNELL: I'd just like to say  
13      that this -

14                  MODERATOR LEWIS: Can we get you to  
15      introduce yourself, please?

16                  MS. GRINNELL: Debbie Grinnell.

17                  MODERATOR LEWIS: Thank you.

18                  MS. GRINNELL: I'd just like to say  
19      that this panel has been amazing. And this  
20      expertise and these comments for structuring  
21      the process and holding to the integrity of  
22      the process is so critical, but I agree with

1 Seth which is that you have to start  
2 somewhere.

3 And although, unfortunately, I  
4 came in late because of traffic, I didn't hear  
5 the very beginning of this discussion. But it  
6 needs to be said that the NRC regardless of  
7 the research and the obvious threat that spent  
8 fuel poses, has not required one single spent  
9 fuel rod to be removed from the spent fuel  
10 pools of any nuclear plant in this country for  
11 which there are 104.

12 So, despite what's happened at  
13 Fukushima, which we all painfully know,  
14 despite what happened at 9/11 when the need to  
15 move to hardened onsite storage became  
16 apparent, the bureaucracy at the NRC has not  
17 moved one single rod out of the pool. And  
18 they have over - they are now at over  
19 capacity. We have old plants.

20 Pilgrim has four times the  
21 capacity in their spent fuel pool. We know  
22 the seriousness of this situation. And if

1 this commission is to tackle long-term  
2 storage, this is an immediate and urgent  
3 threat in this country that needs to be  
4 addressed seriously, and it needs to be the  
5 first priority. And what needs to be done is  
6 the NRC needs to be directed to do this. And  
7 the Commission will continue to look at long-  
8 term storage when interim storage is dealt in  
9 a safer way.

10 At Fukushima, the dry casks did  
11 not become trajectories one mile away and  
12 contaminate the entire nation. They remained  
13 intact. There is a lesson learned here, and  
14 we have to learn it. Which means we have to  
15 implement it, and the NRC will not do it on  
16 their own. They need to be directed to tell  
17 it - tell them to do it.

18 And the Commission has the  
19 authority to say that we will continue, we  
20 will look at our processes, we are developing  
21 our framework. But until you move spent fuel  
22 five years and older into dry cask storage and

1 require it of the industry, we will not move  
2 forward.

3 MODERATOR LEWIS: Thank you. Other  
4 questions?

5 (Applause.)

6 MODERATOR LEWIS: Back here, and  
7 then I'll come up forward, please.

8 MR. KELLI: My name is Michael  
9 Kelli. I really want to reinforce what this  
10 panel has brought up and sort of ask a  
11 question.

12 The first study of decision-making  
13 took place in 1905. So, we've got a hundred  
14 and five or six years on how to make wise  
15 decisions. If you look at the research that's  
16 been done, you can - there are about four  
17 requirements emerged that you - you must meet  
18 these four requirements if you're going to  
19 have a wise decision.

20 And by wise, I mean -

21 THE COURT REPORTER: Can you speak  
22 into the mic?



1 MR. KELLI: Thank you. There are  
2 four requirements that emerged from the  
3 research. And you have to meet these four  
4 requirements in order to make a wise, which is  
5 to say a high value-added decision. So,  
6 there's clear science underlying this. This  
7 is not - there is a hundred years of research  
8 to back this up.

9 There's a real opportunity, I  
10 think, for the Blue Ribbon Commission to be a  
11 little bit more operational about what it  
12 means by a consent-based approach. I mean,  
13 there's enough research, there's enough  
14 background, Dan's and my experience at WIPP,  
15 it would be very, very simple to define what  
16 exactly those requirements are, and I wonder  
17 if it would be possible to make the  
18 definitions or the recommendations of the  
19 Committee in this area a little bit more  
20 operational. I mean, I know it's feasible to  
21 do that. The knowledge is in place. Can the  
22 recommendations be adjusted to be a little bit

1 more operational so that you can say, yes, we  
2 are doing it, or, no, we are not? Thank you.

3 MODERATOR LEWIS: Anybody on the  
4 panel want to have a quick response?

5 MR. TULER: I just want to, I  
6 guess, express like a tension that there is  
7 about that. I mean, I agree. There's a lot  
8 of research. There's a lot of research about  
9 how to make good decisions, how to weigh  
10 evidence, but sometimes wise decisions aren't  
11 viewed as legitimate decisions or fair  
12 decisions.

13 And with this kind of an issue,  
14 there's sort of a tension among a lot of these  
15 different needs. And so, part of it is trying  
16 to find a way, a structure and a process of an  
17 organization or an entity that can navigate  
18 through those in a way that people can be  
19 satisfied with. And so I think that, you  
20 know, Susan brought up the issue about  
21 accountability. And there's a lot of issues  
22 about capture of organizations, using the best

1 practices for making decisions, for weighing  
2 evidence.

3 What I would hope that the  
4 Commission can do is kind of create,  
5 operationalize in a sense, a structure that  
6 helps to ensure that an organization will  
7 behave in the way that we want it to behave.  
8 Which is really challenging, because we can't  
9 make it do something, but what are the ways  
10 that we can sort of force its hand?

11 And I think Susan's question  
12 about, you know, your points about how do we  
13 ensure it's accountable, that's one of the  
14 main things. And that's, I think, a complaint  
15 that we hear about with the NRC, the EPA, the  
16 DOE. People have a lot of questions. Whether  
17 they're realities, perceptions, I mean, I  
18 don't want to get into that, but it's there  
19 and we need to sort of try to address that.

20 MODERATOR LEWIS: Anybody else on  
21 the panel?

22 MS. LEVINE: I would just add I

1       certainly agree that the Commission, it would  
2       be very helpful to have more operational  
3       recommendations.

4                   I think the recommendations that  
5       are in there are of the nature that nobody  
6       could disagree. Of course you need a consent-  
7       based process, but what does that actually  
8       mean? And how are you actually going to get  
9       there? How are you going to ensure that there  
10      is both accountability and that there's a  
11      level playing field among all the participants  
12      involved? And unless and until you get that,  
13      you're not going to find a solution.

14                   MODERATOR LEWIS: Okay. The good  
15      news is there's lots of hands up. Dr.  
16      MacFarlane, I'll go to you. The bad news is  
17      that we're about out of time for this panel.  
18      But there is going to be lots of opportunity  
19      this afternoon to roll up your sleeves and  
20      explore some of these issues in more depth.

21                   I'd like to take Dr. MacFarlane's  
22      question, and then we're going to transition

1 to the next panel in fairness to them.

2 MEMBER MACFARLANE: Great. Thank  
3 you. So sorry, everybody else, for jumping in  
4 line here.

5 Anyway, I hope you guys have all  
6 submitted written comments, because it's very  
7 good and I'm sure I didn't take good enough  
8 notes. So if you haven't, I urge you to  
9 because I find this really valuable.

10 But in general, Seth, I have lots  
11 of questions for you all, but I'll just try to  
12 keep it short. Your last comment sort of  
13 prompted me. I've been thinking a lot about  
14 what we've written about this new entity. And  
15 so, I'm interested in all of your critiques of  
16 what we've got so far in terms of this new  
17 entity with the Board of Directors structured  
18 as we have.

19 And maybe you guys haven't had a  
20 chance to read that section of the report in  
21 detail. But if you haven't, I would urge you  
22 to. And then to give us some feedback, or

1 even just give me some feedback on that,  
2 because you all have a lot to offer and we  
3 certainly aren't a bunch of old, wisepeople  
4 figuring everything out.

5 So, we can use all the help we can  
6 get.

7 MS. WILTSHIRE: May I ask you a  
8 question?

9 MEMBER MACFARLANE: Sure.

10 MS. WILTSHIRE: Did you have any  
11 organizational expert help?

12 MEMBER MACFARLANE: We had some.

13 MS. WILTSHIRE: Good, because it's  
14 just like so many things that you don't know  
15 about, it turns out there are people who do.

16 MEMBER MACFARLANE: I know, but I  
17 think we can use more.

18 MS. WILTSHIRE: No, I'm not  
19 questioning that. I'm just saying for me, I  
20 couldn't give you much help, but I know that  
21 people can. And it's important to get  
22 knowledge where it exists. And that's one of

1 the things about the social science research.

2 A lot of people - these things  
3 look so impenetrable. Turns out some people  
4 know something.

5 MEMBER MACFARLANE: Yes, I'm aware  
6 of that.

7 (Laughter.)

8 MEMBER MACFARLANE: I'm married to  
9 one, so -

10 MS. WILTSHIRE: Oh, that explains  
11 it.

12 (Laughter.)

13 MODERATOR LEWIS: Okay. Well, our  
14 panelists are going to be mixed through the  
15 groups this afternoon. There will be, as I  
16 said, more opportunities to pursue your  
17 questions with them. And I apologize for  
18 moving us along, but I think we need to  
19 acknowledge and thank this panel and then ask  
20 the next set of panelists to come forward.

21 (Applause.)

22 MODERATOR LEWIS: And this is the

1 panel dealing with transportation and we have  
2 quite a large group. And as they're taking  
3 their places, I'm going to acknowledge Cort  
4 Richardson who's going to kind of kick things  
5 off for this discussion.

6 (Off-record comments.)

7 MR. RICHARDSON: Good morning. If  
8 we could take our seats and resume the panels,  
9 this would be helpful.

10 Okay. My name is Cort Richardson.  
11 I am the Director of the Northeast High-Level  
12 Radioactive Waste Transportation Project, and  
13 I'm going to introduce the panel. We're going  
14 to run this session a little bit differently  
15 than the rest of the panels are organized.  
16 Instead of having a presentation from every  
17 member, I'm going to start off by introducing  
18 each of the panelists. And then we're going  
19 to have a presentation from two of them that  
20 will take up most of the time that we've  
21 allocated for presentations.

22 And then I'm going to wrap up with



1 a few ideas and conclusions about the topic  
2 that we're addressing today, which is the  
3 transportation aspect of managing spent  
4 nuclear fuel and high-level waste, and also  
5 taking a brief look at the processes that have  
6 gone into organizing that kind of work in the  
7 past and what's worked and what hasn't worked,  
8 and what the Commission has to say about it  
9 and what our recommendations are.

10 We've really just started our  
11 review. And so, our thoughts are going to be  
12 preliminary in terms of the broad scope of the  
13 transportation area. We'll be putting  
14 together complete comments to be submitted to  
15 the Commission by the end of the month,  
16 according to their schedule, but we're here  
17 today to talk in depth about some of the  
18 problems that we see with the transportation  
19 system in America, particularly pertaining to  
20 rail. And we're going to respond to the  
21 Commission's assumptions about what kind of  
22 shape that system is in.

1                   First of all on the far right, we  
2                   have Rich Pinney. He's a nuclear engineer  
3                   with the Department of Environmental  
4                   Protection in New Jersey. And he's also a co-  
5                   chair of the Northeast High-Level Radioactive  
6                   Waste Transportation Project. This is the  
7                   organization that's one of the co-sponsors of  
8                   today's meeting, and one of my major roles is  
9                   to staff that organization.

10                   John Giarrusso who you met this  
11                   morning, is also a co-chair, works for the  
12                   Massachusetts Emergency Management Agency.  
13                   He's already introduced himself.

14                   We also have to his left, Patrick  
15                   Edwards who's also a participant on our task  
16                   force, and a regular one at that. And Pat  
17                   works for the Pennsylvania Public Utilities  
18                   Commission as an FRA, Federal Railroad  
19                   Administration inspector in Pennsylvania.

20                   And to his left, we have Mel  
21                   Massaro who is a hazardous materials and  
22                   radiological materials inspector for the

1 Federal Rail Administration. And Pat and Mel  
2 are going to give a presentation now that will  
3 really present their findings that they have  
4 acquired over the years in looking at rail  
5 infrastructure and what its implications are  
6 for this National Transportation Program  
7 that's contemplated to move the spent nuclear  
8 fuel and high-level waste either to a central  
9 storage facility or a permanent disposal  
10 repository.

11 So, Mel and Pat, you might want to  
12 get up here so you can see the slides a little  
13 better. You can look at the laptop as well.  
14 And with that, we'll get started.

15 MR. EDWARDS: Mel and I got  
16 involved really when we were thinking about  
17 moving some high-level radioactive waste spent  
18 nuclear fuel. We were concerned about the  
19 infrastructure of the railroad system  
20 particularly or actually in Pennsylvania, and  
21 then Mel went into the Federal Railroad  
22 Administration. So, he expanded his knowledge

1 of the infrastructure of other railroads. And  
2 that's what we're going to really talk about  
3 today. Can these rail lines and the short  
4 lines, the ones going to the power plants, can  
5 they carry the load of these casks? And  
6 that's what we're going to talk about.

7 MR. MASSARO: Everybody looks  
8 through the eyes of the Class 1 railroads, the  
9 major railroad. There are approximately 500  
10 operating railroads in this country, freight  
11 railroads. Seven of which are Class 1. So,  
12 you see the disproportionate segment of this.

13 MR. EDWARDS: Class 1s are  
14 railroads, the main feed or the main carrier  
15 railroads. The big ones. The big Class 1  
16 railroads. This is a picture, I believe, in  
17 Pennsylvania, Emporium, Pennsylvania. And the  
18 cars you see actually are state policemen. We  
19 always get cooperation from the police for  
20 security.

21 MR. MASSARO: Yes, this was the  
22 West Valley shipment that took place seven

1 years ago, I guess, now. Five, seven.

2 (Off-record comments.)

3 MR. MASSARO: Like I said, this was  
4 the West Valley shipment that took place five  
5 to seven years ago. This is on the Buffalo  
6 and Pittsburgh Railroad. And this was the two  
7 spent nuclear fuel casks that come out of West  
8 Valley.

9 The task of this was to identify  
10 the short line railroads serving the nuclear  
11 power plants, to establish contact information  
12 with the railroad officials, a field review of  
13 each railroad's physical and operational  
14 infrastructure, and facilitate upgrades to  
15 meet safe, acceptable standards.

16 We began by contacting 28 short  
17 line railroads that will be serving the 74  
18 different sites across the country. These  
19 railroads either have rail access to the  
20 plant, or would have a short, heavy haul to  
21 the nearest railhead. We did a prototype in  
22 September of 2007, where we went to a railroad

1 in Winchester in western and southern New  
2 Jersey for the Hope Creek and Salem plants  
3 just to review what we would be looking at  
4 maybe to start this program.

5 And what we were looking at, the  
6 Physical and Operational Infrastructure and  
7 Survey information, is track information.

8 MR. EDWARDS: What we started  
9 looking for, really, was the class of track.  
10 The railroads are classed by carrier, by their  
11 revenue, but that the condition of the track  
12 is actually classed by track class. Class 1,  
13 2, 3, 4 and on up. We had to look at the rail  
14 weight. The rail weight is generally given in  
15 three-foot segments like 100-pound rail, 130-  
16 pound rail. That goes by three-foot segments.

17 Track ownership, we discussed  
18 people, what their history was, their  
19 commitment to rail safety, their commitment to  
20 rebuilding and maintaining the railroad and  
21 track restrictions. We'll get into track  
22 restrictions. That could be restrictions for

1 high and wide or anything like that.

2 MR. MASSARO: When you get into  
3 track ownership, it may be owned by a county,  
4 a government, a state or a business group, but  
5 operated by another entity that is up for  
6 contract. So, it gets pretty convoluted when  
7 you get into it.

8 Other information we were looking  
9 at was their method of operation. You could  
10 have 261 automatic signal control. It could  
11 be dispatched. Railroads are set up with  
12 blocks that have names. A train crew can  
13 operate between this block and the next block.  
14 They can operate between the blocks safely  
15 without any other traffic coming in against  
16 them. We want to look at that. We want to  
17 look at joint operations. Some railroads have  
18 other railroads coming in and operating over  
19 the same track at the same time. This is very  
20 important when we start moving these fuel  
21 shipments.

22 The mechanical information, we

1 want to look at equipment restrictions;  
2 locomotives, the size of locomotives, the  
3 equipment being used - I don't know why this  
4 is wrong. Let's go back there.

