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Case: **Community Engagement Panel  
Public Meeting**

**Transcript of Proceedings**

Date: **01/27/2015**

Job #: **595473**

Court Reporting – Videoconferencing – Trial Presentation – Nationwide Networking

**Calabasas - Hermosa Beach - Santa Ana - Riverside - San Diego - Las Vegas**

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SAN ONOFRE DECOMMISSIONING  
COMMUNITY ENGAGEMENT PANEL MEETING  
STATE OF CALIFORNIA, COUNTY OF ORANGE

TRANSCRIPT OF PROCEEDINGS  
SAN JUAN CAPISTRANO, CALIFORNIA  
TUESDAY, JANUARY 27, 2015

Reported by:  
CARLOS R. HICHO  
CSR No. 13111  
Job No. 595473

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SAN ONOFRE DECOMMISSIONING  
COMMUNITY ENGAGEMENT PANEL MEETING  
STATE OF CALIFORNIA, COUNTY OF ORANGE

Transcript of proceedings, taken at  
25925 Camino Del Avion, San Juan  
Capistrano, California 92675, commencing at  
the hour of 6:05 P.M., TUESDAY, JANUARY 27,  
2015, before CARLOS R. HICHO,  
CSR No. 13111.

1 PANEL MEMBERS IN ATTENDANCE :

2 DR. DAVID G. VICTOR  
3 COMMUNITY ENGAGEMENT PANEL CHAIR

4 CEP MEMBERS :

5 EDWARD "TED" QUINN  
6 AMERICAN NUCLEAR SOCIETY, SAN DIEGO  
7 CHAPTER

8 RICH HAYDON  
9 CALIFORNIA STATE PARKS

10 VALENTINE "VAL" MACEDO  
11 LABORERS INTERNATIONAL UNION OF NORTH  
12 AMERICA LOCAL 89

13 DAN STETSON  
14 OCEAN INSTITUTE

15 JEROME M. "JERRY" KERN  
16 OCEANSIDE CITI COUNCILMEMBER

17 GARRY BROWN  
18 ORANGE COUNTY COASTKEEPER

19 DONNA BOSTON  
20 ORANGE COUNTY SHERIFF'S DEPARTMENT

21 GENE STONE  
22 RESIDENTS ORGANIZED FOR A SAFE  
23 ENVIRONMENT

24 MAYOR TIM BROWN  
25 SAN CLEMENTE

JIM LEACH  
SOUTH ORANGE COUNTY ECONOMIC COALITION

TOM PALMISANO  
VICE PRESIDENT AND CHIEF NUCLEAR OFFICER  
SONGS

23

24 (Continued.)

25

1 PANEL MEMBERS IN ATTENDANCE :

2 CHRIS THOMPSON  
3 SOUTHERN CALIFORNIA EDISON  
4 VICE PRESIDENT FOR CHAIRMAN'S OFFICE

5 DR. WILLIAM PARKER  
6 UNIVERSITY OF CALIFORNIA, IRVINE

7 TOM CAUGHLAN  
8 CAMP PENDLETON

9

10 PANEL GUEST MEMBERS IN ATTENDANCE :

11 GEOFF FETTUS  
12 SENIOR ATTORNEY AT THE NATURAL RESOURCES  
13 DEFENSE COUNCIL

14 DR. PER PETERSON  
15 UC BERKELEY

16 DAVID WRIGHT  
17 BPC ADVISORY COUNCIL MEMBER

18 TIM FRAZIER  
19 BPC ADVISORY COUNCIL MEMBER

20 ROB OGLESBY  
21 CALIFORNIA ENERGY COMMISSION

22 JIM WILLIAMS  
23 HIGH-LEVEL RADIOACTIVE WASTE COMMITTEE

24 EINAR RONNINGEN  
25 SACRAMENTO MUNICIPAL UTILITY DISTRICT

MARNI MAGDA  
COMMUNITY MEMBER

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1 TUESDAY, JANUARY 27, 2015, SAN JUAN CAPISTRANO,  
2 CALIFORNIA

3 6:05 P.M.

4 \* \* \*

5

6 DR. VICTOR: Well, good evening. Happy New Year to  
7 everyone. Thanks to all of you for coming out. And  
8 for the members of the two panels we have tonight and  
9 the Community Engagement Panel. Thanks to everyone for  
10 spending your evening with us.

11 My name is David Victor. I'm chairman of the  
12 Community Engagement Panel for San Onofre. Let me just  
13 begin with our standard reminders, which is: If there  
14 is an emergency that requires that we evacuate the  
15 room, the exits are out there or out the door that you  
16 came in, in the back along the hallway.

17 I want to thank the officers from CHP for  
18 spending the evening with us and for providing security  
19 for all of us, so thank you very much to them. We have  
20 heard, in the Community Engagement Panel, over the last  
21 year of our operation, a lot a concern about the fact  
22 that spent fuel is accumulating at the site and will be  
23 there for the foreseeable future, and, of course, that  
24 reality reflects the difficulties in Washington. And  
25 many people on the panel and in the public have asked

1 us to focus on that and focus on what can be done.

2 Specially, from the perspective of the local  
3 communities that are concerned about this, but don't  
4 really have a sense of how can we -- how can we make a  
5 difference, and that is the focus of tonight's panels.

6 Since so much of what's needed is at the  
7 federal level and is outside our community, it is very  
8 important that we not try and do this ourselves but  
9 that we partner with an institution that knows a lot  
10 about what's going on at the federal level.

11 And so it's my great pleasure to be partnering  
12 this evening with the Bipartisan Policy Center, with  
13 Tim Frazier, who will take the floor in just a moment,  
14 from the BPC, to help us think about the federal and  
15 national, regional, local efforts underway to try and  
16 get us smarter on long-term storage policy for nuclear  
17 waste.

18 Just a reminder: The Community Engagement  
19 Panel was set up more than a year ago as a conduit, a  
20 two-way conduit, to help the communities that are  
21 affected by the decommissioning of the plant,  
22 understand what's going on, and how Edison, which is  
23 doing the decommissioning, understand what the  
24 communities want and what's feasible.

25 And we're not going to agree on everything, we

1 already have seen that, but it's crucial that we have  
2 dialogue and discussion and we be fully transparent  
3 about that process. This is not a decision-making  
4 body, this is a conduit that is designed to help  
5 provide this two-way flow of information.

6 The agendas for tonight's meetings are on your  
7 chairs. We will organize the meeting around two  
8 panels: The first panel, that Tim Frazier will chair,  
9 is going to look at the federal and regional level at  
10 some of the large strategic questions; the second  
11 panel, which I will chair, will look at what all this  
12 means for California and for the local communities.

13 Wherever possibly, we're going to try and be  
14 pragmatic and focus on what we can actually do here in  
15 California to improve the situation.

16 After these two panels, we will have our  
17 standard public comment period. We experimented at our  
18 special meeting last October on the casks. We expe --  
19 experimented with the idea of having a facilitated  
20 public discussions and instead of people getting,  
21 saying their three minutes one on topic, getting down,  
22 and then somebody else coming up and talking -- and  
23 talking about something different, we're going to -- we  
24 have cards and we'll have more cards available.

25 So if you have a question to ask, either if



1 you know it now or later, write it down on your card,  
2 indicate the theme, and Dan Stetson, Tim Brown, and I  
3 will -- will collect those cards and organize them and  
4 lead a discussion around some major thematic ideas, and  
5 we'll get to that and discuss that in greater detail  
6 later this evening.

7 There'll be two -- there'll be two breaks  
8 between the first and second and the third segments of  
9 the meeting.

10 The last point I want to make before I give  
11 the floor to Tim is that we're live-streaming and I  
12 believe also archiving and recording this meeting on  
13 SONGScommunity.com. SONGScommunity.com disappeared for  
14 a while. It's not reappeared. So I want to thank  
15 Edison for -- and their computer mavens for figuring  
16 that out, and dealing with the North Koreans or whoever  
17 took it over, and getting it back online, and also by  
18 bipartisanpolicy.org

19 And so both sides are going to have the full  
20 information from tonight's meeting and is being  
21 live-streamed. So welcome to all of you at home who  
22 are watching this at home.

23 Because of that, when you do take the floor,  
24 specially during the public comment period, please  
25 identify yourselves so that we have a proper record of

1 this and so the people who are listening on the  
2 live-streaming will know what's happening.

3 Let me give the floor now over to Tim Frazier  
4 of the Bipartisan Policy Center. Tim.

5 CHAIRMAN FRAZIER: Thanks, David. I want to add my  
6 welcome to everyone who's -- who has come out tonight.  
7 The Bipartisan Policy Center is a bipartisan think tank  
8 from Washington.

9 We try very hard at BPC to look for bipartisan  
10 solutions, solutions that can get support, Republicans  
11 and Democrats. If you know the way Washington works,  
12 the only thing that seems to get anything done is  
13 whenever you have true bipartisan support. We're  
14 working very diligently on a nuclear waste project,  
15 which is, taking action to address nuclear waste.

16 I'll talk a little bit more about it in the  
17 second -- I've got a little slot at the beginning of  
18 the second panel that I can talk a little bit about.

19 We have several advisory members on our  
20 council. We try to spit it -- split it pretty evenly.  
21 We have Democrats and Republicans, industry  
22 environmental, we've got grassroots people. And so  
23 it's a good group. Like I said, we'll talk a little  
24 bit more about it.

25 We'll go ahead and jump right into the panel.

1 Let me introduce first David Wright. David is a former  
2 president of NARUC, National Association of Regulated  
3 Utility Commissioners, former chairman of the Public  
4 Utilities Commission in South Carolina, he's also on my  
5 advisory council, brings that perspective of the  
6 regulated environment, all the discussions that we have  
7 about nuclear waste and how we can try to move forward  
8 with nuclear waste.

9 Dr. Per Peterson is a professor from UC  
10 Berkley. Per and I have been around the world  
11 together, per was on the Blue Ribbon Commission on  
12 America's Nuclear Future, which I participated as the  
13 designated federal officer, which really only means I  
14 was in charge for the Department of Energy when I was  
15 still with the department.

16 Per is going to talk a little bit about the  
17 current status of the federal policy, which is kind of  
18 a wreck, and some of the things that the Blue Ribbon  
19 Commission recommended, that we believe still are worth  
20 pursuing and got pretty broad bipartisan support.

21 Geoff Fettus is a senior attorney at the  
22 Natural Resources Defense Council. Geoff and I also  
23 have known each other for a very long time and, quite  
24 frankly, are sometimes not on the same side of the  
25 issue. But that makes for good conversation. Geoff

1 and I are friends and have been for a while.

2 Geoff is going to give his perspective of what  
3 needs to happen in the federal Policy world to try to  
4 set this stage so that we can actually move forward on  
5 addressing nuclear waste, which is what the Bipartisan  
6 Center is all about, which I think is what the CEP  
7 would like to see: Some forward movement on nuclear  
8 waste.

9 So I'm going to turn it over to Per.

10 DR. VICTOR: And can you just remind us, Tim, we're  
11 going to have the three introductory comments and then  
12 you're going to lead some questions and discussions --

13 CHAIRMAN FRAZIER: That's right, yeah.

14 DR. VICTOR: -- with the Community Engagement Panel  
15 members?

16 CHAIRMAN FRAZIER: Yeah, they'll lead questions and  
17 discussions and we're also going to take -- they have  
18 comment cards?

19 DR. VICTOR: They have comment cards. We have a  
20 whole segment of the last part of the meeting where we  
21 can bring larger comments.

22 CHAIRMAN FRAZIER: Yeah, absolutely.

23 DR. VICTOR: Unless you want to bring some comments  
24 in already.

25 CHAIRMAN FRAZIER: Yeah, we're going to do Q and A.

1 I will start off with some softball questions that I  
2 know they can answer, and then the CEP members can --  
3 can hit them with more questions and we'll just have a  
4 discussion. All right, Per.

5 MR. PETERSON: Thank you, Tim. Everybody can hear  
6 me okay? Very good. So I'll start this off with a  
7 little bit of a update on where the U.S. Nuclear Waste  
8 Program stands at the federal level:

9 It is still at an impasse, that is, there is  
10 very little to no activity underway, small amounts of  
11 research, small amount of progress towards furthering  
12 the license application for the Yucca Mountain Project.

13 But primarily, U.S. Policy right now is being  
14 determined by how the courts interpret the lack of  
15 Congressional direction that currently exists.

16 So some of the key things that the courts have  
17 found: The first is that they're continuing to award  
18 to utilities and lawsuits funds to pay for the interim  
19 storage of spent fuel. This is important here locally  
20 because the federal government will pick up the tab for  
21 the dry cask storage or, at least, most of the tab  
22 since the Department of Energy is now long in arrears  
23 in fulfilling its responsibility to take title and  
24 remove the spent fuel from nuclear power plants.

25 The second thing that is happening is that

1 there has been some limited restart to the Yucca  
2 Mountain Project that will proceed at whatever pace  
3 additional funds are appropriated. The courts directed  
4 the Department of Energy and Nuclear Regulatory  
5 Commission to do this, Congress, has yet not  
6 appropriated any additional funds so they've been  
7 working with funds that had accumulated.

8 Another interesting development, I think,  
9 since the last time I was here with the panel is that  
10 the courts have also now directed the Department of  
11 Energy to stop collecting the Nuclear Waste Fund fee  
12 since there's not much logic in collecting it if there  
13 is no nuclear waste program to -- to work on.

14 At this point what is clear is that some type  
15 of congressional action will be needed in order to  
16 restart a functional U.S. nuclear waste program, and  
17 it's my hope that this Congress will be able to pass  
18 some legislation to do that.

19 We need to think a little bit about what will  
20 be important for that legislation to do. I think that  
21 the first thing is that to simply start appropriating  
22 money to restart the Yucca Mountain Project is not  
23 sufficient, nor is it likely to work, unless a number  
24 of other problems are also corrected, which were  
25 outlined in the Blue Ribbon Commission's reports.

1           Now, if you -- sitting at public meetings like  
2 this over the last several years, it's my observation,  
3 there is a number of areas where we find broad  
4 consensus in this country about things that need to be  
5 done and other areas where we have significant  
6 disagreement.

7           We don't have broad consensus, we do have  
8 significant disagreement about whether we should use  
9 nuclear energy, but there is a broad consensus that we  
10 have a responsibility to manage the waste that are  
11 generated by nuclear energy safely and well. And we're  
12 certainly -- it's questionable whether we're being  
13 successful in doing that.

14           There is not a consensus as to whether we  
15 should build a repository at Yucca Mountain, but a bit  
16 of compromise position could be to start work on the  
17 second repository as well that might turn out to  
18 actually function better and be more attractive.

19           In order to do this, we do need to have  
20 legislation pass that would restart a program. And key  
21 elements that are important that were recommended by  
22 the Commission and there is broad consensus are  
23 important to do include two additional things:

24           One is to transfer the responsibilities for  
25 implementing this program out of the Department of

1 Energy to some type of new entity that will have this  
2 task as its soul mission.

3 And then the second element is that when we do  
4 finally start recollecting the fees, to not spend them  
5 for other purposes, that is, to put them into a special  
6 fund because all of the money that has been collected  
7 to date actually has already been spent, sort of like  
8 your Social Security funds. So this is discomfoting.

9 The federal government has a legal obligation,  
10 in the longer term, to actually use the money it  
11 collected, but it's very difficult for Congress to do  
12 that under their current budget rules, and fixing that  
13 problem is also critical if we want to have a  
14 successful program going forward.

15 So that's the current state of play, and I  
16 hope that some of the things that we can discuss  
17 involve What can be done to encourage Congress to move  
18 forward and pass legislation and get a functional waste  
19 program up and running again in the United States?

20 Geoff, go ahead.

21 MR. FETTUS: Okay. Thank you, Per. That was,  
22 actually, a good summary of some of the issues. NRDC.  
23 My name is Geoff Fettus, a senior attorney at the  
24 National Resources Defense Council. And I'll try not  
25 to use acronyms, like NRDC, but then you have to be



1 subjected to our long name.

2 I actually don't have a lot of hope for this  
3 Congress moving forward on the legislation that Per  
4 described would very likely be necessary to move  
5 forward with a nuclear waste program, but that's a  
6 political discussion that we can probably get to in a  
7 talk or in a question-and-answer session.

8 What I will talk with -- what I will speak to  
9 quickly are the fundamental things that NRDC and many  
10 of my colleagues and the public interest community  
11 think need to be in place prior to meaningful  
12 legislation or part of meaningful legislation going  
13 forward that can help address the nuclear waste both  
14 commercial and actually the defense nuclear waste  
15 issues that we have around the country.

16 And the Blue Ribbon Commission that Per and  
17 David were on got one thing fundamentally and  
18 importantly right, and they didn't go far enough, but  
19 they got one fundamental thing right, that all three of  
20 us agree on, and that's the issue of consent and the  
21 issue of trying to find a way to have whatever host  
22 site and state give meaningful consent.

23 And I could go through a long, long slide show  
24 that you don't want to see about the history of failure  
25 of the repository program and why we're here today,

1 maybe that's for another day.

2 But the issue that the BRC got right was, with  
3 all the extraordinary effort that was put into the  
4 Lyons, Kansas, in the 1960s, monitor retrievable  
5 storage in the 1970s, and then the Yucca Mountain  
6 Project that failed finally in 2009.

7 The fundamental issue of trying to figure out  
8 a way to work through our federal system had never  
9 really be grappled with, and from -- just from my  
10 perspective as the lawyer who's worked on these issues  
11 for NRDC for years, the failure of Yucca had much more  
12 to do with the corruption of the site process and  
13 weakening standards, as well as the fundamental  
14 federalism problem inherent in selecting the state and  
15 telling that state, "Well, you get the short straw."

16 So, what the BRC got right was important with  
17 consent, but what they didn't do is figure out the  
18 solution to it. And the solution really sits at the  
19 heart of the way environmental laws in this country  
20 work; and that is amending the Atomic Energy Acts  
21 exemption from environmental laws.

22 Many people don't understand, that they think  
23 nuclear -- nuclear, which is heavily regulated in terms  
24 of safety process -- is not heavily regular compared to  
25 many other industries in terms of the environment and

1 public health.

2           And the nuclear industry, specially, both the  
3 commercial and defense, are exempt from environmental  
4 laws in great measure when it comes to radioactivity,  
5 which means that once the process, once a site starts  
6 to go forward and a selection has been made, it's what  
7 happened with Yucca, the state, in many ways, has very  
8 little say except to challenge and that's what  
9 happened.

10           And so I can talk more about this during the  
11 question-and-answer, but we have a very simple set of  
12 prescriptions that we think have to be in place for  
13 meaningful legislation to move the dime, both for the  
14 commercial sites, like here in southern California, and  
15 across the country, from Illinois to New York to South  
16 Carolina.

17           And some of that were shared by with -- by  
18 what the BRC, the President Obama's 2012 BRC, that Per  
19 was on and did right, and that was fundamentally  
20 focused on geological repositories; two, create a legal  
21 framework that's equitable and transparent before the  
22 siting process starts, and that's both for interim  
23 storage as well as for the repository program itself.

24           And by the way, I agree with Per, that it's  
25 going to be multiple repositories, it's not going to be

1 one, ultimately.

2 Three, approach the issue and, finally, solve  
3 the issue of state consent by the fundamental change in  
4 environmental law and giving states meaningful  
5 regulatory authority by ending the exception from the  
6 Atomic Energy Act.

7 Four, approach the issue of interim storage in  
8 a phased, careful approach and that actually has been  
9 suggested in legislation, but unfortunately the  
10 trajectory right now is going the other way.

11 Former chairman of the Senate Energy  
12 Committee, Jeff Bingaman, of New Mexico, a very, very  
13 moderate bipartisan fellow, in issuing 2012 as 3469 was  
14 the first essentially legislative presentation of the  
15 Blue Ribbon Commission's ideas, and we think that's a  
16 very careful presentation in terms of approaching  
17 consolidated storage because it -- because it would not  
18 have it -- it preserved here -- I'll give a little bit  
19 of lingo -- it would've preserved the link between  
20 storage and disposal, meaning it would not have created  
21 a new green de facto disposal site that would just go  
22 forward and then some day allow for a repository maybe,  
23 kind of, sort of, will probably never happen, but you  
24 created a new disposal site.

25 And the fifth, where we've also agreed with

1 the Blue Ribbon Commission and that was excluding and  
2 moving past closed fuel cycles and reprocessing because  
3 we -- we don't see it as a persuasive process for the  
4 back end of the fuel cycles for the next 50 years, at  
5 least. So with that, I'll turn it to David.

6 MR. WRIGHT: Thank you. Good evening. My name is  
7 David Wright and I'm from South Carolina. I actually  
8 made -- coming along, but I happened to live in the  
9 city where the other USC is located and that would be  
10 Gamecocks, not Trojans. And I found it kind of surreal  
11 to be here yesterday, watching the USC Gamecock women  
12 playing basketball on TV here. So, thanks for that.

13 You know, I'm really more interested in  
14 hearing and listening. I mean, in going around the  
15 country, what we've been doing is trying to open our  
16 minds and try to put our biases aside and look at this  
17 issue in a way that can get something moving in the  
18 issue of just moving waste.