5 Okay. Operating, you want to take  
6 the operating package, Pat, and I'll watch  
7 this?

8 MR. EDWARDS: Yes, the operations  
9 actually most of your large railroads or Class  
10 1s, they have signal territory, they have  
11 dispatchers. They don't have joint ownership.  
12 They are mostly owned by one railroad, one  
13 entity, but then they allow other railroads on  
14 them to operate. Operating rights.

15 Mechanical restrictions, oh my,  
16 that could be anything because of the power,  
17 the weight of the rail, the condition of the  
18 rail. Equipment restrictions actually could be  
19 restrictions of the size of locomotives, the  
20 axle load.

21 MR. MASSARO: Next is grade  
22 crossing information. We're looking at the



1 number of grade crossings on the line, whether  
2 they're active or passive, and we're  
3 documenting them.

4 MR. EDWARDS: Railroad like this or  
5 a picture like this, both of these pictures -  
6 that cask that we saw at the very beginning,  
7 they could actually operate on either one of  
8 these tracks. There's nothing saying that  
9 they cannot. That one there is like a Class  
10 3 railroad. This is excepted track or Class  
11 1. It doesn't matter. If that railroad on  
12 the right, if that track on the right leads to  
13 a power plant, they can run on it. If it  
14 complies with Class 1 or excepted track, we  
15 can't tell them they can't at this present  
16 time.

17 These are the classes of track I  
18 talked to you before. Excepted track, they  
19 can go as high as ten miles an hour. No  
20 passengers, of course. Then it goes from one,  
21 two, three, four and the speeds go up 10, 25,  
22 40, 60. And that's just the way the railroads

1 -- most short lines are one and two. Regional  
2 railroads, regionals are larger railroads.  
3 They're shorter and they're smaller than the  
4 Class 1s. They go around Class 3 up to a  
5 maximum of 40 miles an hour.

6 And then Class 1s, they'll go 60  
7 miles an hour freight.

8 MR. MASSARO: Now, as you can see  
9 here as the track diminishes in quality, we  
10 lower the speeds. So, the impact of a  
11 derailment, there's less collateral damage.  
12 So, the better the class, the higher speed  
13 with the track. Another thing we run into if  
14 it's excepted track, we can't have any escorts  
15 on that track, which is important. So, you've  
16 got to be at least Class 1 or better to have  
17 an escort vehicle.

18 The Department of Energy  
19 appropriated funding to begin a program to  
20 inspect these 28 short line railroads. We did  
21 complete two of the inspections before OCRWM  
22 was dismantled. The two studies we conducted

1 were the Ginna Nuclear Power Plant on the  
2 Ontario Midland Railroad, and the Vermont  
3 Nuclear Power Plant on the New England Central  
4 Railroad.

5 This is showing you a map that you  
6 seen a little earlier of the different  
7 locations of the power plants throughout the  
8 U.S. This map here shows the general rail  
9 system of America overlaid by the STRACNET  
10 program. And, Pat, do you want to explain the  
11 STRACNET?

12 Pat is a track specialist.

13 MR. EDWARDS: Yes, the STRACNET  
14 line is -- actually, the DoD designated these  
15 lines as a STRACNET, strategic rail network.  
16 And when we inspect them, on a federal  
17 inspection report we have to designate that we  
18 did inspect them. They are approved for high  
19 and wide loads and heavy haul. And they're  
20 scattered throughout the country for immediate  
21 defense movements. So, they could really --  
22 DoD could take over the -- tell them that,

1       hey, we have to move these tanks or whatever  
2       from DOT shipments, and the dispatchers of  
3       these large railroads will cooperate.

4               MR. MASSARO: Yes, and these  
5       STRACNET programs are maintained at a higher  
6       quality so we can run it at any time. So,  
7       these tracks are maintained. And if you look  
8       at it, most of these are the main lines of the  
9       seven Class 1 railroads. These are the two  
10      power plants we looked at. And you can see  
11      the red with the STRACNET. But the Ginna,  
12      that's one of the short lines coming off of  
13      it. Vermont Yankee has another short line  
14      coming off the STRACNET.

15             The Ginna on the Ontario Midland  
16      Railroad, as you can see, the power plant is  
17      about right in here, Ginna. And you have to  
18      run east and then south down to CSX where the  
19      connecting railroad would be. There is no  
20      direct rail access to the Ginna nuclear power  
21      plant. The Class 1 connection was CSX. It  
22      was approximately 28.6 railroad miles to CSX.

1 The east-west line was the Ontario line.  
2 About 16.1 miles. FRA track Class 1. The  
3 Sodus Bay Line was the north-south line. It  
4 was about 12.5 miles. FRA Class 2.

5 It was all dark territory. In  
6 other words, it wasn't dispatcher controlled.  
7 You want to operate under restricted speed,  
8 which means more than one crew can be out  
9 there at a time. There are 28 active, passive  
10 or private crossings. And there was a barge  
11 slip nearby the plant that was used in the  
12 past.

13 The shipment would require a heavy  
14 haul from Ginna to one of the two prospective  
15 sites. The first site was the Ontario Central  
16 Road on Route 350, about 3.8 miles from Ginna.  
17 We surveyed that site. The second site was at  
18 Knickerbocker Road about 4.8 miles from Ginna.  
19 And you can see the condition of the track.  
20 It's not that great.

21 Pat, you want to get into the 80-  
22 pound Dudley rail?

1 MR. EDWARDS: Well, this is just  
2 one of the conditions that this railroad had.  
3 Any time you do an evaluation of any railroad,  
4 you'll get into other conditions too. Maybe  
5 the railroad has 80 pound, hundred pound,  
6 whatever. Dudley is just a brand. It could  
7 be Lackawanna. It could be Reading. It could  
8 be U.S. Steel or Bethlehem, whatever. But the  
9 point is this was probably rolled in probably  
10 1920 before controlled cooling and before heat  
11 and rail. So, it possibly could, you know, be  
12 brittle and break under the loads. Who knows?  
13 But they did probably haul coal on this, but  
14 it's very possible. Ten miles an hour if they  
15 derail, what's it going to do except cause a  
16 public outcry? It won't probably, you know,  
17 it won't breach the product, but it will do a  
18 public outcry. I mean, it would be bad.

19 MR. MASSARO: And we still don't  
20 want it on the ground.

21 MR. EDWARDS: No, that's the thing.  
22 That's what we're doing. That's why we're

1 doing the survey of all these railroads to  
2 make sure that these railroads maintain these  
3 lines. These lines going to these power  
4 plants, they haven't had any business on them  
5 for probably 30, 40 years. And the railroads  
6 haven't been keeping up. There's no point in  
7 it.

8 So, that's why we're going out  
9 there and going, hey, you know, we don't know  
10 when this is going to run, we have no idea,  
11 but it would be nice to start thinking about  
12 maintaining these railroads, maintaining these  
13 lines, because it takes time to get money to  
14 fix these. There's a lot of states and  
15 federal government programs that will assist  
16 these railroads in rehabbing these lines.

17 MR. MASSARO: The mechanisms are  
18 in place. We've just got to assure that these  
19 railroads get priority when we get to it. And  
20 the problem is it takes five to ten years to  
21 get these railroads upgraded. So, it's not  
22 something you can do tomorrow. We have to

1 look at it well into the future.

2 On the north-south line, the Sodus  
3 Bay Line, the critical part was 130-pound  
4 rail. Good rail, good ties, but it had sharp  
5 S curves. With the type of equipment we'd be  
6 using, we may have trouble negotiating those  
7 curves. We have to look into that.

8 What we did, we photographed all  
9 the bridges. We looked at and documented all  
10 the crossings and the barge slips that were  
11 used before.

12 Now, our areas of concern on the  
13 Ontario Line were the 80-pound Dudley rail and  
14 the poor tie condition. On the Sodus Bay  
15 Line, it was the sharp S curve.

16 The second railroad we looked at  
17 was the Vermont Nuclear Power plant on the New  
18 England Central Railroad. It had direct rail  
19 access to the Yankee Plant. The Class 1  
20 connection is CSX. Approximately 51 miles of  
21 railroad to CSX. And the track class was 2  
22 and 3. Fairly good track. It has a major



1 bridge over the Connecticut River. 17  
2 crossings both active passive or private, and  
3 13 bridges. This is a shot of the Connecticut  
4 River bridge.

5 This is an example of an under-  
6 grade bridge. And like I said, we documented  
7 all the bridges, all the crossings for the  
8 DOE.

9 There's an example of an overgrade  
10 bridge. Small bridges for small creeks.  
11 There's a shot of an active crossing you can  
12 see with the lights, the gates. Passive  
13 crossing just has the cross box. And private  
14 crossings that have nothing.

15 We looked at all the switches and  
16 clearances for curves. Our areas of concern  
17 were the Amtrak route and the - we need a  
18 comprehensive bridge inspection.

19 That road happens to be an Amtrak  
20 route. Before we run the spent nuclear fuel,  
21 we should do a comprehensive inspection of the  
22 bridge and afterwards, because of the waste.

1       Because we don't need something happening to  
2       the bridge due to that shipment, and then  
3       Amtrak run over it. It just wouldn't be a  
4       good idea. So, that was our areas of concern.

5               And our conclusion, we need an in  
6       depth look at the short line system serving  
7       nuclear power plants, options for transport of  
8       heavy rail to the nearest Class 1 site. Is  
9       barge or legal weight truck an option in some  
10      of these places? If rail is a logical route,  
11      there are grants, there's mechanisms in place  
12      already to rehab these railroads. But for the  
13      general railroads, for short lines and  
14      regionals, but we got appropriate money and  
15      give these railroads a higher standard to get  
16      this money.

17              Another thing, we mentioned  
18      STRACNET earlier. STRACNET prefers on the  
19      STRACNET lines, at least acceptable as a Class  
20      2 railroad or track. Desirable is Class 3.  
21      On the connectors, they downgrade it to a 1,  
22      and desirable a 2. With spent nuclear fuel,

1 I don't think we should go below a Class 2  
2 track. I think that should be recommended.

3 We'll entertain some questions  
4 after Cort's done here. Thank you.

5 MR. RICHARDSON: Thanks a lot, Pat  
6 and Mel. I'm going to now give just a short  
7 presentation somewhat on the bigger picture of  
8 the transportation issue.

9 I already introduced myself. If  
10 we could move on to the next slide? Just a  
11 little bit, a short piece on the Radioactive  
12 Waste Transportation Task Force that I work  
13 with. Just the basics.

14 We have representatives from ten,  
15 soon to have 11, northeast states, which is  
16 basically New England plus New York,  
17 Pennsylvania, New Jersey and Delaware. Soon  
18 to be Maryland added to the group.

19 These representatives are  
20 appointed by the governors of their respective  
21 states. And they represent Executive Branch  
22 agencies. We're also working on adding

1 legislative liaisons to the process. And we  
2 have the active participation of a number of  
3 other people to advise us like Pat.

4 We meet twice a year, basically  
5 with project staff with the federal agencies  
6 and tribes involved and other stakeholders.  
7 And we provide input to federal policy and  
8 program development.

9 Next slide, please. So, as I  
10 mentioned earlier, I'm just going to give a  
11 few preliminary responses to the Commission's  
12 report on transportation issues. We'll get  
13 into more depth when we get to our formal  
14 comments, but I'm just going to talk a little  
15 bit about the issue that we were just  
16 presented on, the rail aspect, and then add a  
17 few other comments on some of the other  
18 related issues. And then we'll close and go  
19 to a Q&A period.

20 Next slide, please. The draft  
21 report cites a 2006 National Academy study on  
22 the transportation of spent nuclear fuel and

1 high-level waste as concluding that there are  
2 no fundamental technical barriers to safe  
3 transport. And it finds that while concerns  
4 are cited, most have been resolved and others  
5 should be addressed as appropriate.

6 Our general reaction is that we  
7 agree with the Commission's conclusion that  
8 spent nuclear fuel and high-level waste can be  
9 transported safely and securely, but we  
10 believe that the draft report is far too  
11 optimistic and dismissive about the progress  
12 that has been made in addressing the technical  
13 concerns and the seriousness of the remaining  
14 unresolved issues. And we'll just look at a  
15 couple of examples.

16 Next slide. All right. The study  
17 provides findings and recommendations on  
18 various issues related to spent nuclear fuel  
19 and high-level waste transportation system  
20 operations. That is, the National Academies  
21 of Science study which the Commission's report  
22 relies on pretty heavily.

1                   First, it talks about the mode for  
2                   transporting fuel. It talks about route  
3                   selection, the use of dedicated trains, the  
4                   acceptance order for moving the fuel,  
5                   emergency response training and planning, and  
6                   information sharing and openness of the  
7                   process.

8                   Next slide, please. The preferred  
9                   mode for transporting spent nuclear fuel and  
10                  high-level waste is a mostly rail scenario.  
11                  That policy has been adopted by federal  
12                  regulators, including the Department of Energy  
13                  and the Department of Transportation through  
14                  the Federal Railroad Administration.

15                  The Academies of Science's study  
16                  lists the following supporting points for that  
17                  conclusion: First, the total number of  
18                  shipments is reduced by a factor of five,  
19                  reducing public radiological exposure and the  
20                  possibility of accidents, greater separation  
21                  is achieved from other vehicular traffic and  
22                  interactions with the public by using the

1       railroads, it is the most efficient in terms  
2       of operational logistics, and there's a clear  
3       public preference for rail over other modes of  
4       transportation.

5               The National Academies of Science  
6       study rejected reliance on trucks to transport  
7       spent nuclear fuel and high-level waste, and  
8       strongly recommended reducing inter-modal  
9       shipments in the transportation system.

10              Next slide, please.  NAS warned  
11       that the rail line abandonment and decaying  
12       infrastructure near spent nuclear fuel and  
13       high-level waste storage sites, could  
14       significantly curtail rail access.  And they  
15       cited two 1992 studies, which are obviously  
16       hopelessly out of date in terms of expressing  
17       that concern.

18              As we have seen, I think, through  
19       some of Mel and Pat's presentations, if we can  
20       extrapolate that to the larger system, the  
21       situation is far worse than was reported then.

22              Not only has the infrastructure

1 declined significantly, but the rail rolling  
2 stock needed to efficiently bear the enormous  
3 weights involving the shipping campaign has  
4 not been developed. And the capacity of  
5 current rail lines to accommodate the  
6 dimensions of the equipment is doubtful.

7 Think about the slides that you  
8 saw, some of the S curves, think about  
9 negotiating some of the turns and how close  
10 the geological structures came to the rail,  
11 and think about that in terms of trying to  
12 transport spent nuclear fuel in enormous  
13 rolling stock equipment.

14 At this point, a complex program  
15 with major reliance on trucks and inter-modal  
16 shipments would be required to move the  
17 material to interim storage or disposal  
18 facilities.

19 Next slide, please. Other issues,  
20 and this is just a smattering of a few  
21 examples. The Commission has a priority for  
22 promoting stakeholder engagement in funding,



1 technical assistance and training. And that's  
2 been undermined by DOE's response to the Yucca  
3 Mountain project cancellation and  
4 congressional budget cuts more recently.

5 The stakeholder program that the  
6 Commission, I think, very rightly has praised,  
7 is declining. And that will only continue  
8 unless something is done.

9 Emergency response training  
10 programs for radiological shipments have also  
11 been cut back recently under the thrust of  
12 again the cancellation of the Office of  
13 Civilian Radioactive Waste Management and the  
14 Yucca Mountain Project, and by recent budget  
15 cuts. This trend is clear, it's in one  
16 direction, it's downhill.

17 The route selection process and  
18 many of the other activities that were  
19 undertaken by the transportation tech program  
20 that DOE ran, have also been suspended.

21 As the Yucca Mountain project was  
22 suspended, all of this planning effort among

1 stakeholders and so on also went by the  
2 boards.

3 Next slide. Recommendations.  
4 Planning and coordination for the national  
5 spent nuclear fuel and high-level waste  
6 transportation programs needs to start up  
7 again now, and not later.

8 The Committee should evaluate  
9 transportation concerns to a more prominent  
10 position in the report and qualify its  
11 optimism to reflect more realistic findings  
12 that emphasize the serious challenges that  
13 exist.

14 A major study of near-site  
15 transportation focusing on rail infrastructure  
16 conditions and needs prioritizing first-in-  
17 line facilities, should be undertaken  
18 immediately.

19 As Mel and Pat reported, this is  
20 not something you can do in a day or a month  
21 or a year. This takes decades to be properly  
22 planned and undertaken.

1                   If you want to think about,  
2                   seriously about moving fuel in any kind of  
3                   realistic time frame to a consolidated  
4                   centralized waste storage facility, that  
5                   process needs to begin really tomorrow.

6                   Any questions? And please address  
7                   your questions to all of the panelists. And  
8                   I want to invite, first, Rich and John, do you  
9                   want to add anything? Anything from either  
10                  what you've heard here on the panel, or  
11                  anything else that kind of comes to mind?  
12                  Rich.

13                  MR. PORTER: Is this on? I just  
14                  wanted to emphasize that there are plants that  
15                  are in worse shape in terms of rail  
16                  availability than the ones that were  
17                  identified in the presentation.

18                  There's nuclear plants that have  
19                  been built that never had rail coming into the  
20                  plant. And there's some plants that did have  
21                  rail at one time, which has since been  
22                  abandoned.

1                   And there's no question that  
2           inter-modal transportation and offloading onto  
3           rail at some other place remotely from the  
4           plant is going to be needed, and that's going  
5           to be a major challenge.

6                   It's long distance, possibly a  
7           very slow-moving vehicle of some sort or a  
8           barge. And I think these options need to be  
9           recognized and kept open.

10                   MODERATOR LEWIS: Okay. Questions?  
11           How about right here?

12                   MS. GRINNELL: I'm wondering if the  
13           panelists - I'm just going to ask a specific  
14           question, because I live within four miles of  
15           the Seabrook nuclear plant.

16                   The Seabrook nuclear plant has  
17           gone to a Transnuclear NUHOMS dry cask storage  
18           container and it's not qualified for transport  
19           so that it's going to entail an overpack.

20                   DOE tells me that they will not  
21           pick up by rail or by truck anything that  
22           isn't qualified for transport.

1                   If Seabrook is decommissioned and  
2                   loses its spent fuel pool, there will be  
3                   nowhere to recast the existing casks. They  
4                   are now in massive concrete structures.

5                   And to our knowledge, not a single  
6                   dry cask has been removed from the concrete,  
7                   extracted from it so that it would have to be  
8                   recast. And there is no cooperative agreement  
9                   on criteria between the Department of Energy  
10                  and the Nuclear Regulatory Commission about  
11                  what the standard is for these casks for  
12                  shipment.

13                  There was at DOE, a plan for what  
14                  was called TAD that was never ruled on. So,  
15                  we now have certified casks existing on site  
16                  at nuclear plants that are not qualified for  
17                  transport. Many of them are decommissioned  
18                  and there is no way of recasting them. Thank  
19                  you.

20                  MODERATOR LEWIS: Okay. Anybody  
21                  want to respond to that?

22                  MR. GIARRUSSO: I agree with Deb.

1 One of the things, I think it was in a  
2 previous presentation earlier, a fact that was  
3 brought up that some of these, and I think  
4 you'll see it at the decommissioned plants  
5 that have been sitting there for a while,  
6 these casks need to be prepared for shipment.

7 And as you said, Debbie, there's  
8 nothing on that site right now that we're able  
9 to do that. So, I mean, I agree with you,  
10 Debbie.

11 MODERATOR LEWIS: Okay.

12 MR. PORTER: Yes, I just add that  
13 under the DOE program for Yucca Mountain,  
14 there was a proposal that they develop a  
15 standardized cask that the DOE would supply to  
16 all the plants. And then the fuel would be  
17 transferred into these other canisters. TADs,  
18 I believe, was the acronym that they were  
19 using.

20 And I have not heard any proposals  
21 for anything similar to that in the future or  
22 where that stands, but it would be nice if

1 they could start supplying those. Especially  
2 if there's going to be an effort to move more  
3 fuel into dry storage, they need to make an  
4 effort to put them into transportable  
5 canisters now.

6 MODERATOR LEWIS: So, do you have a  
7 quick follow-up?

8 MS. GRINNELL: The relationship  
9 between the Nuclear Regulatory Commission and  
10 DOE needs, we need to have both these agencies  
11 arrive at a criteria and get this done,  
12 because there's no way you can attend to long-  
13 term storage, because right now we don't have  
14 the railbeds, we don't have the railway, we  
15 don't have containers qualified.

16 We have a long way to go. Even if  
17 we had a long-term facility, we don't have any  
18 way of getting it there.

19 Realize that in the decommissioned  
20 sites, we would have to build new spent fuel  
21 pools that would be qualified to hold with  
22 cranes and move tons of dry casks into a wet

1 pool in order to recast them, because you  
2 can't stand next to a dry cask storage,  
3 because you won't survive it.

4 MODERATOR LEWIS: Other questions?

5 MR. RICHARDSON: If I could just  
6 add something first?

7 MODERATOR LEWIS: Sure. Thank you.

8 MR. RICHARDSON: I think this  
9 discussion also points out a fundamental fact.  
10 And that is that in cancelling the Yucca  
11 Mountain project and just setting aside all of  
12 the planning and research and development  
13 work that was done, the perpetrators of that  
14 went too far.

15 And, you know, it's one thing to  
16 take a year or two out of the timeline to have  
17 the Commission review these things, but  
18 there's an awful lot of work that was being  
19 done that was suspended that was not properly  
20 archived, I don't believe, and preserved, all  
21 in the name of killing off the Yucca Mountain  
22 project.



1                   You've heard other people here say  
2                   that the - like, for example, Sarah Hofmann  
3                   this morning say that on behalf of NARUC, that  
4                   the Commission should have looked at Yucca  
5                   Mountain.

6                   Well, if not considering it as an  
7                   option for disposal, even though that is what  
8                   the law of the land is, even if they don't do  
9                   that, they should have definitely looked at  
10                  the processes that were interrupted by the  
11                  suspension of the program.

12                  There's a lot of work that was  
13                  done. And, again, it was - it has not been  
14                  properly preserved and archived. We are  
15                  losing very valuable time that is needed now  
16                  that cannot be waited for to engage in a lot  
17                  of this planning that we're talking about  
18                  here.

19                  The Commission does not even  
20                  mention a number of the transportation-related  
21                  issues and movement issues that are very  
22                  pertinent to this process like the whole

1 question of TADs and repackaging and the  
2 condition of and nature of the casks that are  
3 stored in various plants around the nation.

4 So, I think the Commission's  
5 report should address these issues. We will  
6 certainly put in the comments on the 30th, and  
7 I sincerely hope that you take them very  
8 seriously.

9 MODERATOR LEWIS: Thanks.  
10 Questions - actually, why don't we try to get  
11 to a couple of people who haven't spoken yet  
12 or - and then I'll come back to you if - time  
13 allowing. Mary, and then, Dr. MacFarlane,  
14 I'll go to you.

15 MS. LAMPERT: Two points. One  
16 point is that the transportation is a huge  
17 issue that's going to take a very long time.  
18 Therefore, that underscores my point to  
19 prioritize safer onsite storage, because this  
20 five-year business, et cetera, is pure  
21 fantasy.

22 Number two is I'm not clear if you

1 say a small rail line feeder to a reactor  
2 isn't being currently used and has to be  
3 upgraded. Who's going to pay for that? Why  
4 wouldn't the licensee pay for that if that  
5 railroad cannot be used for anything else? I  
6 know money is short. So, I'm just curious  
7 who's paying for it? What is the  
8 responsibility? If it's offsite, is that the  
9 responsibility a hundred percent that comes  
10 out of our money? Or if you have a little -

11 MODERATOR LEWIS: Cort, do you want  
12 to take that one on, or whoever?

13 MR. MASSARO: I'll take part of  
14 that. Like you said, there is a mechanism  
15 already in place for short line railroads to  
16 get on a yearly basis that give money to these  
17 railroads to upgrade their facilities.

18 That's not Class 1s. That's your  
19 smaller feeder railroads. Your regionals and  
20 short lines. These railroads may not be going  
21 to the nuclear power plant, but they are  
22 existing and operating on a small scale. So,

1 they're operating. It's not like they're not  
2 operating.

3 Now, maybe the branch going off  
4 into the nuclear power plant hasn't been used  
5 in 30, 40 years, but that line serving other  
6 industries, maybe two or three industries,  
7 are. The mechanism is in place, and what we  
8 have to do is prioritize where that funding  
9 every year is going to go.

10 I think we should look at the  
11 plants that are serving nuclear power plants,  
12 that we get the money to them. Once these  
13 plants are upgraded, these rail lines are  
14 upgraded, you're good for about 20, 30 years  
15 before you need a rehab on them. It's a good  
16 investment not only for that railroad, but for  
17 the community to bring business in.

18 MODERATOR LEWIS: Okay.

19 MR. RICHARDSON: Mary, I just  
20 wanted to add something to reinforce your  
21 point when you're talking about the time  
22 that's involved in these kinds of movements,

1 the transportation campaigns.

2 The plan for the Yucca Mountain  
3 program was to take 50 years to move the  
4 material, 77,000 metric tons and climbing, to  
5 the facility. So, it is a long-term process.  
6 And if there are legitimate concerns about the  
7 onsite storage that is going on in spent fuel  
8 pools or in ISFSIs, then that certainly makes  
9 the point. It is a long-term process.

10 MODERATOR LEWIS: Thanks.

11 MR. RICHARDSON: As far as the  
12 responsibility goes, I think it's a shared  
13 one. I'm not sure, and perhaps some of the  
14 officials here today know more about this, but  
15 I'm not sure whether there is a clear  
16 responsibility anywhere to upgrade this  
17 transportation infrastructure. I'm not sure  
18 it's very clearly spelled out.

19 And so I think what you would have  
20 is a - is the prospect of considering a range  
21 of sources. We have regular transportation  
22 legislation by the federal government that

1 does provide funding, significant funding for  
2 rail infrastructure upgrades, but it's not  
3 enough money to cover what we're talking  
4 about.

5           Maybe over time if it were  
6 properly allocated and reconciled with the  
7 scope of a scheduling for the movement of the  
8 waste that said, well, if upgrades are good  
9 for 20 or 30 years, then we want to start with  
10 a fuel that's going to move first, for  
11 example, if there's an order, if there's a  
12 priority order, and we need to time those  
13 things and carefully reconcile those various  
14 conditions.

15           It can be done, this is not  
16 impossible, but it isn't being done and it  
17 takes a lot of time to do. That's what I  
18 wanted to point out.

19           MODERATOR LEWIS: Okay. Why don't  
20 we go to your question, and then I think  
21 that's going to conclude this panel.

22           MEMBER MACFARLANE: Okay, great. I

1 found this very, very helpful and  
2 enlightening. So, I really appreciate this  
3 feedback and I look forward to more of your  
4 comments when you get them done.

5 This isn't the first time that  
6 we've heard that the transportation piece of  
7 the report is lacking. So, just so that you  
8 know.

9 I'm interested in the study you  
10 guys did, which is fascinating. And you  
11 talked a little bit about ownership and that  
12 kind of thing. I wonder if you looked at sort  
13 of the management piece of this and if you had  
14 any conclusions about things that were missing  
15 from the management bit of moving this  
16 material.

17 MR. MASSARO: No, we didn't find  
18 any management problems. We just want to  
19 address who is in charge and responsibilities.  
20 We want to address that well before the  
21 shipment so we understand how that railroad is  
22 operating. Who's going to be on the railroad?

1 We don't need a last-minute catastrophe if  
2 somebody comes in on you.

3 And a lot of these places do have,  
4 like I said, maybe a state or a county or a  
5 business organization on the rail. They'll  
6 put the contract out for an independent  
7 operator for the rail. We have to make sure  
8 all that's in place. They have regulations in  
9 place. They're following the regulations, and  
10 we want documentation of that.

11 MODERATOR LEWIS: Okay. I'm going  
12 to take one more, if you're quick.

13 MR. EDWARDS: I just have one  
14 comment.

15 MODERATOR LEWIS: Okay. Thank you.

16 MR. EDWARDS: A lot of these small  
17 railroads, they actually have operators. They  
18 don't own them. They're operators. So,  
19 they're not going to make a long-term money  
20 investment in a lot of these tracks that  
21 aren't going to provide some profit. So,  
22 they're operators. And we have 74 railroads



1 in Pennsylvania alone. They change ownership  
2 quite often. They change operators quite  
3 often and it's tough to keep track of.

4 But in Pennsylvania, we've had  
5 pretty good success with the actual utilities  
6 paying to put in some ties just to maintain  
7 that section. So, they're not - say like we  
8 say, eh, we're going to be moving some  
9 generators or whatever they call it at - they  
10 want to maintain their railroad. And,  
11 actually, the power plant itself is kicking in  
12 money for that. They're taking care of that.  
13 That's how we've done it.

14 And we've dealt with a little  
15 railroad called the North Shore Railroad.  
16 That's an operator owned by another entity.  
17 You get that. You have all kinds of  
18 ownerships and operators. That's important,  
19 the operators.

20 MR. RICHARDSON: Another thing I  
21 want to point out because I've worked with Pat  
22 and Mel for a long time, I just want to

1 commend them for their incredible public  
2 spiritedness because this was done without  
3 really much specific funding. DOE did come in  
4 and offer a little bit of money at the end of  
5 the process, but it was really nothing like  
6 what you would normally spend to conduct this  
7 kind of research.

8 I can tell you that those 1992  
9 studies that were conducted, they spent  
10 \$200,000 per site to have people come in who,  
11 frankly, didn't have one-tenth of the  
12 knowledge that these guys have. They weren't  
13 the right people. They were basically  
14 engineers from D.C. and a wealthy consulting  
15 firm.

16 I mean, you need folks that know  
17 the system, that know the industry, that know  
18 the culture. Because unless the right people  
19 walk into that short line office, they're not  
20 going to get the real scoop. These guys do.  
21 Mel is a third or fourth-generation railroad  
22 person. It's just an absolutely invaluable

1       asset.

2                       And so what I'd like to say is  
3       that we really need - the nation needs to have  
4       this sort of study done not just for two  
5       railroads, but all of these railroads. And  
6       you've got to get out in the field and  
7       actually look at the conditions and study  
8       them. We're going to have to get that rolling  
9       stock identified so we have the specifications  
10      to know what kinds of upgrades are needed.  
11      How big are the engines going to be that have  
12      never been built?

13                      In order to negotiate that kind of  
14      rail infrastructure, what are we going to do?  
15      We can't just go out and fix the rails if we  
16      don't know what we're doing. So, there has to  
17      be a very carefully integrated and  
18      comprehensive program launched just about  
19      immediately if we're serious about doing  
20      anything in the near term.

21                      MODERATOR LEWIS: Were you going to  
22      add?

1 MR. EDWARDS: Yes, I was just going  
2 to say a lot of this you could - the  
3 Commission could probably get it for free.  
4 Just ask the state or the commonwealth's  
5 railroad safety division. They know. They  
6 know what the railroad is like. They could  
7 tell you how many ties they need to bring it  
8 up to Class 2. They'll be glad to give that  
9 information.

10 And if the state doesn't have a  
11 state railroad safety division, the Federal  
12 Railroad Administration, they do have people  
13 that inspect that line. They could tell you.  
14 Just ask them for an assessment. How much is  
15 it going to take to take this up? You  
16 wouldn't have to go to some outside  
17 consultant. We already have government  
18 employees to do this.

19 MODERATOR LEWIS: Okay. We're  
20 beyond time for the panel. I know there's  
21 questions out there. I'm going to  
22 respectfully ask that people catch the

1 panelists individually or bring your questions  
2 into the breakouts this afternoon. We're  
3 going to take a lunch break. The invited  
4 panelists who are being offered lunch will be  
5 meeting in the upstairs luncheon lounge, I  
6 believe, on the second floor. I stand  
7 corrected if anybody wants to give me better  
8 information.

9           And everybody else, there is  
10 numerous restaurants in the immediate  
11 vicinity. We're going to reconvene at one  
12 o'clock, and we'll come back at that time for  
13 our last panel.

14           So, thank you all for a really  
15 informative and productive morning. And thank  
16 you panelists in particular.

17           (Whereupon, the above-entitled  
18 matter went off the record at 12:06 p.m. and  
19 resumed at 1:11 p.m.)