19 You've heard a lot things from Per and from  
20 Jeff already and, to many people, they subscribe to one  
21 or the other and that's part of the problem, that right  
22 now we don't have a sense of urgency around the issue  
23 to move the fuel or to consolidate it or to do anything  
24 with it right now.

25 You've got -- right now we lack the political

1 will as a country to do anything and that's part of the  
2 -- that's really a big part of the issue. You know, we  
3 have the Congress that passed the law, we have the  
4 Nuclear Waste Policy Act, we follow the pol -- the act.

5           Whether you like how Yucca was determined or  
6 not, and there are people on both sides of that, as  
7 we're all learning, it was selected and it is the law  
8 of the land. It hasn't failed because there is a  
9 license application.

10           The federal government judicial system has  
11 told them to move forward with trying to get moving  
12 that license application forward. In the end, if it  
13 fails because of bad science or some other reason, then  
14 the Nuclear Waste Policy Act spells as to what's to  
15 happen in that issue: Take get a second repository.

16           Right now there is a political fight between  
17 the House and Senate on whether or not you fund the  
18 license application or you don't. You know, and you've  
19 got a senator from Nevada, who's been pretty set in his  
20 ways, as we know, and so there has not been anything  
21 happening.

22           Yet, we have a new Congress and I -- I do kind  
23 of agree with what Geoff said that the likelihood of  
24 anything really substantial coming out of Congress  
25 without a presidential veto might be remote, but that

1 doesn't mean we can't try to put some markers down and  
2 try to put some things together so that we can at -- at  
3 some point move forward and very proactively and  
4 progressively.

5           And part of the issue is, that I'm looking in  
6 trying to listen to people talk about is, in the issue  
7 of consolidated storage some people, some people call  
8 it interim storage, consolidated storage by itself not  
9 really anybody's asking for it because all it is is  
10 bringing dry cask canisters onto a site, put them on a  
11 pad or maybe putting them underground and, you know,  
12 watching it.

13           There is not any real jobs created from it and  
14 there's not a lot of economic development that results  
15 from it, so I think you've got to look at that along  
16 with the issue of consent, which, to a community, a  
17 willing host community, I don't think it's going to be  
18 dictated from the top down.

19           I think, in the end, it's going to be a  
20 bottoms-up process to where the communities are going  
21 to tell the federal government, "Look, we will do this,  
22 but here's what we need," and there'll incentives and  
23 there'll be agreements or whatever stuff that helps the  
24 community maybe it's R&D, maybe it's other stuff, some  
25 people like the idea of reprocessing and recycling and

1 looking at the back end of the fuel cycle; others  
2 don't. You've heard that.

3 And that's a part of the discussion, and it's  
4 healthy, and I think we have to go through that  
5 process, so I'm really interested in what you've got to  
6 say. Today was a Chamber of Commerce day, is prettier  
7 than anything that I've seen recently back in my home  
8 state, and I'm very proud to be here and I'm looking  
9 forward to hearing what you've got to say in the next  
10 day or so while I'm here. So, thank you.

11 CHAIRMAN FRAZIER: I'm going to ask -- let me jump  
12 back and say one thing: Geoff is right. The BRC  
13 recognized that consent was needed, but we didn't go  
14 farther than that primarily because there were 15  
15 people and it was going to be really hard to get all  
16 these 15 people to agree on it.

17 But the other -- the other more relevant point  
18 is, we were worried about being too prescriptive at a  
19 time when it hadn't fully been flushed out. I think  
20 you agree with that, right, Per?

21 MR. PETERSON: In fact, one of the major  
22 recommendations was that the process for citing new  
23 facilities should include negotiation of legally  
24 binding contracts with the state and local governments  
25 that would transfer to them rights and responsibilities



1 that they felt necessary in order to properly protect  
2 the citizens that would live in those states.

3 And, in fact, it's that sort of mechanism that  
4 you can say has been responsible for much of the  
5 success of the waste isolation power plant, including  
6 remarkably resilient support even following an accident  
7 that happened back in February.

8 But this ability to -- and under the senate  
9 bill that Senator Feinstein and others have developed,  
10 it would give the -- in this case, it would give an  
11 administrator of the new agency legal authority to  
12 negotiate these types of legally binding contracts and  
13 that provides a mechanism to address, at least, in part  
14 these concerns.

15 MR. STONE: More louder, please.

16 CHAIRMAN FRAZIER: Okay. We'll try to talk up.  
17 Okay. Sorry. One of the things that we've looked at  
18 is, what are the barriers to taking action? So, real  
19 quick, in a fast round, because we've got questions  
20 already, Geoff, give me your one barrier to making any  
21 progress on nuclear waste and why, and then we'll go to  
22 Per and David, then we'll go to Peterson.

23 MR. FETTUS: The debate is so polarized over  
24 Yucca/not Yucca and there's very little focus on what  
25 was the foundational problem in the Nuclear Waste

1 Policy Act and that's its allowance of -- of this  
2 federalism problem that I've described to bubble up.

3 And I think it will doom any process. If  
4 we -- if Yucca gets restarted, which I think, by the  
5 way, would be unwise and years-long process, to start  
6 the licensing process again with 300 contentions filed  
7 by the state of Nevada, challenging it, without --  
8 without addressing this fundamental process necessary  
9 to solve the federalism problem, different people,  
10 hopefully not us, will be here 25 years from now, with  
11 the same conundrum in front of them.

12 CHAIRMAN FRAZIER: All right. Per, quickly.

13 PUBLIC MEMBER: What is the federalism problem?

14 MR. FETTUS: The failure of the states to have  
15 meaningful regulatory authority over ways it comes in,  
16 and so when states are given an ultimatum or by fiat.  
17 Per was just talking about how there have been ideas to  
18 allow contracts or sort of one-off agreements with  
19 states in the future that would give them much more  
20 authority than what, say, for example, Nevada had in  
21 the Yucca process.

22 My objection to that, from a simple legal  
23 matter is, no future Congress is bound by what a prior  
24 Congress did, so if they just decide to do away with  
25 that contract, then that's what will happen.

1           MR. PETERSON: Of course, the same applies to the  
2 law they just passed. But let me -- let me go ahead  
3 and point towards what I think it's the fundamental  
4 area of disagreement between the House and the Senate,  
5 is about how and -- whether and how to proceed with the  
6 project at Yucca Mountain.

7           If I were looking at this as being something  
8 that's critical for our nation to be successful in, I  
9 would move forward with multiple repository efforts. I  
10 don't think there is any need to rush forward with  
11 Yucca, but we do need to do good-faith effort to find  
12 the second repository facility that is required by the  
13 Nuclear Waste Policy Act.

14           We have accumulated more than enough spent  
15 fuel to make it legally required for us to also find an  
16 additional repository. And in my expectation, we can  
17 actually probably find one that would have, in many  
18 respects, more attractive features but certainly would  
19 provide some diversity and additional robustness to  
20 this overall system.

21           CHAIRMAN FRAZIER: Okay. David, quickly, a barrier  
22 and why?

23           MR. WRIGHT: A lack of sense of urgency because of  
24 no political will as a result of there being no  
25 national pride on the issue to take care of it.

1           CHAIRMAN FRAZIER: All right. So we're going to  
2 take questions. I see that David has a question.

3           DR. VICTOR: Well, I don't want to jump the queue.  
4 I had a method that allowed you to see that I had a  
5 question, so if others have questions, they should ask  
6 questions first.

7           CHAIRMAN FRAZIER: Seeing none.

8           DR. VICTOR: You've got --

9           MR. STONE: Oh, there you go.

10          DR. VICTOR: Tim's got the method going.

11          MR. BROWN: Well, this is -- this is extremely  
12 relevant to the City of San Clemente due to our  
13 proximity to San Onofre. One of the things that came  
14 up when we were talking about -- you know, we talked  
15 about an interim storage solution versus a permanent  
16 storage solution, but when the public hears storage,  
17 they don't differentiate between the two, they realize  
18 when it comes to the federal government interim  
19 solution, it becomes a permanent solution just by  
20 simple neglect.

21                   And beyond that, much of the process in  
22 establishing a temporary storage solution or interim  
23 storage solution so complex, railway systems, get  
24 everything in there, that eventually isn't it almost as  
25 challenging as developing a, quote-unquote, permanent

1 solution in that regard?

2 I know that, you know, Yucca Mountain was an  
3 enormous amount of money and effort put into that, but  
4 ultimately wouldn't you experience the same with an  
5 interim storage solution in terms of political  
6 push-back, in terms of concerns and, ultimately, if  
7 you're going to be going through that process anyway,  
8 wouldn't you simply try and achieve a permanent  
9 outcome?

10 MR. FETTUS: Yes, I think you're actually right. I  
11 think -- I think without heeding the wise words of  
12 Chairman Bangaman from a few years ago that the effort  
13 that would be involved in a new consolidated storage  
14 site would be so remarkable that unless it's tied to a  
15 repository, and by that I mean entirely tied, which is,  
16 it stops, if the repository stops, so it doesn't become  
17 the de facto site, you will have precisely what you  
18 just described.

19 MR. WRIGHT: Well, I think that's the reason that I  
20 mentioned that if you're going to solve this problem  
21 it's going to have to start from the community, a  
22 willing-host community, actually initiating that effort  
23 themselves.

24 An RFP process that the federal government  
25 puts out might attract some willing hosts, but you've

1 got a number of sites around the country that are now  
2 considering it, but they're not considering being just  
3 an interim storage facility, there is other components  
4 they'd like with it.

5 MR. PETERSON: I'd just point out that there's  
6 absolutely no physical or technical limitations to  
7 implementing these things because it already happens  
8 and the vast majority of spent fuel in Europe is not  
9 stored in long-term storage on site.

10 The French ship it to be reprocessed at  
11 La Hague, the Swedes have a centralized storage  
12 facility. They've also developed successfully a  
13 underground repository and their -- the Finns are  
14 moving forward, as well. The French have a repository  
15 well along.

16 But I think we also want to be thinking about  
17 other risks that come from our end are in action  
18 because there is many places in the world where we  
19 can't -- we can expect that spent fuel will not be  
20 stored safely.

21 And in the past with the research reactors, we  
22 took back spent fuel that had significant levels of  
23 security risk. I recommended to people to go back and  
24 look at what we were doing in California back in 1998  
25 when we were returning highly enriched uranium spent

1 fuel from South Korea and other foreign countries.

2 It was transported through California and we  
3 addressed at that time a lot of the issues, technical,  
4 policy, safety issues associated with spent fuel  
5 transport. In the California Energy Commission, we  
6 have a representative here right now that did a lot of  
7 great policy work.

8 So this is something that can be done  
9 technically, it's much more a matter of how do we put  
10 together and develop a consensus to move forward to  
11 implement these solutions, which are done routinely in  
12 other parts of the world?