20  
21  
22

1 A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N

2 1:11 p.m.

3 MODERATOR LEWIS: Okay. The tray  
4 with the chocolate cupcakes for everybody who  
5 was in their seat on time already got eaten  
6 up. I'm sorry, but let's get started. And we  
7 have our final panel which is going to be  
8 talking about the West Valley mixed federal  
9 and commercial high waste issue. So I'm going  
10 to, as before, just turn it over to the  
11 panelists, let them introduce themselves, and  
12 the order on the agenda has us starting with  
13 Paul. And, again, hang onto your questions.  
14 And Kevin and the timer will be watching your  
15 seven minutes and look for the shift to the  
16 yellow light.

17 MR. KRANZ: Good afternoon,  
18 everybody. My name is Paul Kranz. I am an  
19 associate environmental quality engineer with  
20 the Erie County Department of Environment and  
21 Planning. I'd like to say thank you for the  
22 opportunity to speak on behalf of Erie County

1 and the West Valley Citizens Task Force.

2 Erie County has participated in  
3 the West Valley Citizens Task Force -  
4 somebody's cell phone here is ringing. I'm  
5 not sure whose that is. I would answer it,  
6 but - anybody? Well, if it's important,  
7 they'll call back. I have been attending the  
8 meetings regularly for the past couple years  
9 at the Citizens Task Force as a representative  
10 of the commissioner of the Department of  
11 Environment Planning. In addition to that, I  
12 was employed at West Valley, the West Valley  
13 site as a vitrification systems engineer with  
14 the West Valley Nuclear Services Company in  
15 the mid 1980s.

16 The objective of my presentation  
17 is to provide highlights on the environmental  
18 setting of the region, and also in support of  
19 the premise that the site should never have  
20 been selected for nuclear fuel reprocessing in  
21 the first place, and is not suited for long-  
22 term storage of high-level radioactive waste.

1                   The vast majority of information  
2                   from this presentation was acquired from the  
3                   final environmental impact statement for  
4                   decommissioning and/or long-term stewardship  
5                   at the West Valley demonstration project and  
6                   the western New York Nuclear Services Center,  
7                   DOE document January 2010. And I do have  
8                   Volume 1 here if anybody wants to take a look  
9                   at it.

10                   Okay. For a site description,  
11                   first of all, the site is located 30 miles  
12                   southeast of Buffalo, New York in the town of  
13                   Ashford. And the Western New York Nuclear  
14                   Services Center covers 3,300 acres. The part  
15                   of the site that is under U.S. DOE control for  
16                   purposes of conducting the site cleanup, the  
17                   West Valley Demonstration Project, is 167  
18                   acres in size.

19                   To give you an idea of the  
20                   population, 9,200 people live within six miles  
21                   of the site. It is located in Cattaraugus  
22                   County, not Erie County. And just a small



1 section of the center located at the  
2 confluence of Cattaraugus Creek and Buttermilk  
3 Creek is located in Erie County, New York.  
4 This gives you a little bit of perspective on  
5 the location. We have a map showing the  
6 location center relation to western New York.

7 For purposes of scale, remember  
8 the site is 30 miles southeast of Buffalo.  
9 Although, the map is a little bit skewed. So,  
10 you can see the city of Buffalo here. Western  
11 New York Services Center. A couple other  
12 things, Erie County is located north and  
13 downstream of the site. Hence, our interest  
14 in participation. It can be identified on  
15 this map as the area between Cattaraugus Creek  
16 located here, and Tonawanda Creek. So, this  
17 area here is Erie County.

18 I also want to point out for  
19 purposes of our panel discussion, the  
20 Cattaraugus reservation of the Seneca Nation  
21 which is located here along Cattaraugus Creek  
22 towards Lake Erie and downstream of the

1 Western New York Nuclear Services Center.

2           Some information about the geology  
3 of the site, the site is located on a  
4 glaciated portion of the Appalachian plateau.  
5 And it rests over or on 500 feet of  
6 heterogeneous glacial till deposits. The  
7 topography is such that it's divided in two  
8 sections, a north plateau which includes a  
9 reprocessing building, waste lagoons and tank  
10 farm, and a south plateau which includes a  
11 state-licensed disposal area and an NRC-  
12 licensed disposal area. Now, this portion of  
13 the Appalachian plateau is also called the  
14 Allegheny plateau and consists of eroded  
15 Paleozoic sedimentary rock. A critical aspect  
16 of the unconsolidated deposits is that they  
17 tend to be very permeable and water-laden.  
18 The nearest major municipality is called  
19 Springville, for reasons I'll let you surmise.

20           Also, another thing to point out  
21 with topography is the maximum elevation, the  
22 southwest of the center is at 1,862 feet above

1 sea level. The minimum at Buttermilk Creek  
2 and Cattaraugus Creek is at 1,109 feet almost  
3 800 foot differential. So, the terrain is  
4 hilly and topographically varied.

5 As far as climate is concerned,  
6 it's classified as humid continental. Average  
7 year relative humidity is 76 percent.

8 Temperatures. Site averages 131 days with  
9 freezing temperatures. So, you have a  
10 freeze/thaw cycle to deal with.

11 Precipitation, it's considered moderate at 40  
12 inches of annual rainfall, but with a hundred  
13 to 150 percent of snowfall annually. The  
14 reason why that snowfall varies so much is  
15 that this is downwind of Lake Erie, which  
16 heavily influences the local climate. The  
17 lake contributes to the high humidity and lake  
18 effect snowfall at the area.

19 As a result of the precipitation,  
20 there are erosion concerns. The site is  
21 crossed by several streams. Quarry Creek - it  
22 should be Erdman Brook, by the way, and

1 Frank's Creek. And they all end up in  
2 Buttermilk Creek. So, you have a problem with  
3 stream channeling, sheet erosion, gully  
4 migration, slope movements, nick points and  
5 other problems when you have a site that's  
6 intersected by these types of streams.

7 The minor creeks define the  
8 perimeter of the north and south plateau and  
9 Erdman Brook bisects the site dividing it into  
10 a north and south plateau. Slope movement is  
11 significant, and it has a significant impact  
12 on a recent 219 - Route 219 extension in  
13 Cattaraugus County or in Erie County.

14 The DOE has implemented a number  
15 of erosion mitigation measures, including  
16 filling of gullies, erosion resistant  
17 structures or relocating of stream channels  
18 where necessary.

19 Now, as mentioned, the glacial  
20 till is relatively permeable. So, groundwater  
21 is an issue. The site is located in the  
22 Cattaraugus Creek basin aquifer. It's

1 designated by the U.S. EPA as a sole source  
2 aquifer. Covers 325 square miles. So, it  
3 does supply drinking water for up to 50,000 of  
4 aquifer residents, 20,000 residents, 14 towns  
5 and four counties.

6 Okay, I'm working on it. Let me  
7 see. The most significant concern is the  
8 north plateau groundwater plume originating  
9 from under the main process plant. It affects  
10 an area 650 feet wide and 1,640 foot long.

11 The U.S. DOE recently installed an  
12 850-foot long zeolite-filled permeable  
13 treatment trench to a depth of 19 to 30 feet  
14 in an attempt to stop the migration of  
15 strontium-90.

16 Surface water, the creek's a  
17 tributary to Cattaraugus Creek 45 miles  
18 upstream of Lake Erie. In addition, ten miles  
19 further downstream along the shore of Lake  
20 Erie is the Erie County Water Authority  
21 Sturgeon Point Water Treatment Plant, which  
22 serves a half a million residents.

1                   So in summary, due to the  
2                   environmental setting and conditions at the  
3                   site, West Valley was a poorly suited site for  
4                   a nuclear fuel reprocessing center, and it is  
5                   a poorly suited site for radioactive waste  
6                   storage and disposal. So, there is a critical  
7                   need for federal action for the final  
8                   deposition of the 275 high-level waste  
9                   canisters.

10                   The source of radioactive material  
11                   was the federal government, in fact or by  
12                   default. The mixed pedigree of the West  
13                   Valley high-level waste should not become an  
14                   impediment to final, proper disposal. To meet  
15                   the timetables, goals and objectives defined  
16                   by the preferred alternative in the accepted  
17                   final environmental impact statement, it's  
18                   critical that full funding be made available  
19                   for uninterrupted cleanup operations at West  
20                   Valley.

21                   Removal of the main process  
22                   building is needed for removal of the

1 strontium-90 plume source material. This,  
2 however, will require the construction of a  
3 new and very costly temporary storage facility  
4 to house the 275 high-level waste canisters.  
5 And given the environmental setting of the  
6 West Valley site, the high-level waste  
7 material at West Valley should be given top  
8 priority for removal to a better-suited  
9 consolidated interim waste storage facility.

10 And that's my presentation. I'm  
11 cutting it short. Thank you very much.

12 (Applause.)

13 MODERATOR LEWIS: Mr. Porter?

14 MR. PORTER: I should warn you  
15 about what red lights do to me, in advance.  
16 Ever since I became the President, I don't  
17 like restrictions.

18 (Non-English language spoken.)

19 MR. PORTER: Thank you for being  
20 here. I'm thankful that you're well. On  
21 behalf of the Seneca Nation of Indians, I'm  
22 honored to have an opportunity to present some

1 information to you regarding the impact at the  
2 West Valley site and the Seneca Nation.

3 I want to acknowledge first the  
4 contributions of our environmental protection  
5 director, Anthony Memmo, has been ongoing in  
6 terms of his work with the Commission in this  
7 sense, as well as the citizens group and  
8 others in our area on behalf of our nation,  
9 and I want to thank Tony for his efforts.

10 I have undoubtedly been involved  
11 in this in varying ways through the  
12 generations because my mother, Lana Redeye,  
13 served on the Low-Level Nuclear Waste Task  
14 Force about 25 years ago. And so, to see  
15 folks like Ray Vaughan and the other  
16 governmental participants who are here is also  
17 kind of an inter-generational deja vu. And  
18 so, for that reason also I'm glad to be here.

19 Our nation has a unique position  
20 in relation to West Valley, but in relation to  
21 the treaties that we have with the United  
22 States. And I wanted to share with you some



1 of that information for the record. You may  
2 have heard previously from Indian nations that  
3 may have even wanted to have nuclear waste on  
4 or near their territories for purposes of  
5 business development. I bring to you a  
6 different message on behalf of the Seneca  
7 Nation.

8 We are very much concerned about  
9 the upstream effects of the West Valley site  
10 on our lands and waters. And in our view, it  
11 speaks to an area of trespass, if you will, by  
12 the United States by virtue of allowing this  
13 activity to occur so close to our lands and  
14 waters.

15 The Seneca Nation is one of  
16 America's earliest allies. Historically  
17 aligned with the other members of the  
18 Haudenosaunee, or Six Nations Iroquois  
19 Confederacy, the Seneca Nation promised to  
20 live in peace with the American people on  
21 November 11th, 1794, in the Treaty of  
22 Canandaigua.

1                   The foundation of our treaty with  
2                   the United States is based upon mutual peace,  
3                   friendship and rights to land. In our treaty,  
4                   the United States promised to forever  
5                   recognize and respect the Seneca Nation's  
6                   sovereign title to our lands and waters  
7                   securing our undisturbed free use and  
8                   enjoyment of those lands and waters within our  
9                   boundaries.

10                   As officials of the United States,  
11                   it is our view that you are duty bound to  
12                   uphold the commitment made by the United  
13                   States government to my nation, and the Seneca  
14                   people, in the performance of your duties as  
15                   members of the Blue Ribbon Commission.

16                   At the time the Canandaigua Treaty  
17                   was signed, the Seneca Nation was not aware  
18                   that America, its government, its corporations  
19                   and its citizens, would try to destroy the  
20                   lands and waters around our territory.

21                   American development has  
22                   chronically and habitually extracted value in

1 and around Indian country and then abandoned  
2 our territories leaving behind your pollution  
3 in our lands and waters, leaving us with  
4 contaminated fish and wildlife, poisoning  
5 healing medicines, tainting aquifers and  
6 stripping our lands of their vitality.

7 Our history of interaction with  
8 the United States is a history of nearly  
9 complete loss of everything that we once had.  
10 We have lost our lands and nearly everything  
11 associated with them. We have lost our  
12 natural resources and valuable ecosystems. We  
13 have lost the ability to sustain ourselves  
14 from the land and the water.

15 We have lost our stores of natural  
16 resources such as gold, uranium, oil, gas,  
17 salt, timber and gravel. We have had the use  
18 of our remaining lands taken for railroads,  
19 highways and reservoirs for hydroelectric  
20 dams.

21 In my lifetime, the United States  
22 again broke the Canandaigua Treaty by taking

1 10,000 acres of our Allegheny Territory for  
2 the Kinzua Reservoir so that a license could  
3 be granted to a private megacorporation to  
4 make millions of dollars per year from the  
5 sacrifice of our lands and the burning of our  
6 homes.

7 In his Wealth of Nations, Adam  
8 Smith, the moral philosopher whose economic  
9 theory underpins modern day American  
10 capitalism, said, civil government so far as  
11 it is instituted for the security of property,  
12 is in reality instituted for the defense of  
13 those who have some property against those who  
14 have none at all.

15 Well, when it comes to Indian  
16 property holders, there is no question that  
17 the U.S. government has abandoned Adam Smith's  
18 rule completely subverting the natural order  
19 of property ownership.

20 All too often the United States  
21 has appropriated or allowed states and others  
22 to steal like common thieves, valuable

1 property held by native peoples.

2 This, whether anyone likes it or  
3 not, is the common strain of American history  
4 towards the aboriginal occupants of this land.  
5 For Americans who care about justice, this  
6 history should be a source of shame and  
7 embarrassment.

8 Thankfully, President Obama has  
9 charted a new course that embraces  
10 international law as the standard against  
11 which the actions of government officials like  
12 yourselves must be measured.

13 Last December, the President  
14 announced that the United States would support  
15 a new relationship towards indigenous peoples  
16 based upon the Declaration on the rights of  
17 indigenous peoples, which provides in Article  
18 29 that indigenous peoples have the right to  
19 the conservation and protection of the  
20 environment and the productive capacity of  
21 their lands or territories and resources.

22 In protection of this right, the

1 Declaration requires of governments like the  
2 United States to take effective measures to  
3 ensure that no storage or disposal of  
4 hazardous materials shall take place in the  
5 lands or territories of indigenous peoples  
6 without their free, prior and informed  
7 consent.

8           However, today in my nation's  
9 homelands, the West Valley site imminently  
10 threatens to take lands and waters from the  
11 Seneca Nation without our consent,  
12 consultation or consideration of our health  
13 and welfare.

14           The West Valley site lies upstream  
15 of our nation's Cattaraugus Territory where  
16 nearly 3,000 Seneca people live. The West  
17 Valley site is geologically unstable.

18           Living on the precipice of a  
19 cataclysmic seismic event or major storm  
20 event, our people live with the risk that  
21 stored radioactive waste will one day spill  
22 into our waters that we depend upon to drink

1 and nourish our ecosystem.

2 For this reason, the Seneca Nation  
3 strongly opposes any interim or permanent  
4 storage site of high-level radioactive waste  
5 at the West Valley site complex. Continuing  
6 to allow this pending threat to exist upstream  
7 from our treaty-defined and protective lands  
8 constitutes an ongoing act of trespass and  
9 infliction of emotional distress on our  
10 people.

11 Unlike the American people in our  
12 area who, in the worst case scenario, are able  
13 to relocate to other parts of their country,  
14 we have nowhere else to go. Our homeland is  
15 unique, and failure to address our concerns  
16 constitutes not just a violation of the treaty  
17 promises made to us by the United States  
18 government, but also a violation of  
19 international law.

20 I am aware that the Commission has  
21 issued a draft report and is seeking comment  
22 on its recommendations. I want to be crystal

1 clear in my comments regarding this draft  
2 report. The Seneca Nation does not have any  
3 interest in any aspect of the report that  
4 supports the expansion of radioactive waste  
5 storage or disposal at the West Valley site.

6 To us, the Canandaigua Treaty of  
7 1794 speaks to the truth of the federal  
8 government's obligation to protect Seneca  
9 Nation lands. The Seneca Nation wants the  
10 federal government to do what is already in  
11 its power to do and remove all radioactive  
12 waste from the West Valley site regardless of  
13 its origin, and deliver it to the federal  
14 repository far removed from our area.

15 It is your fiduciary obligation on  
16 behalf of the United States government, to  
17 protect our lands and waters from this  
18 imminent threat.

19 The Seneca Nation asks that the  
20 Commission ensure that the President of the  
21 United States in conformity with his  
22 responsibilities under the U.S. Constitution,



1 honor our treaties and protect our inherent  
2 sovereign right to health, safety and security  
3 and the undisturbed free use and enjoyment of  
4 our lands and waters.

5 Thank you very much for the  
6 opportunity to be with you today.

7 (Applause.)

8 MR. VAUGHAN: Good afternoon. As  
9 you've been hearing, those of us on today's  
10 panel, this afternoon's panel, are dealing  
11 with the unfinished experience we've had at  
12 the back-end of the nuclear fuel cycle.  
13 Something that started in 1960 and is still  
14 very far from resolved.

15 My name is Ray Vaughan. I, like  
16 three of the others on the panel, am a member  
17 of the West Valley Citizen Task Force. As you  
18 may have gathered, the West Valley site is  
19 unique. It was the only U.S. commercial  
20 reprocessing plant reprocessing both defense  
21 and commercial spent fuel. And that's part of  
22 the issue we need to talk to you about today.

1           It also had very high worker  
2 exposures, as I'll explain a little bit more.  
3 Is sited on erosion-prone land, as you've  
4 heard.

5           The wastes that are still on site  
6 not yet having resolution, include two onsite  
7 burial grounds that operated in the 1960s and  
8 1970s. And some of the waste in those burial  
9 grounds exceed the currently acceptable low-  
10 level 10 CFR 61 limits.

11           The onsite source term includes  
12 high-level, low-level, transuranic and mixed  
13 waste in the sense of being mixed hazardous  
14 and radiological waste. Roughly 16 million  
15 curies total at this point in time.

16           It also has a site-specific  
17 federal law, the West Valley Demonstration  
18 Project Act. And under the terms of that act,  
19 the recent years have seen the successful  
20 vitrification of high-level waste from the  
21 original reprocessing operations that went on  
22 at the site, but we end up now with vitrified

1 high-level waste having been very successfully  
2 done from a technical and safety standpoint.  
3 It's commingled, you know, molecule by  
4 molecule, commingled defense and commercial  
5 waste.

6 We've heard some talk of possibly  
7 separating defense and commercial waste for  
8 disposal purposes. We certainly do not want  
9 to see our waste stream left high and dry  
10 because of a decision like that.

11 There is a joint federal  
12 decommissioning going on. It's in its early  
13 stages. It's going on with input from various  
14 sectors of the public, including our citizen  
15 task force. But the truly major  
16 decommissioning decisions have been deferred  
17 until so-called Phase 2 of the  
18 decommissioning, and that will be in about  
19 nine years that those decision, those tough  
20 decisions will be made.

21 So, there are a lot of  
22 controversies remaining. Full funding being

1 one of them, but the question of whether we'll  
2 get a clean site when all is said and done is  
3 a major part of it as well. The \$10 billion  
4 estimated price tag is a big part of it.

5 This will give you a closeup view  
6 of the site, an air photo, and also you can  
7 see on the map as Paul described roughly where  
8 the site is. You can see some of the creeks  
9 that Paul mentioned; Erdman Brook, Frank's  
10 Creek, that are surrounding the two burial  
11 grounds and the area where the mostly empty  
12 high-level waste tanks are still buried with  
13 something on the order of 700,000 curies in  
14 the tanks themselves.

15 Up at the top of the slide you'll  
16 see the 15 million approximate activity level  
17 on the vitrified high-level waste that's  
18 temporarily stored in the reprocessing plant,  
19 but that high-level waste will need to be  
20 moved because there's currently a commitment  
21 to tear down and remove the reprocessing  
22 plant. So, either onsite or offsite that

1 vitrified high-level waste needs a new home.

2           Just a review of the history  
3 briefly, reprocessing went on between 1966 and  
4 '72. Most of the fuel was actually from U.S.  
5 Atomic Energy Commission sources either  
6 directly from the Hanford N-Reactor or from  
7 AEC-owned reactors other than the Hanford N-  
8 Reactor, and also from some commercial  
9 reactors that the DOE had taken responsibility  
10 for. So, quite a mix of reprocessing that was  
11 done.

12           And partly as a result of the time  
13 when this was being done in the '60s and '70s,  
14 there were very high emissions in worker  
15 doses. In terms of worker doses, this will  
16 give you an idea of what I'm talking about.  
17 Doses well above the five rems per year.

18           These are annual figures for  
19 average whole-body exposure. These are not  
20 collective dose. These are individual doses  
21 exceeding the usual five rem per year limit on  
22 what nuclear workers are supposed to receive.

1           Also, there were high emissions to  
2           air and water during the period of operation.  
3           Various technical problems. We're not meeting  
4           today to talk about reprocessing. But as you  
5           see here at the bottom of the slide, we  
6           believe our input would be useful in any  
7           future Blue Ribbon Commission deliberation on  
8           reprocessing.

9           The reopening of reprocessing is  
10          certainly being talked about by NRC and  
11          others. So, we could certainly have a lot to  
12          say on some of the issues that are involved in  
13          reprocessing.

14          On the last point on this slide,  
15          you'll see the question that I think does have  
16          an easy answer. Should reprocessing be a  
17          named recycling? That is certainly not the  
18          case given the waste streams that result from  
19          reprocessing.

20          Reprocessing ended in 1972. And  
21          as you can see here from MIT's alumni  
22          magazine, there was a cover story in 1977 what

1 to do with the high-level liquid waste that  
2 was on site.

3 So, I've already mentioned the  
4 Demonstration Project Act was passed in 1980,  
5 and it called for DOE to work on site under 90  
6 percent federal, ten percent state funding  
7 arrangement to solidify and dispose of the  
8 West Valley high-level waste with  
9 decontamination/decommissioning of substantial  
10 parts of the site. Not everything, but a big  
11 part was covered under the West Valley  
12 Demonstration Project Act.

13 DOE has successfully done the  
14 vitrification. And as I said, these high-  
15 level waste canisters need to find a place to  
16 be moved to. You can see again the 10 billion  
17 full cleanup estimate.

18 Again, here's a picture of the  
19 site. You've heard me speak of it. Different  
20 parts remain over and above the high-level  
21 waste.

22 And as our final thought on this,

1 we do recommend that the West Valley site be  
2 considered an example of successful cleanup  
3 and not an ongoing festering problem as has  
4 been the case for many years. I don't mean to  
5 suggest there's no progress, but with funding  
6 being cut nationwide, not just the West Valley  
7 site, progress is slowing.

8 So, we ask that the site receive  
9 full funding that's needed to protect the  
10 Great Lakes' environment, public health and  
11 safety for the pending nine years, hence,  
12 Phase 2 decommissioning decision.

13 We think it's extremely important  
14 for not just the local West Valley  
15 constituency, not just for the Seneca Nation,  
16 not just for western New York State, but for  
17 all of those who may think that nuclear power  
18 has a future to really work to make sure that  
19 this example of the back-end of the nuclear  
20 fuel cycle really be cleaned up.

21 In other words, support full-site  
22 cleanup. That's a decision that's going to be



1 made in about nine years, and we don't want  
2 this old site to be pushed aside as people  
3 steer into a new, bright nuclear future.

4 Third point, coordinate current  
5 Phase 1 decommissioning activities with the  
6 Blue Ribbon Commission actions for managing  
7 high-level waste. And more specifically as  
8 you've heard Paul say, we think it's very  
9 appropriate to classify the West Valley high-  
10 level waste, the 275 canisters of vitrified  
11 high-level waste and other things that are  
12 classified as high-level waste, as a priority  
13 waste stream for removal to a consolidated  
14 interim waste facility followed by permanent  
15 geologic disposal. Thank you.

16 (Applause.)

17 MR. GERWITZ: Good afternoon. I  
18 appreciate you folks having he mere today.  
19 I'm the supervisor of the Town of Ashford,  
20 which encompasses West Valley, the  
21 demonstration project. I'm here to talk about  
22 the impacts on the town, past, present, and

1 future.

2 The town of Ashford became a  
3 nuclear community in 1961 when 3300 acres of  
4 taxpayer property was acquired by New York  
5 State as part of the federal government's  
6 initiative to develop commercial nuclear fuel  
7 reprocessing capability in the United States.

8 The citizens who lost their  
9 property to New York State, still have a  
10 negative attitude toward the acquisition and  
11 93 percent of the property in the town of  
12 Ashford remains tax exempt, the highest tax  
13 exempt community in New York State.

14 It is interesting to note that the  
15 town fathers at the time had very little  
16 influence on the decision, and the only demand  
17 that was met was the West Valley Post Office  
18 be the West Valley Post Office used by the  
19 site.

20 At that time, there was a belief  
21 that nuclear fuel reprocessing capabilities in  
22 demand would grow, and so would the town. New

1 neighborhoods within the town would develop.  
2 The school would expand. The infrastructure  
3 would be developed and updated. The streets  
4 would be paved in gold.

5 Neither the industry nor the town  
6 saw the promised growth. Nuclear fuel  
7 reprocessing became more costly and  
8 uneconomical as a result of changing safety  
9 and environmental regulations.

10 Just six years after the - yes,  
11 just six years after the initiation of the  
12 nuclear fuel reprocessing activities at West  
13 Valley, the site was shut down in 1972. But  
14 in this short time, the federal and the state  
15 governments' experiment with commercial  
16 nuclear fuel reprocessing have thoroughly  
17 contaminated the central 200 acres of the  
18 site.

19 When the site was shut down and  
20 the commercial operator walked away, they left  
21 600,000 gallons of liquid high-level waste in  
22 two underground storage tanks, a highly-

1 contaminated fuel reprocessing plant, a 1500-  
2 acre low-level radioactive waste disposal  
3 area, a five-acre high-level waste disposal  
4 area, a strontium-90 groundwater plume, and a  
5 cesium-137 air contamination plume that  
6 extended beyond the site boundary.

7 Fortunately, 1970's negotiations  
8 between the Nuclear Fuel Services and New York  
9 State, and New York State and the federal  
10 government resulted in the passage of the 1980  
11 West Valley Demonstration Project Act.

12 The WVDP Act provided federal  
13 funding with a ten percent state match to  
14 begin the cleanup at West Valley, and the New  
15 York State Energy Resource and Development  
16 Authority to support the cleanup of the West  
17 Valley Nuclear Service Center.

18 Many jobs were created, and  
19 overall, the town of Ashford and surrounding  
20 communities benefitted from the increased  
21 resources associated with as many as 1400  
22 employees during peak operations leading to

1 the vitrification of the high-level waste in  
2 the 1990s.

3 The 275 high-level waste canisters  
4 produced as a result of the vitrification  
5 activities, remains stored in one of the  
6 shielded cells in the process plant.

7 Since the late 1990s, employment  
8 at the site has continually dropped off as the  
9 vitrification operations were concluded and as  
10 the site transitioned to decommissioning  
11 activities.

12 Most recently with the expiration  
13 of funding from the American Recovery and  
14 Reinvestment Act in June 2011, and the  
15 initiation of Phase 1 decommissioning with a  
16 new DOE contract and contractor in September  
17 2011, the workforce has been reduced by more  
18 than one-third. And I think there's around  
19 200 folks over there working right now  
20 directly, many of which were local residents.

21 Needless to say, the town has been  
22 devastated by these recent layoffs. Many of

1 these highly-trained, skilled workers are  
2 currently unemployed and will not find work in  
3 the nuclear field unless they are willing and  
4 able to relocate if this -- if this was the  
5 result of the completion of all cleanup  
6 activities at West Valley, this would be  
7 understandable, but decades of work remains to  
8 be done.

9 A more appropriate and reasonable  
10 level of funding to support the cleanup is the  
11 issue. The primary focus of the Phase 1  
12 decommissioning contract is decommissioning  
13 and removal of the highly-contaminated nuclear  
14 fuel reprocessing building which currently  
15 holds the 275 canisters of vitrified high-  
16 level waste.

17 The relocation of the high-level  
18 waste canisters from the process building to  
19 an engineered, dry, above-ground storage  
20 facility at the WVDP is one of the first tasks  
21 that will need to be completed.

22 The ultimate fate of these 275

1 high-level waste canisters and other potential  
2 high-level waste at West Valley, including the  
3 high-level waste tanks, the vitrification  
4 melter and materials buried in the two  
5 disposal areas will be the subject of future  
6 discussions.

7 But without a destination, they  
8 will remain indefinitely at West Valley  
9 presenting only risk and no benefit to the  
10 community.

11 In closing, the Blue Ribbon  
12 Commission should recommend that the federal  
13 government do the following to address West  
14 Valley's high-level waste and other  
15 radioactive waste contamination problems.

16 Number one, and necessary,  
17 complete the remaining work to enhance  
18 environmental protection and public safety.

19 Number two, reconcile current  
20 plans for the West Valley Phase 1  
21 decommissioning plan contract for  
22 dismantlement and removal of highly-

1 contaminated nuclear fuel reprocessing  
2 building which currently holds the 275  
3 vitrified high-level waste canisters to be  
4 relocated to an engineered, above-ground, dry  
5 storage facility with opportunities presented  
6 by the BRC to chart a new path for managing  
7 the nation's high-level waste.

8 Number three, classify the 275  
9 high-level waste canisters and other potential  
10 high-level waste at West Valley. Tanks,  
11 vitrification melter, material buried in two  
12 disposal areas is a priority waste stream for  
13 removal to a consolidated interim waste  
14 facility, and then to permanent disposal in  
15 national, deep, geological repository.

16 Thanks for listening. Thank you  
17 very much.

18 (Applause.)

19 MODERATOR LEWIS: Okay. We're  
20 going to open it up for questions, but I  
21 understand that we may have a question on the  
22 phone.



1                   Is that Dr. Peterson?

2                   MEMBER PETERSON: Yes, this is Per  
3                   Peterson. And I again would like to thank all  
4                   the members of the panel for this very helpful  
5                   and useful information.

6                   My question relates to the policy  
7                   of commingling or not commingling defense and  
8                   civilian high-level waste.

9                   Current U.S. policy is that the  
10                  geologic repository that we'll develop will be  
11                  used for both the disposal of defense and  
12                  civilian high-level waste. But one of the  
13                  questions the Commission has had to consider  
14                  and needs to provide some guidance and  
15                  recommendation on in its final report and in  
16                  the Disposal Subcommittee's final report,  
17                  relates to the question of whether there - we  
18                  should revisit this question around  
19                  commingling. There is the potential that if  
20                  you were to develop separate geologic disposal  
21                  facilities for defense and civilian high-level  
22                  waste, some people state there may be some

1 advantages.

2 In particular, it may be easier  
3 politically to site a disposal facility for  
4 defense waste than one that would have  
5 commingled waste.

6 So, I would appreciate the panel's  
7 thoughts on the question of commingling in the  
8 disposal facility and the question of whether  
9 it makes sense to maintain the current  
10 policies or to revisit the set of questions  
11 about commingling versus non-commingling  
12 defense and civilian high-level waste.

13 MODERATOR LEWIS: Okay. Thanks,  
14 Per. Panelists?

15 MR. VAUGHAN: This is Ray Vaughan  
16 regarding that question.

17 MODERATOR LEWIS: Is your mic on?

18 MR. VAUGHAN: Our waste is already  
19 commingled. So, for us it's not an issue. We  
20 could conceivably have every vitrified waste  
21 canister sawed in half, roughly 60 percent, 40  
22 percent to represent the proportions, but I

1 don't think anybody would consider that a good  
2 idea.

3 So, I'm not quite sure why you're  
4 asking us. Our waste is commingled.

5 MR. KRANZ: This is Paul Kranz.  
6 I'd also like to state that with safety being  
7 paramount as far as priorities are concerned,  
8 any other redefinition of high-level waste be  
9 it red or blue, up or down, left or right, any  
10 other redefinition above and beyond that will  
11 only add costs and further complications.  
12 Neither of which we can afford at this stage  
13 of the game.