13 DR. VICTOR: Yeah. Let me reach to other members  
14 of the CEP to raise questions as well and we'll have a  
15 chance later for the public, and let me also recognize  
16 Tom Caughlan. He's a new representative from Camp  
17 Pendleton. Larry Rannals is retiring, and we thank  
18 Larry for his terrific service over the last year and  
19 wish him well in his -- in his retirement.

20 It seems like none of the problems here are  
21 technical problems, they're political problems. And so  
22 the question that we're grappling with is,  
23 strategically, where are the real opportunities to move  
24 -- to make progress politically? I mean, there's a lot  
25 of moving parts.

1           I guess I wanted to ask you, Gentlemen, from  
2 Washington, who all have snow shovels, and spend more  
3 time there than we do, where -- where's the real  
4 opportunity for progress?

5           Because, I've heard, at least, four things  
6 tonight: One thing is, we should push harder on Yucca,  
7 we've got existing legislation and there's a procedure  
8 there, and, if Yucca fails, then we go to the next plan  
9 after that, and that's in the legislation right now,  
10 and that's kind of the Republican strategy in the House  
11 right now, as far as I can tell, if they have a  
12 strategy.

13           The second is: Do multiple sites, which Per  
14 has suggested. It makes a whole lot of sense. It's  
15 insane to be working on a single site because it makes  
16 us hostage to the reality of that site, but  
17 unfortunately doing multiple sites, as the permanent  
18 repository requires new legislation, and then we're  
19 back stuck where we were in the first place, which is,  
20 we can't get -- we couldn't get legislation to declare  
21 that today was Tuesday let alone a legislation that  
22 would do something really. So, and maybe there's  
23 progress here that we don't understand.

24           The third is do consolidated interim storage  
25 and advance documents for this meeting, which are



1 posted online, is an article in the Bulletin of Atomic  
2 Scientists with yet another case for doing consolidated  
3 interim storage and let local communities, basically,  
4 bid for the right to store and watch the waste.

5 I mean, if they're going to get paid and so  
6 some communities want that and it's -- this is not  
7 rocket science, and we have evidence that, in fact,  
8 communities have wanted to do that in the past. We saw  
9 this with the private fuel storage solution or solution  
10 that then died in Utah.

11 And then the fourth thing I heard is: We need  
12 to provide more information to communities about  
13 transport of waste and so on. If we have that, then a  
14 lot of these other solutions, like consolidated interim  
15 storage, will be feasible, and that's, more or less,  
16 the message from the GAO report. GAO keeps changing  
17 its name. But the Government Accountability Office's  
18 report that was circulated in advance.

19 And so I'm just wondering, from the panel,  
20 yeah, there is a lot of things that can be done and  
21 there are a lot of barriers, but if you had to put --  
22 if you were representing a local community here and you  
23 had to -- to bet on an area where we can actually make  
24 progress or make a big effort and, at least, have some  
25 chance of progress, where would you push?

1           MR. WRIGHT: Well, I'll take this first and go the  
2 other way. I think that, and you're absolutely right,  
3 David, everything that you said, I agree with it. Not  
4 everybody else agrees with all of it or parts of it.

5           But I think the consolidated storage,  
6 specially of the decommission facilities now --

7           DR. VICTOR: So, like this facility here?

8           MR. WRIGHT: Possibly. But you've got the Yankee  
9 Plants and you've got the city -- you've got Prairie  
10 Island Community in Minnesota and others that there --  
11 that it's been sitting there forever, you know, in  
12 their minds and these are sites that can be returned to  
13 economic use very quickly, if they could just get the  
14 casks moved off their site.

15           I don't know that how -- how far you are  
16 there, but you would certainly fall into that category  
17 here. But I think in order to get something  
18 politically, because that's the big animal, through, I  
19 think in order to get -- to get the buy-in from the  
20 House, you're probably going to have to do something to  
21 keep the license application process moving forward so  
22 that you get the goodwill to push for a consolidated  
23 program of some time -- of some type, an interim  
24 storage facility.

25           The transportation issues, I totally agree

1 with, can be solved. I mean, we're doing it in South  
2 Carolina all the time. You know, we are moving stuff  
3 to WIPP, you know, from Savannah River Site.

4 MR. PETERSON: The Commission spent a lot of time  
5 thinking about this question of consolidated storage  
6 and the arguments for it and against it.

7 MR. STONE: Louder, please.

8 MR. PETERSON: The Commission spent a considerable  
9 amount of time thinking about these questions related  
10 to consolidated storage and the arguments for and  
11 against it. I think that there is a compelling  
12 argument to do due diligence and the best we can to  
13 develop consolidated storage for the spent fuel  
14 currently stored at the shut down reactor sites.

15 And the reason is not just for the communities  
16 here, but if I -- in the report we had a graph. You  
17 can find it on page 113 that shows all of the different  
18 countries around the world that have reactors right  
19 now; 21 of them have tiny, little programs, less than  
20 10 gigawatts of capacity, none of them or very few of  
21 them will ever develop the capability and domestically  
22 to be able to handle these materials.

23 85 percent of the actual spent fuel is being  
24 generated in the remaining 10 countries and adding  
25 small amounts to that would not impose a significant

1 qualitative change.

2           The key -- the key point is that if we don't  
3 develop the capability to consolidate our own spent  
4 fuel, then 20 to 30 years from now when an urgent need  
5 comes for us to do something because there's a security  
6 problem with stuff elsewhere in the world, we will not  
7 have the physical ability to do it and that could be a  
8 very terrible place to be in.

9           Now, we don't have to think about doing it  
10 today, but we want to make sure that the future  
11 generations have the capability to manage these  
12 materials safely. And if we don't build up the  
13 infrastructure now, they'll be sitting there with no  
14 tools to do the right thing, if they need to, in the  
15 future.

16           DR. VICTOR: Could I just quickly on that, does  
17 that imply that we -- it's currently illegal under  
18 federal law -- we ought to also be thinking about  
19 whether there are other countries that could be  
20 providing consolidated interim storage services even  
21 for U.S. fuel? Send it to Russia, they --

22           MR. PETERSON: The first -- well, another thing,  
23 part of the reason I'm a little bit excited about this  
24 is that this month Russia announced that it was ending  
25 a long deal -- a long-term deal that we had with them

1 to help them secure all of their direct used nuclear  
2 weapon material.

3 We have concerns that as a sequence of this  
4 the security is going to degrade as the equipment that  
5 we provided to them becomes obsolete and wears out.  
6 When we think -- it's quite commonplace that we tend to  
7 focus on ourselves so much rather than thinking about  
8 what's helping in other places in the world.

9 And, you know, we did bring back spent fuel  
10 from foreign research reactors through California. It  
11 was very controversial. In the end, the shipments were  
12 executed safely. And some of the stuff we brought  
13 back, here's a description, this is from a news article  
14 from 1998: "Furthermore, a number of the assemblies  
15 exhibited some degree of degradation, varying from  
16 minor cladding penetration to completely severed fuel."

17 Now, this is stuff that had been abandoned and  
18 was sitting in spent fuel pools at research reactors in  
19 countries where it was not secured and would have  
20 highly-enriched uranium. And I'm really glad that back  
21 then we had the capability and the willingness,  
22 although it was hard, to grab those materials and take  
23 them out of places where they presented a security  
24 hazard to us.

25 Now, right now we no longer really have the

1 functional ability to do that sort of thing. And if we  
2 can't get our own act together here in the United  
3 States, it's difficult for me to see how it is that  
4 we're going to be able to manage problems that will  
5 crop up in the future in other parts of the world.

6 MR. FETTUS: Small bites. Small bites. You want  
7 to know what you'd do quickly? I was going to get a  
8 quick answer on the -- on the "What would I do? What  
9 would I do if I can say "point to this that could  
10 happen"?

11 I think -- I think something along the lines  
12 of one of these three areas in the smaller-bite bill  
13 are theoretically possible but, I think, pretty  
14 unlikely for all the reasons that David and I, while we  
15 disagree on so many things, agree on politics.

16 First I want to say, it's not just politics,  
17 politics is kind of a reductive phrase, it's more  
18 institutional and there is some significant world views  
19 that are clashing sometimes, and so politics can be a  
20 small-pea thing or it can occasionally be a pretty  
21 significant thing.

22 But three areas where I think there could be  
23 progress in the next few years is, some sort of  
24 combination of hardened on-site storage with a  
25 commercial industry in terms of substantially improving

1 safety that almost everybody agrees that when the fuel  
2 is not in the pools, when we don't have densely-packed,  
3 overstuffed pools and they're in hardened, on-site  
4 storage, that's much safer.

5 And combining significant set of requirements  
6 that the NRC has not seen fit to require the industry  
7 yet along with something of a pilot project in terms of  
8 interim storage that does address the stranded sites,  
9 of which San Onofre is now essentially becoming one.

10 The "how that goes forward," we have a view  
11 that the way to do it is to send it to operating  
12 reactors because you already have consent and you can  
13 essentially keep the onus on the industry. But that  
14 combination through those small bite things, and,  
15 third, and we even saw it in a bipartisan manner in the  
16 senate last year.

17 I didn't think the bill was particularly there  
18 yet, but it was, at least, the idea from some  
19 Republicans and Democrats was something where they  
20 wanted to set up the -- and I'm going to get really  
21 legal here, but they wanted to set up the --  
22 essentially, the environmental protection standards  
23 first for whatever was going to go forward, so that  
24 everybody can kind of know what the rules of the game  
25 were going to be before the next process started

1 whether it was Yucca or something else.

2 DR. VICTOR: And just quickly, to press one more  
3 time on this kind of tapas strategy, what -- we talk a  
4 lot about bills and the senate, what -- how do we  
5 actually get something done in the House? Because it  
6 would seem to me that -- I mean, because both sides  
7 turns out are important. And should we be leaning on  
8 our House of Representatives' members to introduce some  
9 bill should that be there for -- I sense from your  
10 comments, that should be around consolidated interim  
11 storage maybe for existing reactors and maybe we -- we  
12 build some kind of alliance here in these communities  
13 with other communities around decommissioned reactors?

14 Is that kind of what you're recommending?

15 MR. FETTUS: No, I don't think the House is going  
16 to do anything that constructive.

17 DR. VICTOR: Then how do we get anything done if  
18 the House doesn't do anything?

19 MR. FETTUS: Well, I think -- I think if someone in  
20 it -- I think the Senate were likely to target and even  
21 that, for the reasons I said, I don't think is that  
22 likely. I think -- I think it's something very, very  
23 smart. We haven't seen anything like that from the  
24 House in a very long time, so there is an instinctive,  
25 if anything is going to be happen, it's going to come



1 from the Senate committees where they do occasionally  
2 work together to create something, whether we like it  
3 or not.

4           Once something is on the ground and dropped,  
5 then you don't really know what's going to happen.  
6 "Drop" means put into the process and it goes through  
7 the grinder of the legislative process. I don't see  
8 anything, I see nothing productive coming out of the  
9 House for quite a long time except for the more  
10 direction --

11           MR. WRIGHT: Somebody has to come to the defense of  
12 the House a little bit because the House has offered to  
13 do stuff. All the House wants -- and I've been on the  
14 Hill, met with these people, and talked about these  
15 things.

16           If the license application would be allowed to  
17 move forward through the process, live or die, fail or  
18 not, I believe that you've got the will and the good  
19 will in the House to work with the Senate on a  
20 consolidated plan, I really believe that.

21           CHAIRMAN FRAZIER: Gene?

22           MR. STONE: I have a question. Thank you.

23           DR. VICTOR: In your mic.

24           MR. STONE: The talk of see if anything is nuclear  
25 waste and federal level solutions, barriers to

1 progress, and opportunities to break through these  
2 barriers.

3 PUBLIC MEMBER: We can't hear you.

4 MR. STONE: So as someone mentioned, we've been  
5 talking about this for a very long time. I believe  
6 David mentioned that the problem -- the problem with  
7 Congress at our very first meeting and I think it has  
8 come up at every meeting and you guys have brought it  
9 up, as someone said, I believe it was you, Per, that we  
10 can be sitting here for another 25 years with this kind  
11 of public meetings and still not have the political  
12 will to get anything accomplished.

13 So I think the process and the science, we can  
14 work through the difficulties, like you said. But the  
15 real question here, and there is only one question, is  
16 that, is "How to move the public -- the political will  
17 to get something done?"

18 And I believe there is only one solution to  
19 that and that is -- and I'm not a lawyer, so I'm asking  
20 for Geoff Fettus's help here with this, but I do  
21 believe that the doctrine of public trust is something  
22 that we can all work together on California Edison, the  
23 activists nationwide can work together on the strategy  
24 to force the government to do its job, and it has been  
25 taken to court on several times in several cases and

1 they've won each time.

2           And this doctrine of the public trust goes  
3 back to Roman Law; every government has conceded to  
4 this doctrine and I believe it's the only strategy  
5 because we've -- we've been sitting here for over a  
6 year now and it's come up every time and if we don't  
7 figure out a strategy to move the politicians forward  
8 to take care of the public good and the public trust  
9 then we'll be sitting here for 25 years and I'm not  
10 planning on living that long. So we need to take  
11 action now. And I think, I'm hoping, that's what this  
12 meeting is all about: It's ideas to move forward.  
13 Thank you.

14           CHAIRMAN FRAZIER: Any comments?

15           MR. PETERSON: I think that, in the end, we'll need  
16 to have Congress -- Congress will need to take some  
17 actions in order to start a program. We're more likely  
18 to be successful if the actions that they take build on  
19 the foundation where there is consensus and reached  
20 compromise in areas where there is disagreement.

21           As I mentioned before, there is strong  
22 consensus around the idea that when we start collecting  
23 the fee again, it should be put into its own fund and  
24 not appropriated and spent for other purposes, so I  
25 think that's a no-brainer unless it's a congressional

1 budget office or -- otherwise you should do that,  
2 likewise, the idea that we should transfer these  
3 responsibilities to a different entity that has brought  
4 consensus.

5 The place where I think we really run into  
6 loggerheads right now is the questions of what to do  
7 about Yucca Mountain and I know that there's people in  
8 this room from Nye County who are strong supporters of  
9 moving forward with that.

10 And if you take a look at the local community  
11 and their feeling about that repository, you'll find  
12 that there is substantive support for it even though at  
13 the state level and the domino effect in Las Vegas and  
14 such, you won't find that support.

15 So in trying to think through this conundrum  
16 of how do you reach some sort of -- of balance here, I  
17 do believe that we would be better served by pursuing  
18 multiple options at the same time in terms of  
19 developing a repository.

20 MR. WRIGHT: So part of the -- part of the purpose  
21 of knowing where you want to go is knowing where you  
22 come from, and one of the problems that we have on the  
23 federal level is that the people who were in place in  
24 1987 and later are gone, even the staff people are  
25 gone, so it's a whole new group of people that have to

1 be reeducated on the issue.

2           They don't know why we're arguing about what  
3 we're arguing about. So I think it's things, meetings  
4 like this, around the country and people would have an  
5 open mind in learning. I think education process is  
6 going to be the one thing that's going at some point  
7 rally the country, if that's what kind of what you're  
8 looking to do. Because unless it's something that we  
9 can all support, it's going to be a long fight, a long  
10 run.

11           CHAIRMAN FRAZIER: Wait. Hang on. Let me get  
12 Jerry Kern.

13           MR. KERN: Thank you. Just a couple of comments.  
14 And Mr. Fettus has kind of mentioned this. It seems  
15 like though if we get local storage that's very robust  
16 and very hardened, it takes the pressure off of finding  
17 a permanent solution, so and I know that we're working  
18 towards that here, you know, that we want the safest  
19 storage that we can possibly get.

20           And I find it, you know, kind of this  
21 NIMBY-ism on a state level, you know, the idea that,  
22 you know, the people in Arizona don't want spent fuel  
23 from California, so I don't think it's the politics so  
24 much on a party line, but it's on a state-by-state  
25 issue, so I think that's the one.

1           So is this -- do we give up on Congress and  
2 find a state-by-state solution? You know, we look at  
3 the size of California to find California to solve its  
4 own problem? I know that's 48 lower states that would  
5 have to deal with this, but -- and I see people shaking  
6 their heads.

7           MR. FETTUS: It's a --

8           MR. KERN: You know, somebody probably brought that  
9 up before and has probably been shut down.

10          MR. FETTUS: It's a thoughtful observation because  
11 you've got right to the heart of some of the problem.  
12 I mean, you're using another phrase that's tough when  
13 you say NIMBY-ism. But it is a burden issue when  
14 you're looking like the West, for example, Nevada did  
15 not have a nuclear power plant and, yet, there they are  
16 the recipient or the potential recipient. They did  
17 have a lot of nuclear weapons testing, but they were  
18 the potential recipient of an extraordinary amount of  
19 waste.

20                 The state issue, the state burden issue is  
21 definitely something significant and that's where I  
22 would suggest to you my theory of how to crack the nut,  
23 which is to end the Atomic Energy Act's exemption from  
24 environmental laws, which -- which would allow states  
25 to have regulatory authority, which they don't have now

1 over nuclear waste.

2 And then, for example, the way it might play  
3 out is if states could make a deal. You know, on the  
4 state of "X," and I'm not even going to say a name  
5 because then you -- I'm on camera and that's not --  
6 that's not politics, small "P" politics, on the State  
7 of "X," but I'm going to -- we think we have a good  
8 site for whatever technical reasons.

9 We think we can go through the process and if  
10 the Atomic Energy Act has been amended, not so that it  
11 is a one-off deal with the state but all 50 states have  
12 this power, they can have the authority to say, "Okay.  
13 We're going to take 10,000 metric tons," and I'm  
14 choosing a number, out of that 20,000 metric tons.

15 We've got a great site, back the truck of  
16 federal money up here, we think we can technically  
17 defend this site, and as attorney general, senator,  
18 governor, whatever I am of the state, I am not  
19 potentially sacrificing my political career by doing  
20 this because my state can say, at any point, unlike  
21 what is the case now, "No" or "We're going to shut it  
22 down."

23 Or, for example, what happened with WIPP,  
24 which is a great example, because WIPP had a disaster  
25 happened and they had a sitting radioactive release.

1 WIPP has -- the State of New Mexico, and I  
2 unfortunately know this far too well, having litigated  
3 it for the state years ago, the state has limited  
4 authority over the site, and without that fundamental  
5 state control, you're going to have exactly the problem  
6 that I think you're articulately described.

7 MR. PETERSON: So since the BRC has -- no longer  
8 exist on a formal member, I'll just say Texas and then  
9 go on. But then that's an inside joke, maybe.

10 Let me -- I'd like to make a point: The first  
11 is that while it would be wonderful to amend the Atomic  
12 Energy Act, it's not practical. But we can -- I think  
13 that you can get far enough along on that through  
14 having the legally binding agreements and Congress can  
15 undo anything it wants to do in the future except it  
16 can't undo the fact that, if you violate a contract,  
17 you have to pay, you know, you have to pay because  
18 that's -- I think that that's the Constitution protects  
19 people from unfair taking.

20 There is another really important point behind  
21 all of this, which I think needs to be emphasized, and  
22 that is that there is a very strong scientific and  
23 technical consensus that deep geologic disposal  
24 properly designed and located can provide safe and  
25 effective long-term isolation of nuclear waste, that



1 is, that this is a problem for which there is a  
2 technically and scientifically viable solution.

3 Moreover, the work that has been done to  
4 demonstrate that at this point has foundations that are  
5 as solid as everything that we've done with respect to  
6 understanding how carbon dioxide affects the climate,  
7 and they do put us in a position of being able to make  
8 rational decisions going forward.

9 The final thing to remember is that we dispose  
10 very large amounts of highly toxic chemicals in shallow  
11 disposals and we've already, for example, in  
12 California, contaminated thousands of wells with  
13 chemicals.

14 When we look at the consequences of geologic  
15 repositories not performing as well as they were  
16 supposed to, they involve the contamination of small  
17 amounts of water and, if it's the Swedish repository,  
18 it's seawater, which nobody is going to be drinking  
19 anyhow.

20 That is, the consequence in the long-term from  
21 having geological repositories not work that well is  
22 quite small compared to other things that our  
23 generation is doing with chemicals it's manageable  
24 because you can move your wells or you can treat the  
25 water.

1           And it is quite a bit different from the  
2 consequences of what we're doing with all of the coal  
3 that we're burning in states like Nevada and elsewhere,  
4 which is something that will never be practical to get  
5 out of the atmosphere.

6           And if you want to think about access to safe  
7 water for agriculture and drinking going forward,  
8 right, geological repositories are not going to be the  
9 problem. Chemical waste and climate change, you know,  
10 right now we're observing that as we're heating up the  
11 Arctic areas, the golf -- the Jet Stream is being  
12 pulled further north.

13           We're seeing persistent high pressure over  
14 California that's pumping lots of heat up into the  
15 Arctic, it's displacing large amounts of cold air out  
16 of the Arctic down into warmer areas and making our  
17 life miserable for our colleagues who live on the East  
18 Coast and it is providing a positive reinforcing  
19 mechanism to accelerate the effects of climate change.

20           Now, if this high pressure persists, then our  
21 water problems in California are going to be vastly  
22 worst than anything of geological repository could ever  
23 do and it will be vastly worst within just a couple of  
24 decades, not a couple of millennia.