14 So, I would implore the Blue  
15 Ribbon Commission to support keeping the  
16 definition as is and do no additional line  
17 drawing which would, once again, further  
18 complicate things and add costs.

19 MODERATOR LEWIS: Any other  
20 responses?

21 (No response.)

22 MODERATOR LEWIS: Okay. I'm going

1 to open it up for questions. And we're  
2 actually at the time allocated for the panel  
3 already and hoping to move into the breakouts,  
4 but any questions for the panelists at this  
5 time?

6 (No response.)

7 MODERATOR LEWIS: Okay. Well,  
8 thank you very much. That was very  
9 informative.

10 (Applause.)

11 MODERATOR LEWIS: We're going to  
12 get ready for the next phase of the agenda,  
13 which is the interactive breakout groups. And  
14 a couple of purposes for those. Provide  
15 feedback on the topics that you've heard  
16 discussed in the panels earlier in the day as  
17 a way to inform your own thinking, and to ask  
18 questions of panelists who will be scattered  
19 throughout the breakouts who have additional  
20 time for questions that you may not have been  
21 able to ask in the general session, and to  
22 explore implications of some of the

1 recommendations and ideas you've heard with  
2 other people in your group.

3           One of the purposes explicitly is  
4 not to try to reach consensus. We're not  
5 trying to p we have no expectation that in an  
6 hour and 45 minute conversation you're going  
7 to achieve some magical consensus on the  
8 recommendations that you've heard or that you  
9 would want to put forward, but a chance to  
10 explore with one another some of the ideas and  
11 the implications you've heard this morning.

12           Unlike what has already been  
13 presented and discussed, we're not capturing  
14 the discussions in a transcript in all of the  
15 breakouts. We are going to do a couple of  
16 things though to capture the discussion.

17           The facilitators in the groups  
18 will have flip charts, and they're going to be  
19 jotting down in a general way, points that  
20 they hear.

21           They're not trying to capture  
22 every word, but they're, you know, keep track

1 of key words, key phrases, key ideas that come  
2 up in a general sort of way.

3 There will also be a note taker in  
4 each room who will be either working on a  
5 computer or have a notepad and be doing a  
6 little bit more detailed note taking.

7 And our expectation is that the  
8 Meridian Group that's facilitating will be  
9 producing a high-level summary of what's  
10 discussed in the groups based on those notes,  
11 and based also on what we hear from you at the  
12 end of each session as to what you think are  
13 the key things that ought to be reflected in  
14 the summary.

15 So, the sequence when you get into  
16 your breakouts will be a quick round of  
17 introductions so that you know who else is in  
18 the room. And then we'll be working  
19 sequentially through the topics that you'll  
20 see on the agenda and that correspond with the  
21 panels that you've heard from today.

22 And we're asking different groups

1 to start in different places. So, for  
2 example, the group I'm facilitating, which is  
3 the red group, is going to start with the West  
4 Valley topic that has just been presented.  
5 Another group will start with another panel,  
6 and so on.

7 And the intention there is just  
8 based on the reality that perhaps the most  
9 energy in the room and a little bit of extra  
10 time usually gets dedicated to the first thing  
11 you take up. And we - the intention with  
12 every group is to hit on every topic.

13 So, we don't want to shortchange  
14 the opportunity that you all have to talk  
15 about all the topics, but we just want to give  
16 a nod to the fact that it's really important  
17 that each of these topics gets really good  
18 attention. So, that's the reason we're  
19 starting in different places with different  
20 groups.

21 So, you'll work through the  
22 topics. And then the facilitators have been

1 asked to try to preserve a few minutes toward  
2 the end to just see if there's anything else  
3 that's on your minds that you would want to  
4 make note of before closing.

5           And then as I mentioned before,  
6 each of the groups is going to take a few  
7 minutes at the end to just reflect on what you  
8 think are the real high points out of your  
9 discussion that would be most important to  
10 capture in a summary knowing we can't and you  
11 wouldn't want to have to read every single  
12 word that everybody says, but we'd like some  
13 group input in to help us in crafting our  
14 summary.

15           The way that we've put these  
16 groups together is to take the list of people  
17 who are preregistered. And we tried to mix it  
18 up so that you're going to be sitting in a  
19 diverse group of people with different  
20 perspectives. So, we've got state  
21 representatives, NGOs, tribal folks, et  
22 cetera, you know, mixed up in the different



1 groups.

2 And if you look on your name tag,  
3 you'll see a colored dot. And that's your  
4 assignment to a group. And we've got five  
5 groups set up.

6 I think the way the numbers are  
7 working, we'll probably end up with about a  
8 dozen people, between 12 and 15 per group,  
9 which is actually a really nice size. And  
10 then we've assigned groups to rooms and  
11 facilitators.

12 So, if you are a yellow dot on  
13 your - if you are a yellow dot, if you have a  
14 yellow dot on your name tag, you're going to  
15 be with Kristie who's back here. And Kristie  
16 is going to be in Becket A, which is the first  
17 floor.

18 Now, that's not this floor. We're  
19 on the ground floor, which was news to me.  
20 So, this is ground floor. You're going to go  
21 up one level and just walk through the lunch  
22 room. Big set of doors there. And she's in

1 the room that's immediately to the left. And  
2 that's Becket A - or Pechet A.

3 The green group is the group that  
4 I'll be facilitating. We're in that same  
5 general area. So, next floor up. And we're  
6 in Pechet B. You have to go around the corner  
7 beyond where Pechet A is located.

8 Maria-Dolores, where are you? Is  
9 she in the room? Here's Maria, M.D. And she  
10 has the group that has red dots on their name  
11 tags. And she's going to be in the dining  
12 room lounge on the third floor.

13 So, you actually have to go up two  
14 levels - well, oh, I'm sorry. Second floor,  
15 but it's the second up from here. And it's  
16 the lounge where some of you had lunch.

17 The blue group is with Justin  
18 Henceroth. Justin, do you want to stick your  
19 hand up? And Justin's group is going to be in  
20 Room Number 216, which is also on that second  
21 floor two levels up.

22 And then Kevin's group, here's

1 Kevin over here, is the orange group. And  
2 they will be in Room 217, which is close to  
3 where 216 is.

4 We're going to start the groups as  
5 soon as we can get people ready to go. And we  
6 will conclude those conversations by 3:30,  
7 take a short break, and then migrate back to  
8 this room for the public comment period.  
9 Particularly those of you who have signed up.

10 Thank you very much, and good luck  
11 with your discussions.

12 (Whereupon, the above-entitled  
13 matter went off the record at 1:55 p.m., and  
14 resumed at 3:56 p.m.)

15 MODERATOR LEWIS: Okay, folks.  
16 We're going to go ahead and start the public  
17 comment period. And just want to clarify that  
18 based on the number of people who signed up,  
19 I think there's 14 people, we're going to  
20 allocate four minutes apiece.

21 And we're using our handy dandy  
22 light system. So, when it turns yellow, that

1 means you have two minutes left. And then it  
2 will start flashing and beeping - or blinking  
3 and beeping. And that means it's time to  
4 stop.

5 So, I'm going to swap places with  
6 Kevin, and I believe we're about ready to get  
7 started. And we're going to start with -

8 MR. KOTEK: Yes, while we get  
9 everybody in the room, we're going to start -  
10 actually, Matt Milazzo, the Deputy Staff  
11 Director, is going to read in a letter that  
12 was sent by Representative Joe Courtney from  
13 Connecticut who asked us to read it in on his  
14 behalf.

15 So, Matt, please go ahead.

16 MR. MILAZZO: And I apologize. I'm  
17 reading this off of my iPhone. It's small  
18 print. So, bear with me.

19 Dear Chairman Hamilton and  
20 Chairman Scowcroft, I want to thank the Blue  
21 Ribbon Commission on America's nuclear future  
22 for its efforts to date to address the need

1 for expedite removal of spent nuclear fuel  
2 from shutdown reactor sites. I applaud the  
3 Commission for including statements to address  
4 the needs of shutdown reactor sites in the  
5 Commission's draft report to the Secretary of  
6 Energy, and I urge their inclusion in the  
7 Commission's final report.

8 It is time for the country to  
9 address the long, overdue needs for these  
10 facilities and the communities that surround  
11 them, and I commend the Commission where  
12 reflecting the need in the language of their  
13 report.

14 In particular, I applaud the  
15 Commission's recommendation for the creation  
16 of a consolidated interim storage site which  
17 would allow for the removal of spent fuel from  
18 sites like the Connecticut Yankee independent  
19 spent fuel storage installation facility in  
20 Haddam, Connecticut.

21 Transferring the stranded fuel out  
22 of our communities and into a new central site

1 will ease significantly the financial burden  
2 of securing and monitoring expenses ratepayers  
3 currently shoulder to store this spent fuel.

4 In addition, ensuring the spent  
5 fuel from these shutdown reactor sites be the  
6 first in line for the transfer to a  
7 consolidated interim facility as the  
8 Commission recommends, will quickly allow  
9 these facilities to be completely  
10 decommissioned and reclaimed for other  
11 productive uses within their respective  
12 communities.

13 As I know the Commission concurs,  
14 the indefinite long-term storage of spent  
15 nuclear fuel at decommissioned sites like  
16 Connective Yankee, was never the intended  
17 outcome of the past federal law and  
18 regulations.

19 It is unacceptable that so many of  
20 our local communities are trapped by federal  
21 inaction in dealing with this unsustainable  
22 situation, and I commend the Commission for

1 their efforts to move forward.

2 While the U.S. has waited far too  
3 long for a permanent solution to the safe  
4 repository of spent nuclear fuel, I applaud  
5 the Commission's recommendations and I think  
6 the Commission for their understanding of the  
7 direct and immediate benefits of removing  
8 spent fuel from shutdown reactor sites.

9 Sincerely, Joe Courtney, member of Congress.

10 MR. BRYAN: Thank you. Let's see.

11 The next person up is Rebecca Ramsay. And  
12 then Lissa Weinmann will be next in the queue.

13 Rebecca, you can just go - you can  
14 talk right from there or you can come here.  
15 Whichever you want.

16 (Off-record comments.)

17 MS. RAMSAY: Good afternoon. My  
18 name is Rebecca Ramsay, and I am a resident of  
19 Cambridge, Massachusetts.

20 The Blue Ribbon Commission has  
21 provided a valuable service in conducting a  
22 comprehensive assessment of the current

1 dilemma over what to do with radioactive  
2 waste.

3 In the report, Section 2.3.1 on  
4 ethical responsibility describes the  
5 responsibility the current generation has  
6 toward future generations as mandated by the  
7 federal government several decades ago.

8 Those who have been creating  
9 nuclear waste should not leave the problem of  
10 storing it to future generations.

11 The Blue Ribbon Commission report  
12 is evidence of a concerted and comprehensive  
13 effort to find the most acceptable solution  
14 for all.

15 Additional ethical considerations  
16 could include the following: One, policies to  
17 promote additional nuclear power plants cause  
18 ever increasing accumulations of waste  
19 material putting future generations at ever  
20 greater risk.

21 These future generations would  
22 have to confront an ever-expanding exposure to



1 the hazards involved in dealing with nuclear  
2 waste, including temporary storage, highly  
3 dangerous reprocessing strategies,  
4 transportation and potential problems caused  
5 by unstable seismic and hydrological  
6 conditions on deep geological nuclear disposal  
7 facilities.

8 Two, from start to finish, siting  
9 and building nuclear power plants and storing  
10 nuclear waste is proving to be more and more  
11 costly and less and less competitive when  
12 compared with safer alternative forms of  
13 energy.

14 Perhaps our government should have  
15 a mandate for proposing energy policies that  
16 diminish financial burdens for future  
17 generations.

18 Three, an awareness of the  
19 contribution of fossil fuels to climate change  
20 has led to the development of alternative  
21 sources of energy. This conscientious  
22 endeavor shows an acknowledgment of the

1 importance of our global ecosystem and the  
2 abundant forms of life it supports.

3 We could have an energy outlook in  
4 line with our growing ecological sensitivity.  
5 One that encourages efficiency, conservation,  
6 and less hazardous types of energy. Thank  
7 you.

8 MR. BRYAN: Thank you, Rebecca.  
9 Okay, next Lissa Weinmann. And then we're  
10 going to move to Ned Childs.

11 MS. WEINMANN: Hi. My name is  
12 Lissa Weinmann. I live within the ten-mile  
13 evacuation zone of the Vermont Yankee nuclear  
14 power plant. I'm also a senior fellow at the  
15 World Policy Institute in New York, and I have  
16 begun a real deep study of the nuclear policy  
17 issues at stake, and I really thank the  
18 Commission for this opportunity to deepen my  
19 understanding, and also would like to thank  
20 all the people in our breakout session today  
21 for the fruitful discussion that we had.

22 I think it's important for the

1 Blue Ribbon Commission to maintain a high  
2 level of credibility as it issues this report.  
3 The whole title of the Commission calls into  
4 question whether it indeed is a commission  
5 that is meant to promote nuclear energy as  
6 part of America's policy future. So, I would  
7 just say that the name of the Commission might  
8 put some people off.

9 I also think that you don't keep  
10 increasing a problem that you have, and the  
11 Commission has an opportunity to really  
12 comment on the leadership of both -  
13 particularly of the Nuclear Regulatory  
14 Commission.

15 In the draft report, the  
16 Commission has said that the EPA and the NRC  
17 are basically functioning effectively.

18 I don't think that's the case, and  
19 I think the Commission might actually damage  
20 its credibility by asserting that much.

21 I think there's real problems that  
22 have been pointed out even within the NRC's

1 own self-analysis that it's going through now.  
2 And I think to just sort of rubber-stamp what  
3 NRC is doing is to miss an opportunity for the  
4 Commission.

5           There needs to be much more  
6 analysis of what NRC is doing in this  
7 commission report, I believe.

8           Also, I think that if you have a  
9 problem, you don't keep adding to it. And the  
10 more waste we create by continuing to re-  
11 license reactors, the more problem we have and  
12 still no solution in sight. It just doesn't  
13 seem responsible.

14           I would like to say that my  
15 priority is really for safety, public safety  
16 to be the priority for the Commission, for  
17 that to be said in the report. And that spent  
18 fuel that is being stored in some cases like  
19 at Vermont Yankee seven stories up, vulnerable  
20 to weather conditions and all kinds of  
21 potential problems, I do believe that that  
22 should be the priority in terms of how the

1 Commission goes about its work.

2 I would also like to say that I  
3 feel that the industry as a whole, the global  
4 nuclear industry has been given largely a pass  
5 in the Commission report. I think the  
6 industry has greatly benefitted over the years  
7 from the largesse of the federal government  
8 and the government subsidies without which it  
9 would not exist.

10 And I think it's time to start  
11 considering potentially a new tax on the  
12 industry. It's not a popular concept in some  
13 circles, but I think that there is a  
14 responsibility that the industry as a whole  
15 should assume in this process.

16 Again, I thank you for the  
17 opportunity to comment. I have hopes, high  
18 hopes, for the Commission's report. I hope it  
19 has the intestinal fortitude to provide the  
20 country with the leadership that's needed on  
21 this issue. Thank you very much.

22 MR. BRYAN: Ned Childs, and then

1 Steven Jarrett.

2 MR. CHILDS: Well, thank you for  
3 giving me a chance to speak again. Ned Childs  
4 representing the New England Coalition on  
5 Nuclear Pollution, which has been in existence  
6 for a little over 40 years.

7 We started up a little bit before  
8 Vermont Yankee started up, and I'm not sure if  
9 we're ever going to shut down the New England  
10 Coalition before the radionuclides tend to go  
11 on for a long time.

12 As far as America's nuclear future  
13 goes, we will have a nuclear future because in  
14 our future, there will be radioactive poisons  
15 almost beyond measure.

16 And they're gladly following our  
17 example and making them now in other  
18 countries, specifically China, maybe India,  
19 some of the countries around the world are  
20 starting to adopt a more rational strategy and  
21 abandon the nuclear process altogether.

22 There is no safe nuclear power.

1 The whole idea that the NRC says these plants  
2 can be safely run, safely operated is  
3 wordsmithing. It's a word game kind of like,  
4 oh, the game in Washington where they have  
5 deniability, believable deniability.

6 And that's really what we're into  
7 here, but I don't want to belabor you with  
8 that issue.

9 The process that the Commission is  
10 following should be to contain the existing  
11 wastes and not make more. That is pretty  
12 clear. But I wanted to share with you an  
13 insight I picked up from reading some of John  
14 Gofman's work from around the time of the  
15 Three Mile Island accident.

16 And he made the point that people  
17 in the industry in the business of promoting  
18 nuclear power, put a lot of emphasis on the  
19 final repository. And I believe there could  
20 be a final repository, but that serves to  
21 distract our attention from the fact that you  
22 -- that's the bank. But on the way to the

1 bank, you're going to lose a lot of  
2 radioactivity.

3 Nuclear plants vent this  
4 radioactivity in their normal course of  
5 operation. At lunch, we talked with people  
6 from C-10 that have a monitoring station, and  
7 they see a significant spike in gamma  
8 radiation every couple days, 150 times a year,  
9 from the Seabrook plant.

10 When you mine this stuff, you  
11 release radon gas into the environment that  
12 will travel around for many, many years or  
13 centuries, millennia that would have been  
14 safely stored underground if we hadn't brought  
15 it up.

16 As we all know, there's no stable  
17 isotope of uranium. But when you fission it,  
18 you create the daughter isotopes that are  
19 orders of magnitude more toxic.

20 The accidental releases, there  
21 were a lot of them when the industry was  
22 started up. And when we start transporting



1 this stuff around, there will be leaks. They  
2 can't get the containment they need to make  
3 this industry safe enough.

4 And so, Gofman's point which I'm  
5 trying to make here, is that there is no way  
6 that this process of making electricity from  
7 nuclear fission belongs on the surface of the  
8 planet. And that's the message I'm hoping to  
9 somehow get through to the Blue Ribbon  
10 Commissioners so that, you know, they really  
11 are earning their blue ribbon.

12 MR. BRYAN: Thank you. Stephen  
13 Jarrett, and then Susan Shapiro.

14 MR. JARRETT: This is a letter from  
15 Maine Yankee Community Advisory Panel to the  
16 chairmen Hamilton and Scowcroft.

17 The Maine Yankee Community  
18 Advisory Panel, CAP, now in its fifteenth  
19 year, spent most of our September 1st annual  
20 meeting discussing the Blue Ribbon Commission  
21 on America's Nuclear Future July 29th draft  
22 report.

1           The CAP's purpose is to enhance  
2           open communication, public involvement and  
3           education on the spent nuclear storage in  
4           Maine Yankee.

5           Attending the CAP meeting to hear  
6           the discussion of our draft report were  
7           representatives from the offices of Maine's  
8           congressional delegation, three Wiscasset  
9           selectman, the first selectman from Westport  
10          Island and the director of the Northeast High-  
11          Level Radioactive Waste Transportation  
12          Project.

13          We are pleased to provide comments  
14          from the CAP and commend you for a thorough,  
15          encouraging draft report.

16          The Maine CAP, Yankee CAP, thanks  
17          the Commission for recommending the spent  
18          nuclear fuel with shutdown reactor sites  
19          should be first in line for transfer to  
20          consolidated interim storage.

21          Also, we endorse the Commission's  
22          recommendations for a new consent-based

1 approach to siting future nuclear waste  
2 management facilities, and the recommendations  
3 for near-term actions especially in the areas  
4 of storage and transportation.

5 As the BRC Transportation and  
6 Storage Committee heard when they met August  
7 10th, 2010 in Wiscasset, the people of Maine  
8 and elsewhere in New England are deeply  
9 concerned and frustrated where the federal  
10 government has not fulfilled the commitment to  
11 remove spent fuel and greater-than-Class-C  
12 waste from the decommissioned Yankee sites and  
13 other nuclear facilities as required by the  
14 Nuclear Waste Policy Act.

15 We thank you for including as a  
16 key recommendation in the draft report, that  
17 spent fuel currently being stored at shutdown  
18 reactor sites should be first in line for  
19 transfer to consolidated interim storage.

20 The Maine Yankee CAP and many  
21 others who testified at the August 10th  
22 subcommittee meeting made the central point,

1 and it is gratifying to know we were heard by  
2 the Commission.

3 Section 5.2.1 of your draft,  
4 consolidated storage, would allow for the  
5 removal of stranded spent fuel from shutdown  
6 reactor sites, does an excellent job of  
7 explaining the reasons this makes good policy  
8 sense from the economic and fairness  
9 perspectives.

10 Wiscasset and other communities  
11 had an expectation that the spent fuel would  
12 be removed by the federal government beginning  
13 in 1998 as required by the Nuclear Waste  
14 Policy Act.

15 Maine Yankee's ratepayers have  
16 paid for the removal of this material, paid to  
17 have it transferred to dry cask storage, and  
18 continue to pay millions of dollars each year  
19 for its storage at the Maine Yankee  
20 independent fuel storage installation.

21 As the commissioners who visited  
22 Maine Yankee know firsthand until the spent

1 nuclear fuel and greater-than-Class-C waste is  
2 removed, the site property and its  
3 infrastructure will be unavailable for  
4 beneficial reuse.

5 We unanimously endorse the  
6 Commission's first of seven key strategy  
7 elements. A new consent-based approach  
8 deciding future nuclear waste siting  
9 management facilities involving communities,  
10 states, tribes, and other affected entities  
11 from the beginning will be crucial to the  
12 success of siting both one or more interim  
13 consolidated storage facilities and a final  
14 repository.

15 We know that from nearly 15 years  
16 experience as a community advisory panel  
17 during Maine Yankee's decommissioning  
18 construction of the ISFSI and operation of the  
19 facility is an unknown length of time how  
20 important it is for the community to have a  
21 voice as the decisions are made and will  
22 affect community stakeholders.

1                   Our final comment in this support  
2 of the Commission's draft recommendations of  
3 near-term actions especially in the areas of  
4 storage and transportation, we agree the  
5 Department of Energy under the existing  
6 authority should begin immediate -- also, if  
7 anybody wants to finish reading what I  
8 started, it's at the front desk.

9                   MR. BRYAN: Thank you. Susan  
10 Shapiro, and then Ray Shadis.

11                   MS. SHAPIRO: First of all, I want  
12 to quickly say that I'm sorry that the Blue  
13 Ribbon Commission decided not to have a  
14 hearing like this in the New York area, and  
15 request that it does, and that it has  
16 disenfranchised 20 million people by not doing  
17 that. We're the largest reactor community in  
18 the country, and we're often ignored.

19                   Also, the other thing I  
20 respectfully insist that the Blue Ribbon  
21 Commission stop calling this nuclear waste  
22 nuclear itself, a low-carbon energy source or

1 clean.

2 If you even look at Page 9 in  
3 Figure 1 of the nuclear fuel cycle, you have  
4 forgotten to look at the carbon footprint of  
5 the plant construction, mining, milling,  
6 virgin enrichment, fuel fabrication and then  
7 interim storage and final disposition, which  
8 is why we're here.

9 So, it's a fallacy to keep calling  
10 it clean or has a small carbon footprint. The  
11 carbon footprint is incredibly misrepresented  
12 by the nuclear industry and by the Blue Ribbon  
13 Commission.

14 Additionally, the CFC emissions,  
15 it's the only industry that's exempt from CFC  
16 emissions that is causing the problems with  
17 the ozone and one of the biggest problems with  
18 regard to climate change.

19 With regard to the recommendations  
20 that the Blue Ribbon Commission made, I agree  
21 with the Commission that there has to be a new  
22 organization formed to deal with the waste.

1       However, the structure of that organization is  
2       imperative that at least 50 percent of it is  
3       direct participation from reactor communities.

4               If you don't do that, if you don't  
5       have an equal, meaningful vote by the reactor  
6       communities on this commission or on this  
7       organization or corporation, whatever you want  
8       to call it, or the Tennessee Valley Authority  
9       for waste that you're proposing, you will end  
10      up with an endless Yucca Mountain problem.

11      You will never find a solution to this waste  
12      problem, waste storage problem.

13              The public today has to understand  
14      and the Blue Ribbon Commission has to  
15      understand and the President needs to  
16      understand that we, the public, are actually  
17      the insurers for the nuclear industry. And  
18      it's time that instead of the NRC, the Blue  
19      Ribbon Commission and everyone kow-towing and  
20      answering to the NEI and the NRC - oh, my God,  
21      that's already two minutes? Sorry - that we  
22      need to be a meaningful party.



1                   Long-term storage is - the consent  
2                   for the states has already been violated  
3                   because we now have long-term storage at 70  
4                   sites. None of that land was ever planned for  
5                   that. That's new use of the land and the  
6                   states never agreed to it.

7                   So, there is no consent with long-  
8                   term storage that you're calling interim  
9                   storage. That needs to be hardened onsite  
10                  storage. It is not hardened onsite storage at  
11                  this time.

12                  The EJ issues with regard to  
13                  consent are enormous because money will go  
14                  into underfunded communities and encourage  
15                  them to keep this dirty stuff on site.

16                  I have much more to say. I'm not  
17                  going to be able to finish it in one minute.  
18                  Basically, by the DOE not taking control of  
19                  this waste, it's a violation of the Waste  
20                  Policy Act.

21                  And what has happened now is  
22                  commercially-produced and commingled waste is

1       unequally protected, which is a violation of  
2       Constitutional rights. And this commission  
3       needs to understand that the long-term interim  
4       storage at the 70 sites has to be protected.

5                 Right now we have leaking spent  
6       fuel pools and a variety of different things  
7       that are going on.

8                 With regard to re-licensing or new  
9       superseding licenses, the NRC refuses to hear  
10      any contentions about not having a waste  
11      confidence rule. That should be something  
12      this Blue Ribbon Commission makes a very  
13      strong point that that is not acceptable.

14                And transferring the liability to  
15      the ratepayers, once again, we've already been  
16      the funders of the nuclear industry in this  
17      country. To ask us to continue to fund more  
18      research for more ways to make more waste is  
19      no longer acceptable.

20                And any new monies need to be  
21      spent on hardening the waste storage that  
22      currently exists, and for finding new

1 solutions to our energy problems.

2           And I ask again, clearly I ask,  
3 does anyone have full knowledge of the total  
4 waste heap that is being produced or has been  
5 produced from the fission of the - what is it?  
6 65,000 tons of waste as of 2010, and 133,000  
7 tons of spent fuel as of 2050.

8           If the Commission doesn't have  
9 that information, it can't make a meaningful  
10 decision as to how the storage of any  
11 longtime, long-term or even short-term storage  
12 can be made.

13           Once again I reiterate I asked the  
14 President and I asked the Blue Ribbon  
15 Commission to request the President to issue  
16 an Executive Order requiring immediate  
17 hardened onsite storage for -- dry cask  
18 storage for all spent fuel, and to stop making  
19 - continuing producing nuclear waste which we  
20 don't have a solution for.

21           Until we have a solution for it,  
22 it's only a fool who does the same thing over

1 and over again and expect a different result.

2 Thank you.

3 (Applause.)

4 MR. BRYAN: Okay, the next person,

5 Ray Shadis, and then David Agnew.

6 MR. SHADIS: Thanks to the BRC and

7 all the other groups and agencies that put

8 this event together. I really do appreciate

9 the opportunity to address you.

10 Most of the issues that I have

11 prepared comment on have been addressed by the

12 various committees, and were addressed also in

13 our breakout group.

14 For what it's worth, I thought the

15 Committee presentations were terrific. Very

16 good exposition on the issues.

17 I am the Executive Director of

18 Friends of the Coast, a Maine environmental

19 organization. And I also serve as Technical

20 Advisor to New England Coalition, which is

21 based on Brattleboro, Vermont.

22 In that capacity, I have had more

1 than my share of public participation and  
2 personal interaction with the regulatory  
3 agencies and also with the nuclear utility  
4 companies.

5 On the whole, my experience is  
6 that it has been much more fruitful to engage  
7 directly with the nuclear utility companies,  
8 and especially in terms of gaining safety and  
9 environmental concessions.

10 And I guess I'm going to hold it  
11 up as a model, really, for what we are seeking  
12 in terms of meaningful and effective public  
13 participation in the waste storage process.

14 At Maine Yankee, Friends of the  
15 Coast - well, there we go. At Maine Yankee,  
16 Friends of the Coast intervened before the  
17 Federal Energy Regulatory Commission. And  
18 that gave us just a little bit of coercive  
19 power to help in negotiations with Maine  
20 Yankee Atomic Power Company.

21 As a result of that, we were able  
22 to secure some additional safety concessions

1 for the stored nuclear waste.

2           Earthen berms were something that  
3 we asked for and which the company agreed to  
4 do. We now have earthen berms rising two-  
5 thirds of the height of the 64 casks on three  
6 sides. The fourth side is partially shielded  
7 by the Administration Building for the casks.  
8 So, we are pretty well secured against  
9 aircraft impact and line-of-sight ballistics.

10           We also asked for conservative  
11 spacing. The casks which are stored at the  
12 Palisades nuclear plant in Michigan, are  
13 stored all in a row down a very narrow confine  
14 between a couple of sand dunes right on the  
15 shore of Lake Michigan, I guess it is.

16           And if one of the casks were to  
17 run into trouble, if the geometry of the fuel  
18 were somehow to become upset or if the casks  
19 sprung a leak, they would have to move if it  
20 were one of the rearward casks, they would  
21 have to move the casks that are in front of it  
22 in an evolution that would take many hours, if

1 not many days, in order to get to it.

2 What we proposed at Maine Yankee  
3 was a modular spacing, a series of,  
4 essentially, interrelated pads, each one  
5 holding six casks that would allow emergency  
6 vehicle equipment - may I have a little more  
7 time, please?

8 (Off-mic comment.)

9 MR. SHADIS: Would allow emergency  
10 equipment to access any one of the casks  
11 without having to move any other cask.

12 We also managed to get concessions  
13 regarding the use of sanding salts which in  
14 the northern climate is something common, on  
15 the concrete pads. That that was eliminated  
16 because of its potential corrosive aspect to  
17 the canisters themselves. And also, a  
18 prohibition against too much of the wrong kind  
19 of fuel for equipment being brought into the  
20 range of the canisters.

21 At Vermont Yankee intervening  
22 before the Public Service Board of Vermont, we

1 were able to get the plant to agree to put in  
2 a line-of-sight barrier. They would not go  
3 the earthen berm route, but they at least put  
4 in a turnpike-style fence as high as the casks  
5 shielding them from view and also from line-  
6 of-sight targeting for ballistics.

7 In addition to that, we got  
8 agreements once again on the sanding salts.  
9 And also, an agreement to periodically report  
10 the radiation and temperature levels of the  
11 casks to the state.

12 And these are simple things, but  
13 they are plus-positive added things. And I  
14 just hold them up to you as examples of the  
15 kind of meaningful participation,  
16 constructive, positive participation that can  
17 come from citizens if they are graciously  
18 involved. Thank you.

19 (Applause.)

20 MR. BRYAN: Next up, David Agnew  
21 followed by Gailanne Cariddi.

22 MR. AGNEW: Hi. I'm the



1 coordinator of a group called Cape  
2 Downwinders. I live in Harwich, Massachusetts  
3 on the Cape downwind of Pilgrim Nuclear Power  
4 Station.

5 We're about six decades into this  
6 nuclear experiment, and this industry still  
7 doesn't have an idea of what to do with the  
8 waste.

9 I guess my first bottom-line  
10 common sense recommendation would be that we  
11 cease generating nuclear waste since we don't  
12 really know what to do with it.

13 Barring that, I want to say that I  
14 fully endorse the comments of Physicians for  
15 Social Responsibility, and also want to point  
16 out that the money in the Nuclear Waste Fund  
17 is the ratepayers' money. We've paid for it  
18 and we've gotten nothing for it.

19 And there should be a priority put  
20 on protecting the safety of the people and the  
21 ratepayers. And my suggestion is that the  
22 nuclear utilities should be required to

1 depopulate their spent fuel pools, which offer  
2 the greatest risk to the population, of the  
3 entire nuclear waste stream.

4           It's the stuff that sits in the  
5 pools that puts us most at risk, especially  
6 the highly overcrowded fuels. They should be  
7 depopulated. The waste should be put into  
8 hardened onsite storage as soon as possible.  
9 Thank you.