25           So, trying to keep things in perspective is a

1 very important thing to do in this overall area of  
2 endeavor. That said -- and sorry for going on and  
3 on -- it does require careful --

4 DR. VICTOR: I'm used to it.

5 MR. PETERSON: -- scientific and technical work to  
6 properly site and design repositories and it has to be  
7 done under a rational regulatory system. It is not  
8 easy to do, but at least it's possible.

9 We will not get the carbon dioxide that we  
10 pump back into the air back out again, but at least it  
11 is possible to manage waste safely, if you do the right  
12 things.

13 CHAIRMAN FRAZIER: So now you see why during the  
14 Blue Ribbon Commission Per was the only commissioner  
15 that had its own stoplight system. God love him.

16 MR. PETERSON: I apologize. I -- everybody knows  
17 I'm obsessed.

18 CHAIRMAN FRAZIER: It's his passion.

19 MR. PETERSON: Tim?

20 MR. BROWN: Yes. So, actually, it dove tails very  
21 nicely with what Jerry was saying and, that is, you  
22 know, it feels as if these problems have been generated  
23 at the federal policy level and, ultimately, we keep  
24 turning back to the federal Government, the DOE, for  
25 the solutions for the problems that they've generated

1 systemically. Didn't we say it was a systemic problem?

2           And what I'm -- what I'm concerned about is, I  
3 also see San Clemente is going through what's called  
4 the Local Coastal Program right now, the Coastal  
5 Commission oversees all coastal-related items in the  
6 State of California, but the cities can engage  
7 through -- we can become local regulatory authorities  
8 to the local coastal programs, we can have oversight  
9 and manage that and we have certain checks and, you  
10 know, that they will make sure we're doing it  
11 correctly.

12           From my part, I see no reason why it is -- one  
13 of the biggest premise here is the federal government  
14 won't relinquish any control, it won't empower any  
15 other bodies to address this issue; all of the  
16 solutions flow through Washington, DC, all of the  
17 problems also stem from Washington, DC.

18           Do we see the cycle here?

19           So, ultimately, it's the atomic energy, all of  
20 these things need to involve more of the states because  
21 there's just so much -- there's so much invested in  
22 Yucca Mountain as the only solution, which makes it so  
23 emotional.

24           And I would also say, if I was in Nevada, "I  
25 don't want -- we didn't generate this. Why would we be

1 the ones stuck with it?" But if every state has the  
2 ability to pursue their own solution that ultimately  
3 will allow for the elected to engage in a better level  
4 with the -- with the public, that allow for them to  
5 meet the criteria established by the DOE and also make  
6 them co-state holders along with the DOE maybe on a  
7 state level that it allows for them to engineer  
8 solutions under strict criteria issued by the federal  
9 government that will be managed locally and ultimately  
10 be a better environment than what we currently have,  
11 which is all of the sites stuck in this perpetual state  
12 of storage because the federal government can't and  
13 won't get its act together.

14 And, by the way, I'm ending any federal career  
15 I have right now, so I'm okay with that. I'm okay with  
16 that. I honestly feel that the federal government has  
17 completely stepped on -- it has completely left the  
18 states alone on this issue.

19 So do us a favor, make us stakeholders, make  
20 us empowered stakeholders to be able to engineer these  
21 solutions as effectively what I would consider like a  
22 local coastal program. Let us be, you know,  
23 participants in this process and we can find interim  
24 storage solutions.

25 I was very dismissive of this idea and now

1 that I'm hearing more and more and more about it, I can  
2 see each state engineering a solution, an interim  
3 storage solution, to be far better than what -- than  
4 what we're stuck with right now.

5 And, ultimately, we're not going to always be  
6 leaning on a congress to come up with solutions,  
7 frankly, because I think they've got their hands full  
8 of plenty of other things. And so I would like to see,  
9 you know, in terms of the solution, I see that the  
10 state being empowered to take actions as it fits their  
11 needs, as it fits their own waste requirement is to be  
12 a really solid step forward.

13 So that was just my two cents.

14 MR. WRIGHT: Well, for a second I thought you were  
15 getting ready to talk succession. I was going to tell  
16 you my state tried that once, it didn't go very well.

17 MR. BROWN: I'd move to Texas if that was -- if it  
18 was to happen.

19 MR. PETERSON: There is a senate seat opening up in  
20 California, please run for it.

21 CHAIRMAN FRAZIER: We're going to go to Ted Quinn.

22 MR. QUINN: Okay. I'd like to ask the three  
23 panelists what your belief is on the consensus towards  
24 the final solution. In my mind, the final solution is  
25 not just a geological repository but, in fact, it's in

1 something that addresses the fuel cycle back-end, what  
2 is the -- what is the disposition? Is it in the rods  
3 that we currently have physicality on? Or is it in a  
4 different solution that's been recommended by the Blue  
5 Ribbon Commission, I believe, by MIT professor?  
6 Could the three of you discuss your opinion on that?

7 DR. VICTOR: Can say just for the benefit of  
8 everybody what "the back-end" is?

9 MR. QUINN: The back-end of the government fuel  
10 cycle, in my understanding, in simple terms is, after  
11 it leaves -- after it leaves the site where we've  
12 produced electricity, then what is the final  
13 disposition? Is the disposition to stay in the  
14 physical presence of the fuel rod? Is it to be  
15 reprocessed as the Navy does? And then a much smaller  
16 amount goes to -- to a final repository?

17 I'd be interested in what you believe that  
18 consensus is on that subject.

19 MR. FETTUS: I think -- I think this is one area  
20 where you can find deep agreement that I have with Per,  
21 that there's been a long consensus since -- a long  
22 consensus since 1957 in deep geological repositories,  
23 that that's the final solution.

24 I think we're more likely to end up over the  
25 next few decades with multiple repositories, as in two

1 or more. If the process works well and the way we hope  
2 and we think it's going to be spent fuel, we don't see  
3 any future for reprocessing or close cycle, certainly  
4 not on an economic level.

5 MR. PETERSON: The current technologies that are  
6 available for recycling fuel are more expensive than  
7 using the ones through fuel cycle and to deploy  
8 technologies to recycle would take decades to put in  
9 place anyhow.

10 In any case, we know that we need a geologic  
11 repository. So, in fact, I think that the commission  
12 was able to reach consensus that we don't need to  
13 decide today one way or the other on this question. We  
14 will have plenty of spent fuel remaining in storage  
15 that we could reprocess in the future if we were to  
16 choose to do so.

17 And, therefore, the people in the commission  
18 would not have been able to reach agreement on this.  
19 You know, we had Alison McFarland and Pete Domenici.  
20 You know, really, this is -- this is something that if  
21 we've been asked to say whether or not U.S. should  
22 reprocess, it would've been possible.

23 But there's no need to worry about that  
24 question today. There's plenty of other things we do  
25 have that are immediate problems to get working on.



1           MR. WRIGHT: You never say "never" because nobody  
2 ever thought we'd get on the moon and we did that. So  
3 there is a time when I believe reprocessing and  
4 recycling will be something we will look at because it  
5 will be economic. So to, out of hand, just rule it  
6 out, I think that's wrong.

7           I do think that -- or it's shortsighted, let's  
8 put it that way. I do think that as you look at  
9 consolidation or consolidated sites, second  
10 repositories, whatever, it's going to have to be a  
11 willing host that's going to take it and whenever that  
12 willing host comes to the table, they may want R&D, you  
13 know, as long as they can get the economic benefit from  
14 it that they want for their community. So I think it's  
15 wide-open, you know.

16           CHAIRMAN FRAZIER: Questions? Well, thank you.  
17 Thank the panelists. So as you can see -- to wrap up  
18 this little session, it's very complex, it's  
19 multi-faceted, there are, you know, "N+1" opinions in  
20 the room when you got "N" people in the room. It's  
21 a -- it's a difficult, not intractable.

22           I mean, there are solutions out there, it just  
23 takes a combined effort of people willing to work,  
24 willing to compromise, willing to listen to each other,  
25 and willing to check the other person's viewpoint,

1 listen to their own and see how it goes. So, thank  
2 you.

3 DR. VICTOR: We're going to take now just a  
4 five-minute break while we reorganize the panel up here  
5 for the second of the three installments this evening.  
6 So, please don't go to another ZIP code right now.  
7 We're just going to take five minutes.

8 (A brief recess was taken.)

9 CHAIRMAN VICTOR: Let's get settled here for the  
10 second of three segments of this evening's meeting.  
11 The first segment really focused a lot on the federal  
12 level, a little bit on the international level, which  
13 is an interesting dimension, and --

14 PANEL MEMBER: I'm not sure what's going on in  
15 there.

16 CHAIRMAN VICTOR: Please we're going to -- we're  
17 going to get started here.

18 MR. STETSON: It was a suggestion that we --

19 CHAIRMAN VICTOR: And now I want to focus on the  
20 regional, so West State California and local level --  
21 levels and be as pragmatic as possible. A lot of you  
22 in the communities here are focused on this question  
23 and want to know what to do and we're all grappling  
24 with this in different ways, and so I'm hoping that our  
25 next panel will help us think about what might work,

1 what might not work, how we can move the needle on this  
2 question.

3 I'll give you a sense of -- we're going to  
4 have two introductory talks to help set the frame from  
5 different perspectives, then we're going to have Edison  
6 tell us a little bit about what Edison has been doing  
7 and where things are headed on this, and then have some  
8 perspectives from a variety of different points of  
9 view, and then open it up for discussion by the  
10 Community Engagement Panel and others up here.

11 We have Tim Frazier, who you've met  
12 previously, from Bipartisan Policy Center, Rob Oglesby,  
13 from the California Energy Commission, which has state  
14 responsibility for many of these domains; Chris  
15 Thompson, who you know well, from Southern California  
16 Edison; Jim Williams, Western Interstate Energy Board;  
17 Einar Ronningen, from Sacramento Municipal Utilities  
18 District, SMUD, which has a reactor that's been  
19 decommissioned; and Marni Magda, who is right there,  
20 who is familiar to many of you in the local  
21 communities, who has been very active on these issues.

22 We're going to have initial comments five to  
23 seven minutes from the first two speakers and then  
24 we're going to hear from Edison for a little -- for a  
25 little briefer time about what they're doing, and then

1 we're going to go and have some brief comments from  
2 these different regional and local perspectives.

3 So let me first give the floor to Tim Frazier.

4 MR. FRAZIER: So, what I wanted to do in my time is  
5 kind of lay out what the Bipartisan Project is all  
6 about, and I'm going to go back to the Blue Ribbon  
7 Commission --

8 CHAIRMAN VICTOR: I'm sorry.

9 MR. FRAZIER: Because it's kind of relevant, and  
10 Per can tell you this, if you care to talk to him about  
11 it, we -- when the Blue Ribbon Commission was  
12 established, we were chartered to go out and look at,  
13 essentially, what was going to be the next step,  
14 what -- what was the plan forward.