10           MR. BRYAN: Okay. Next, Gailanne  
11 Cariddi. And then following that, Guntram  
12 Mueller.

13           MS. CARIDDI: Hello, and thank you  
14 for coming to Massachusetts. It's nice to  
15 have a commission like this concentrate on our  
16 area and the Boston area here.

17           My name is Gail Cariddi. I'm a  
18 state representative. I represent the first  
19 Berkshire district in Massachusetts. It's the  
20 home of Yankee Rowe.

21           Please accept this testimony  
22 relative to the former Yankee Rowe Electric

1 Company plant in Rowe, Massachusetts.

2 I respectfully urge the federal  
3 government to fulfill its obligation under the  
4 Nuclear Waste Policy Act of 1982 to remove  
5 spent fuel from the fuel site.

6 As a state representative serving  
7 the town of Rowe and ten neighboring  
8 communities and the former chair of the Yankee  
9 Rowe Spent Fuel Storage and Transportation  
10 Community Advisory Board, I remain committed  
11 to the complete removal of the stranded waste  
12 at the Yankee Rowe site.

13 The Yankee Rowe site has been  
14 fully decommissioned for years. Yet, what  
15 remains is an independent spent fuel storage  
16 installation facility.

17 The removal of the material was to  
18 begin in 1998. Aside from the fact that it  
19 has been more than a decade since the removal  
20 was to have begun, time and the ratepayers'  
21 money is wasted until the site can be used for  
22 further beneficial ways.

1                   Removal becomes more urgent  
2           because as time passes, concerns rise because  
3           of the process which is very involved and time  
4           consuming and may be hindered by re-licensing  
5           and requirements for transport after this  
6           unforeseen delay.

7                   I urge the Commission to endorse  
8           the Fiscal Year 2012 House Energy and Water  
9           Development Committee report to include  
10          language that directs the Department of Energy  
11          to submit with its Fiscal Year 2013 budget  
12          request a plan requesting options to develop  
13          interim storage capacity that would as a  
14          priority matter, provide a means for  
15          consolidating the spent nuclear fuel and other  
16          high-level waste present at the permanently  
17          shut down reactors.

18                   Thank you very much for allowing  
19          me to have this testimony, and I will give my  
20          written remarks to you, I guess.

21                   MR. BRYAN: Okay. Guntram Mueller,  
22          and then we're going to have Elizabeth

1 Gerlach.

2 MR. MUELLER: Yes, hello. Thank  
3 you for allowing me to speak. My name is  
4 Guntram Mueller, and I'm with Massachusetts  
5 Peace Action.

6 I want to make two points to you,  
7 basically. One is that the incentives have to  
8 be done right. Over the course of these hours  
9 we've had lots of information/suggestions for  
10 how to make things safer. And why don't we do  
11 them all? Well, because they all cost money.  
12 The question of cost and benefit and that's  
13 where I'll say that the incentives come in.

14 The companies have to be properly  
15 incentivized to make sure that they do the  
16 things that are necessary to make things safe,  
17 if they can be made safe.

18 Let me get you a specific example.  
19 The Pilgrim nuclear power plant in Plymouth,  
20 Mass, which is about 40 miles from here and  
21 we're often downwind from it, has these spent  
22 fuel rods in a pool. The things on the top

1 floor of the reactor building, the roof above  
2 is not solidly reinforced.

3 A few weeks ago a young man was  
4 arrested because his plan was to use drones  
5 filled with C4 high explosives to blow up the  
6 Pentagon and the Capitol. He could just as  
7 easily have chosen to blow out the spent fuel  
8 pool.

9 There's a report that was  
10 commissioned by the Massachusetts Attorney  
11 General that said that if the cesium-137 in  
12 the spent fuel pool were to be blown up by  
13 either fire or explosion, that the cost of the  
14 damages would be 488 billion, with a B, \$488  
15 billion and there could be 24,000 latent  
16 cancer deaths.

17 Now, your household insurance  
18 doesn't cover that. So, who's going to pay  
19 for it? Well, either the victims or the  
20 taxpayers. There is nobody else.

21 Why? Well, because the company  
22 has to pay very little. The company would

1 have to pay \$112 million. That's it.

2 So, where does the incentive lie?

3 Suppose you were to propose that the spent  
4 fuel area should have a reinforced roof and  
5 the plant should be shut down in the meantime,  
6 and suppose that were to cost 500 million.

7 I'm just grabbing that number out  
8 of the air. I have no idea how realistic that  
9 is.

10 But how - where are its  
11 incentives? It can pay the \$500 million and  
12 possibly never even have the accident occur.  
13 And if it does occur, it only has to pay \$112  
14 million. Where's the incentive? It's all  
15 wrong.

16 The incentives have to be done  
17 right. Otherwise, all the regulations and  
18 inspections won't do it for you. You have to  
19 have the incentive. Thank you.

20 MR. BRYAN: Okay. Our last three  
21 persons; Elizabeth Gerlach, Nancy Wrenn and  
22 Mary Lampert.

1 MS. GERLACH: Member of the Boston  
2 branch of the Women's International League for  
3 Peace and Freedom fondly known as WILPF, are  
4 please to have this opportunity to speak to  
5 the BRC at this important time. We are  
6 particularly concerned with spent nuclear  
7 reactor fuel, SNF.

8 In light of the accident at  
9 Fukushima, Japan, wet storage in pools has  
10 proven unsafe.

11 According to the draft report of  
12 the Commission's subcommittee on  
13 transportation and storage, 75 percent of our  
14 onsite storage of SNF is in pools. Only 25  
15 percent in dry cask storage.

16 Additionally, since all SNF at any  
17 given site includes all the waste generated  
18 there in its years of operation, many cooling  
19 pools are known to be considerably over their  
20 design capacity, to put it mildly.

21 Spent nuclear fuel being stored on  
22 site at shutdown reactors is still the



1 responsibility of the utilities that generated  
2 it. Here in the northeast, evidently storage  
3 at these sites is in dry casks. All SNF at  
4 shutdown reactors should no longer be stored  
5 in cooling pools.

6 To quote the BRC's draft report,  
7 recognizing the substantial lead times that  
8 may be required in opening one or more  
9 consolidated storage facilities, dispersed  
10 interim storage of substantial quantities of  
11 spent fuel at existing reactor sites can be  
12 expected to continue for some time, end of  
13 quote.

14 There being no need to wait for  
15 approval or development of consolidated  
16 storage sites, we should immediately begin  
17 placing this spent fuel currently in cooling  
18 pools, in hardened, passively cooled storage  
19 casks that can be safely stored on or very  
20 near the site of generation.

21 We join ANA in recommending that  
22 affected communities should be involved in

1 monitoring the sites and planning for how to  
2 handle the stored fuel.

3 To quote the subcommittee's draft  
4 report, the subcommittee has concluded that  
5 there do not appear to be unmanageable safety  
6 or security risks associated with current  
7 methods of storage, wet or dry, at existing  
8 sites.

9 Known wet storage problems at  
10 Fukushima must and will continue to be  
11 analyzed closely. So far they do seem to cast  
12 out some of the subcommittee's judgment of wet  
13 storage.

14 Operating reactors already have  
15 the level of security that hardened onsite  
16 storage or HOSS would require. We agree with  
17 ANA in supporting HOSS and in recommending  
18 hardening SNF which is presently in cooling  
19 pools, into passively cooled casks as close as  
20 possible to the site of generation.

21 Nuclear waste should be removed  
22 for interim storage only if it improves

1 safety. Thank you.

2 MR. BRYAN: Okay, Nancy Wrenn.

3 MS. WRENN: I have the privilege of  
4 reading to you the letter from the Alliance  
5 for Nuclear Accountability otherwise known as  
6 ANA, which Libby just referred to. And they  
7 are a national network of organizations  
8 working to address issues of nuclear weapons  
9 production and waste cleanup.

10 Dear commissioners, the Alliance  
11 for Nuclear Accountability is glad that the  
12 BRC has chosen to hear concerns from the  
13 northeast, but we are troubled by the pattern  
14 of for-profit industry perspectives being  
15 highlighted while public involvement is often  
16 marginalized.

17 We have expressed this concern  
18 from the beginning and suggested ways to  
19 correct the problems, including adding tribal  
20 and community interest representation to the  
21 advisory groups. Limiting public comment to  
22 three minutes or less, I guess four today, is

1 not an effective way for the BRC to benefit  
2 from the experience and wisdom of affected  
3 communities.

4           Additionally, our experience  
5 participating in a Denver meeting led us to  
6 believe that breakout sessions were not  
7 effective either with inadequate and  
8 inaccurate reporting making it impossible for  
9 commissioners to receive feedback from  
10 participants - this is not my writing.

11           So, their recommendations are in  
12 regard to stranded spent nuclear fuel, spent  
13 nuclear fuel being stored on site at shutdown  
14 reactors is still the responsibility of the  
15 utilities that generated it.

16           At sites in the northeast, it is  
17 in dry cask storage. At other sites, spent  
18 nuclear fuel at shutdown reactors should be  
19 removed from cooling pools.

20           To quote the BRC's draft report,  
21 recognizing the substantial lead times that  
22 may be required in opening one or more

1 consolidated storage facilities, dispersed  
2 interim storage of substantial quantities of  
3 spent fuel at existing reactor sites can be  
4 expected to continue for some time.

5 We can immediately begin placing  
6 the spent fuel in hardened passively cooled  
7 storage casks that could be safely stored on  
8 or very near the site of generation.

9 And affected communities should be  
10 involved in monitoring the sites and planning  
11 for how to handle the stored fuel.

12 In regard to transportation, the  
13 safest, least expensive, and easiest way to  
14 deal with nuclear waste is to transport it as  
15 little as possible. Interim storage need not  
16 be consolidated.

17 Shipping nuclear waste around the  
18 country necessitates expensive safety upgrades  
19 to transportation routes and creates  
20 unnecessary environmental and human health  
21 risks.

22 In regard to reprocessing, as we

1 learned at West Valley, reprocessing is a  
2 dirty, inefficient way to deal with spent  
3 nuclear fuel.

4 The NRC, Department of Energy, and  
5 private utilities have responsibility to clean  
6 up the environmental devastation wrought by  
7 reprocessing. Reprocessing creates new toxic  
8 waste streams and does not eliminate the long-  
9 term need for nuclear waste storage.

10 The high-level waste at West  
11 Valley must be vitrified and spent fuel should  
12 be hardened in passively cooled casks on site,  
13 not transported throughout the country.

14 Across the globe the reprocessing  
15 industry is on the decline. As a nation, we  
16 cannot afford to dedicate our resources to  
17 reprocessing, or research and development on  
18 reprocessing technologies.

19 ANA members across the country  
20 `call on you to take these comments to heart,  
21 and we urge the Commission to offer improved  
22 opportunities for public involvement at the

1 upcoming meetings in Minneapolis, Atlanta and  
2 Washington, D.C.

3 As the Commission finalizes its  
4 report, we ask you that you include strong  
5 recommendations about the importance of  
6 including tribes and community interest groups  
7 in all future process and decision-making  
8 concerning nuclear waste. Thank you.

9 MR. BRYAN: Finally, Mary Lampert.

10 MS. LAMPERT: I'm speaking for the  
11 town of Duxbury this time and not for Pilgrim  
12 Watch.

13 The town of Duxbury is within the  
14 emergency planning zone of the Pilgrim nuclear  
15 power station. The town has voted twice at  
16 annual town meetings, asking that it be a  
17 requirement that there be low-density, open-  
18 frame pool storage and the rest put in  
19 hardened, dry cask storage dispersed on the  
20 site. And that this be regarded as an interim  
21 measure until a scientifically and ethically  
22 responsible offsite solution can be found.

1           The town at annual town meeting  
2 two times, made this vote. That was the  
3 sense, obviously, of the town and that is how  
4 serious we look at it.

5           I was getting a very uncomfortable  
6 feeling during some of the conversations today  
7 on the seeming push for interim storage and  
8 onsite, and ignoring the onsite issue as a  
9 priority. The focus being seemingly an  
10 economic focus of Maine Yankee, of Connecticut  
11 Yankee, of closed reactors which are not  
12 generating income, but have to spend monies to  
13 babysit the waste.

14           I think the priority -- I can  
15 understand that. The priority, however, has  
16 to be the safety of our communities. And  
17 putting at the top tier, Boiling Water  
18 Reactors that are storing the waste in  
19 overcrowded spent fuel pools outside primary  
20 containment in the attic of the reactors is  
21 not acceptable. Thank you.

22           (Applause.)



1 MR. BRYAN: Thank you to all of you  
2 for your comments. We're going to turn over  
3 now to John Kotek to give a few summarizing  
4 words.

5 MR. KOTEK: Thanks again. I really  
6 want to extend my thanks and that of the staff  
7 and I know the commissioners, to everybody who  
8 has joined us today and offered comment. It's  
9 extremely helpful.

10 Just to remind everybody where the  
11 Commission is heading from here, we ask that  
12 comment be in by the end of October so the  
13 commissioners have time to digest what has  
14 come in and decide how they want to factor it  
15 into their final subcommittee reports and  
16 report of the full commission before that  
17 report is submitted to the Secretary of Energy  
18 in the end of January. January 29th of 2012  
19 is the due date.

20 What happens after that, of  
21 course, is the Commission report is submitted  
22 to the Secretary of Energy for consideration

1 by the Administration. Presumably by the  
2 Congress as well.

3 The Administration, if it accepts  
4 the Commission's recommendations, of course  
5 should put together a legislative package and  
6 work with the Congress to try and get  
7 something enacted.

8 We have, as was noted earlier, we  
9 have actually already seen some action being  
10 taken by some committees in Congress who are  
11 interested in seeing some of the Commission  
12 recommendations enacted and put into law and  
13 funding be provided for their implementation.

14 So, we're actually seeing some  
15 action on the Hill right now. Although,  
16 nothing is through the appropriations process.  
17 There's still a ways to go. I would expect  
18 there would be hearings and such next spring  
19 and summer on the Commission recommendations.

20 So, there's still work ahead, but  
21 the commissioners, of course, those who have  
22 dedicated the last 18 months of time as either

1 commissioners or staff to try and see this  
2 through, want to see the Commission's  
3 recommendations acted upon.

4 I know the commissioners and the  
5 staff will be working to try and make that  
6 happen afterwards. And your input to the  
7 process has been really valuable.

8 Thanks for those who have also  
9 provided comments on the process and on the -  
10 what the commissioners are trying to do is  
11 provide effective opportunities for public  
12 input. And if folks don't see these the way  
13 we're structuring this as adequate, giving  
14 your feedback on that is essential so we can  
15 try and make the process better going forward.

16 So, again, thank you very much for  
17 your time and for your interest in being here.  
18 And I think that will do it unless Connie has  
19 something to wrap up.

20 MODERATOR LEWIS: Also I'd add my  
21 note of thanks. I also want to say that to  
22 affirm that we've taken and heard and

1 appreciate the feedback we have had on the  
2 Denver meeting and look forward to any  
3 feedback people would like to give us about  
4 this meeting, we're striving to be a learning  
5 process and to continually improve.

6 And specifically with regards to  
7 the summary, I'm sure you noticed in the  
8 breakouts that we spent some time trying to  
9 understand what were the most important points  
10 that we incorporate into the summary.

11 So, as before, we will be  
12 preparing a high-level summary, not a  
13 transcript of what happened in the breakouts.  
14 That will be distributed.

15 And certainly if you still feel  
16 like we have missed something critical, we  
17 welcome your feedback on that. And that will  
18 be made available to the Commission.

19 So, again thank you, and wish us  
20 well as we go on to Atlanta and Washington,  
21 D.C. and Minneapolis, which are our upcoming  
22 meetings.

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And feel free to grab any of the  
facilitators or staff if you have any  
suggestions for us going forward. So, thanks  
again very much.

(Applause.)

(Whereupon, the above-entitled  
matter went off the record at 4:50 p.m.)

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This is to certify that the foregoing transcript

In the matter of: Draft Commission Report  
Public Meeting

Before: Blue Ribbon Commission on ANF

Date: 10-12-11

Place: Boston, MA

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