15 We were directed by Secretary Chu not to look  
16 at Yucca Mountain, which we didn't, because I worked  
17 for Secretary Chu back then, and he was my boss. He  
18 said "no" and so that was that. And General Scott  
19 Kauft and Lee Hamilton, Congressman Hamilton, were very  
20 good and understood that the discussion wasn't really  
21 about Yucca Mountain, the discussion was about What are  
22 we going to do from this -- this point forward to try  
23 to get consent or a new charter or a new path for spent  
24 nuclear fuel? And not just spent nuclear fuel, defense  
25 high-level waste that they've got up in Hanford and

1 down in Savannah River.

2 Our charter was to come back with  
3 recommendations, which we did. We were specifically  
4 not asked to, and didn't mostly, try to take any action  
5 on the recommendations we made, and the recommendations  
6 were kind of broad.

7 If you've seen the report, there were eight of  
8 them. They were backed up by a ton of recommendations,  
9 but that -- by a ton of data. But that's just what it  
10 was, it was a series of recommendations to really kind  
11 of set a new path forward.

12 By the way, for my friends from Nye County,  
13 you noticed in the report there is nothing that we --  
14 we said or put in writing that would specifically  
15 exclude Yucca Mountain from being included in a  
16 consent-based process going forward.

17 When I was approached by BPC to run this  
18 project for them, what I really liked about it was the  
19 taking action part because there were many of us that  
20 were involved in the BRC that were dying to, not only  
21 talk about it and recommend things.

22 And we traveled all over, had a series of  
23 meetings across the country, went to Finland, Sweden,  
24 to -- to France, the UK, we went to Russia to talk to  
25 them about how they handle these things.

1           And it was -- it was an interesting  
2 across-the-board, it was a lot more consent-driven than  
3 the Yucca Mountain process had been. So we came up --  
4 but once against, it was all about recommendations.  
5 There wasn't -- we weren't trying to take any action.

6           This project that we're running is all about  
7 trying to take action. We're trying to identify the  
8 barriers that are stopping us from taking action. Once  
9 we get the barriers, we're trying to figure out what  
10 actions we might promote or might encourage that would  
11 move us past the barriers, either remove them entirely  
12 or lower the barriers enough so that we can get over  
13 them and really try to make some movement.

14           So where do the local stakeholders come in?  
15 It's important, I should -- one other thing: One of  
16 the deliverables we talked about for the project is  
17 kind of an action plan, a very broad-based plan that  
18 would -- that we would have broad-based support and  
19 it'll be built from what we hear at regional meetings  
20 like this, what we've heard at other regional meetings,  
21 where we think that there is a series of actions that  
22 all the stakeholders can agree to.

23           You know, at the meetings we have utilities,  
24 at the meetings we have nuclear industry, not  
25 utilities, these are the nuclear supplies. We have

1 environmental organizations, we have NGOs, grassroots  
2 organizations. Beatrice Brailsford is from Snake River  
3 Alliance and she's on my advisory council.

4 Frances Beinecke from -- she used to be the  
5 head of NRDC, was on the advisory council until she  
6 retired, now Geoff carries -- Geoff and another comrade  
7 of his, Matthew McKenzie, kind of carry the flag for  
8 NRDC on the advisory council.

9 So it's -- we're really trying very hard to  
10 come up with something that everybody can support. So,  
11 what is this going to look like at the end? My hope is  
12 that it'll be a play sheet, a talking point that all  
13 can agree to and that all will keep in time with the  
14 same talking points.

15 One of the problems we have in getting  
16 anything done and taking any action is you've got kind  
17 of disparate groups interested in only their piece of  
18 it, and this is -- this is going to be very political,  
19 but, you know, they run up to the Hill in Washington  
20 and they go down there talking points.

21 So, yes, the congressmen or the staff they're  
22 talking to then goes and the next appointment is a  
23 different group that comes in, talking about the same  
24 thing, but they're talking points are entirely  
25 different because they haven't tried to normalize the

1 things that they both can agree on, the things that  
2 could raise the conversation to a level where everybody  
3 can get behind it and everybody can support it.

4 So one of the things that I'd like you to  
5 think about is where -- where there is common ground  
6 among the diverse groups that are represented here,  
7 including, you know, SONGS, including the CEP,  
8 including the various environmental organizations that  
9 are out here, one of the things that we learned fairly  
10 quickly at the beginning of the project is, in general,  
11 and I'll just say it like that because I had some  
12 people up at the -- involved at MIT that were not --  
13 they had their own view.

14 But, in general, everybody -- everyone seems  
15 to be very focused on "We've got to do something with  
16 the waste," that the waste is there, it's not going  
17 away. And, by the way, the project -- our project, by  
18 definition, is agnostic on nuclear power.

19 Our position for the project is, we're not --  
20 we're not for nuclear, we're not against nuclear, we've  
21 got nuclear waste. If you shut all the plants down  
22 tomorrow, you're still going to have nuclear waste,  
23 you're just going to have a lot more of used nuclear  
24 fuel or spent nuclear fuel, depending your view of  
25 things.



1           We are optimistic unlike Geoff that -- that  
2           the 114th Congress being republican-controlled in both  
3           House -- a House and Senate could try to move forward  
4           on some collaborative bill to try to address nuclear  
5           waste.

6           Senator Murkowski has spoken about it, she's  
7           written about it. She was one of the authors. I think  
8           you heard the Big four. That that can really try to  
9           make a move and get something going. So, what I'd like  
10          you to do is, watch our Website. We're going to put  
11          some stuff out. We're going to put some what we think  
12          are actions that are supportive, that we would like  
13          your support.

14          But stakeholders are really going to drive  
15          this, and so they've got to be engaged, they've got to  
16          be informed, and they have to just keep at it. So,  
17          thank you.

18          CHAIRMAN VICTOR: Great. Thank you very much, Tim.

19          Next, we're going to hear from Rob Oglesby of  
20          California -- Executive Director of the California  
21          Energy Commission about what's up on the state  
22          landscape, what's happened, and what we might expect in  
23          the future. Rob?

24          MR. OGLESBY: Well, first let me thank you for  
25          convening this, and the Bipartisan Policy Center and

1 the local community group for pulling this together. I  
2 think it's really important to have these kinds of  
3 forums to bring together leaders and activists and  
4 experts in this subject and to have an opportunity to  
5 have a public forum to discuss the issues.

6 And so for the last few years, I've been  
7 coming down in this area related to the San Onofre  
8 closure and it relates to the role of the energy  
9 commission, which, for the most part, has been related  
10 to keeping the lights on down here in the absence of  
11 SONGS initially, immediately responding to shore up the  
12 infrastructure and work with the others to make up for  
13 the loss of SONGS and its role on the grid, and now a  
14 longer-term planning process and working with  
15 stakeholders, too, for life without the energy resource  
16 that SONGS provided going forward and as we grow in the  
17 state, so that's our -- that's been our main role. But  
18 I want to thank you for having me here for this aspect  
19 of the discussion.

20 I am the only one that has a Powerpoint that I  
21 brought, but I'm going to go through it really quickly,  
22 but I hope I'll provide some context and foundation  
23 here, particularly with respect to the Energy  
24 Commission.

25 So the Energy Commission doesn't have

1 jurisdiction over nuclear facilities or waste, but our  
2 history is really born from nuclear policy and nuclear  
3 development energy resources in the state.

4 In 1972 the RAND Company did a report at the  
5 behest of the legislature and determined that if we did  
6 nothing and continued on the direction of energy policy  
7 of the day, which was growing very rapidly, that would  
8 we need -- we would need something like 120, very  
9 large, power plants up and down the coast of  
10 California. That was in the Heyday and the Boomdays of  
11 nuclear power plants.

12 There was some concern about that, so the  
13 legislature got together and passed the bill, signed by  
14 Governor Reagan at the time, but then put in place by  
15 Governor Brown in his first time around. They created  
16 the Energy Commission to do some planning and to look  
17 at other options rather than just building our way out  
18 of our needs for power, we included some efficiency and  
19 conservation as part of that.

20 Shortly after that, in '76, the state  
21 legislature passed the law that was the moratorium on  
22 new power plants, it was kind of modeled after the  
23 First Rule of Holes: If you're digging a hole and you  
24 find yourself at the bottom, stop digging. And the  
25 California legislature felt the same policy was

1 suitable for nuclear waste.

2 So in 1976, the legislature passed a bill that  
3 basically said "Before you go forward with additional  
4 nuclear facilities, we needed to have a solution in  
5 place for dealing with the waste," and it was the  
6 Energy Commission that's given the duty to make a  
7 finding of that has happened before the moratorium  
8 would be list -- lifted and, of course, that hasn't  
9 happened yet.

10 The Energy Commission has had a role in  
11 commenting and participating at various levels. We'll  
12 go into that in a minute. But, clearly, we've filed  
13 comments in opposition and raising concerns with the  
14 Yucca Mountain facility and we've updated that on the  
15 Generic Environmental Impact Statement as recently as  
16 2013.

17 So California's role in nuclear waste  
18 transport and storage is, as I said, we don't have  
19 direct jurisdiction, but we do have a state liaison  
20 officer, who is my boss, Chair Weisenmiller, appointed  
21 by the Governor to be the principal contact with the  
22 State of California on matters related to nuclear  
23 activities in the state.

24 This included our role in filing -- filing  
25 comments on Yucca Mountain, but also involves

1 informational input to the Nuclear Regulatory  
2 Commission and working on proceedings and as a  
3 participant in proceedings.

4 We also serve in the Western Interstate Energy  
5 Board. We will say more in a moment. And we also  
6 coordinate with others, including the Highway Patrol  
7 and Office of Emergency Services and Department of  
8 Health and others on the transport of nuclear  
9 materials.

10 So a few pictures to talk about what we're  
11 talking about in California. I mean, there are some  
12 older sites and some smaller labs throughout the state,  
13 but the -- the main location of waste in the state  
14 relates to these four facilities that, I'd imagine,  
15 everyone is familiar with: Diablo Canyon, on the upper  
16 left; San Onofre, on the upper right; Rancho Seco,  
17 lower left; and Humboldt, which has been deactivated  
18 for the longest of all of those.

19 Diablo Canyon, the waste storage, is really --  
20 currently, is the Holtec -- I mean, it's -- excuse  
21 me -- the NUHOMS horizontal. I'm sorry. I just  
22 realized I went to Diablo first. Diablo has Holtec  
23 facilities and that's proposed to be part of the  
24 solution for the canisters at SONGS.

25 The lower right-hand picture shows the spent

1 fuel pool just -- it's that rectangular structure. Now  
2 let me go to San Onofre where you have the NUHOMS  
3 horizontal units on the left and the -- what the plants  
4 are to move the -- the waste and fuel rods into the  
5 Holtec System, which is on the right, and the diagram  
6 of where that would be is below.

7           They were planning to ship the waste by  
8 mid-2019 into the cask storage. Rancho Seco is the  
9 NUHOMS version horizontal outside of Sacramento. They  
10 have a smaller amount of waste. They've really done a  
11 fair amount in their decommissioning and they use the  
12 rail support to move some of their heavier hardware,  
13 but the casks remain in place as you see in the lower  
14 right-hand corner.

15           Humboldt Bay is in the Holtec plants. And,  
16 again, a small number of units, but they have a  
17 different design of plant. That was a boil plant --  
18 boiler plant rather than a pressurized plant.

19           And I want to close with this review of some  
20 of the major points of a publication that we do every  
21 other year: It's the Integrated Energy Policy Report.

22           And this report has been, since 2005, the  
23 place for input and policy recommendations on nuclear  
24 power and issues related to nuclear power in  
25 California. And among the -- and there are many

1 recommendations and I encourage you to access them on  
2 our website. There are many issues that are covered in  
3 the Integrated Energy Policy Report, many relating to  
4 nuclear power.

5 But I highlighted here some of the ones that I  
6 think are relevant for discussion today and the  
7 recommendations beginning in 2005 was to evaluate the  
8 routes for the safe transport of nuclear waste. We'd  
9 like to see less crowded fuel rod storage in the -- in  
10 the spent fuel pools. We'd like to estimate and assess  
11 the cost low-level waste generation and disposal from  
12 the operating and decommissioning sites.

13 Monitor key spent fuel parameters and,  
14 finally, and this relates particularly to the topic  
15 tonight, I believe, at least the near term concerns  
16 which are to expedite the transfer of spent fuel  
17 assemblies from pools to dry cask storage.

18 Finally -- we take this very seriously. We  
19 take this duty very seriously, and we have a position  
20 established at the Energy Commission that's been around  
21 for a long time, but I'd like to take tonight to  
22 introduce you to a new member of our staff, who is our  
23 senior nuclear policy advisor Danielle Osborn Mills,  
24 and she'll stand.

25 MS. OSBORN MILLS: (Complies.)

1 MR. OGLESBY: And she's available and focuses on  
2 nuclear issues in the State of California at the Energy  
3 Commission. So with that, I'll pass the microphone.

4 CHAIRMAN VICTOR: Great. Thank you very much.  
5 Tremendously helpful. And after we have the initial  
6 comments, I want to come back to you and ask you what  
7 you think the Energy Commission's role is going to be  
8 if we did interim storage as we discussed in the last  
9 panel.

10 Let me first, though, ask Chris Thompson, from  
11 Southern California Edison, to take four or five  
12 minutes and tell us, Chris, Edison's perspective on  
13 this and what you've been doing and planning to do in  
14 the future. Chris, the floor is yours.

15 MS. THOMPSON: Thank you, David. Thank you  
16 everyone for being here tonight. I wanted to give an  
17 on overview of Edison's position on long-term storage  
18 of fuel and to the point that Tim Frazier made: Look  
19 at areas of common ground.

20 And I think this is clearly an area of common  
21 ground between Edison as the operating agent and  
22 decommissioning agent for the plant and the surrounding  
23 communities, that we all have an interest in the  
24 movement of the spent fuel off-site as soon as possible  
25 to permanent storage solution.



1           As long as we have the fuel on site, we  
2 have -- we're committed to safely storing either in wet  
3 or dry configurations. We currently are safely storing  
4 2,668 fuel assemblies in our spent fuel pools and 1,187  
5 fuel assemblies in the dry cask storage system that is  
6 on site. We will continue to state -- to safely store  
7 that fuel until DOE takes possession and title of the  
8 fuel. Some of the things that we've done as a company  
9 over the years is advocating for and investing in  
10 off-site storage solutions.

11           Since the late 90s, Southern California Edison  
12 has been a partner in a private fuel -- private fuel  
13 storage solution, which is a consortium of utilities  
14 that were seeking to establish an off-site repository  
15 that was sited in Utah on the reservation of the Skull  
16 Valley Band of Goshute -- Goshute Indians and it was a  
17 good lesson in consent-based siting.

18           The tribe was interested in hosting a storage  
19 facility; the State of Utah was not. And the State of  
20 Utah advocated with the federal government to block  
21 access by rail and road to the site, so the site was  
22 licensed in 2006 for 20 years, but the Bureau of Land  
23 Management and other agencies declined to give access  
24 to the site through right-of-way and the site never  
25 broke ground and has not made progress since then, and

1 I think that is a good illustration of the importance  
2 of getting consent prior to moving forward with the  
3 storage solution.

4 Edison's position currently is that we're open  
5 to and advocate for a number of solutions. We are  
6 proponents of geologic repository, we are in support of  
7 Yucca Mountain or another geological repository, we are  
8 supportive of consolidated storage.

9 We support the bill that's been referred to a  
10 number of times, authored by four senators to establish  
11 a consent-based consolidated storage facility, and we  
12 believe that DOE needs to do its job and take  
13 possession of fuel and should be prioritizing taking  
14 possession of fuel from decommissioning and  
15 decommissioned sites first.

16 We also have fuel stored off site at GE  
17 Hitachi facility in Morris, Illinois. About 270 fuel  
18 assemblies were moved off site to that facility in the  
19 70s when that site was going to be a reprocessing  
20 facility. When the Carter Administration ended, put in  
21 place a prohibition on reprocessing movement of fuel to  
22 that site ended, but the 270 SONGS assemblies are still  
23 there on site in Morris, Illinois.

24 As I mentioned, SCE is an advocate for the  
25 Nuclear Waste Administration Act, which is the formal

1 title of the bill that keeps getting referred to.  
2 We've lobbied in support of the bill, both with its  
3 authors, with Senators Murkowski and Landrieu, who were  
4 at the time -- well, Landrieu and Murkowski, Landrieu  
5 was the chairman of the Senate Energy and Natural  
6 Resources committee, Lisa Murkowski was the ranking  
7 republican member we lobbied in support of that bill.

8 We're a member of the Decommissioning Plant  
9 Coalition, which is -- provides advocacy for  
10 decommissioning plants in Washington, DC, and one of  
11 the things they do is advocate with DOE to get  
12 preference in the queue of fuel pickup to the fuel at  
13 decommissioning sites.

14 So, to kind of circle back to something Tim  
15 Frazier said, I am anxious to hear -- hear what your  
16 thoughts are and what your suggestions are and how we  
17 can work together to -- to solve this problem, and I  
18 think it's in all of our interest.

19 CHAIRMAN VICTOR: Thank you very much, Chris. I  
20 think one of the themes of tonight's meeting is, in  
21 addition to all the things you're doing to press on  
22 these various fronts, whether there are some additional  
23 fronts or some areas where there are higher priorities  
24 than others and we need to, in part, hear from the  
25 local communities about that.

1           So now we're going to have three  
2 interlocutors, each make comments of three to four  
3 minutes each, to give some different perspectives on  
4 what they're seeing. And so first we're going to hear  
5 Jim Williams, from the Western Interstate Energy Board,  
6 to give us a regional perspective, because this  
7 maybe -- maybe there are state-focused solution, as Tim  
8 Brown urged us to pay attention to, and maybe there are  
9 regional multi-state solutions.

10           Jim, what are your views on this?

11           MR. WILLIAMS: Thank you, David. David asked me to  
12 say a few words on what shutdown site communities  
13 should do to apply pressure to get spent fuel off site  
14 and secured. So here's my response: As you apply this  
15 pressure, try also to appreciate the concerns of  
16 downstream or corridor communities.

17           Why do I say this? It's because this  
18 downstream communities are your necessary but likely  
19 very reluctant partners whose concerns it is for --  
20 it's in your own interest, I think, to appreciate maybe  
21 even advocate their interest.

22           I'm not saying this is easily done. Most of  
23 these downstream communities don't even know that  
24 they're slated for this role in this national program,  
25 but potentially there lots of them. Disposal at Yucca

1 Mountain, for example, would require spent fuel  
2 shipments through 890 counties in every region of the  
3 country, all right, that's about 12 corridor counties  
4 for every sending county, such as yourselves.

5 Some are large, some are small, some urban  
6 renewal, some are rural, but every one of them is a  
7 local polit -- political entity, like yourselves. What  
8 are these people going to think when they find out that  
9 the feds intend to ship spent fuel on their rail and  
10 highways perhaps over decades? How might that  
11 discussion go?

12 Well, first the program managers are going to  
13 say that transport will be done very safely and they'll  
14 have lots of technical studies. Next, they'll say that  
15 shipments are really quite legal and they'll have  
16 plenty of legal support.

17 But what about the people in these  
18 communities? And I think in each of the 890 potential  
19 corridor communities will have deep concern about the  
20 highly radiological content of the material being  
21 shipped, they will reflect that they do not directly  
22 benefit from this transport, they will worry about  
23 their economy and their property values, and they'll  
24 soon understand that spent fuel shipment is  
25 logistically complex and that it presents many

1 opportunities for things to go wrong.

2           What will happen? I don't know. But it could  
3 get a little bit contentious, it could take time for  
4 all these corridor communities to accept inevitability,  
5 to exhaust their legal and political objections, things  
6 could get delayed, your removal could get delayed.

7           And if there is an event, all schedules go  
8 into a very cocked hat. So is there a solution here?  
9 I think that the solution is in a larger, more  
10 integrated national program. I think that the 890  
11 potential corridor communities will expect a convincing  
12 explanation why this imposition on them is actually  
13 necessary for legitimate national purpose, not just a  
14 matter of program convenience. If the program cannot  
15 meet that test, corridor communities might reasonably  
16 think, "Why us? We don't like this." And there you  
17 go.

18           Unfortunately, the current federal program and  
19 in it the 890 are out of site and out of mind. Almost,  
20 exactly three years ago the Blue Ribbon Commission said  
21 that forcefully the shutdown site should be first in  
22 line for spent fuel removal, that siting of all site  
23 storage should be consent-based and that disposal  
24 siting should also be consent-based, but it did not  
25 seriously consider the perspectives of the 890

1 potential corridor communities.

2 CHAIRMAN VICTOR: Okay. Great. Thank you.

3 MR. WILLIAMS: The program is not being considered  
4 or designed on that integrated basis, maybe you all can  
5 help remind them.

6 CHAIRMAN VICTOR: Thank you very much, Jim. Next  
7 we're going to go to Jim Wright, from Einar Ronningen  
8 at SMUD, which has the Rancho Seco plant and although a  
9 smaller fuel pad has confronted some of the same  
10 issues. Einar, what are your perspectives about this  
11 and what can you advise us to be doing down here?

12 MR. RONNINGEN: Well, first, thanks for the  
13 opportunity to be here today. I think it's important  
14 that we have these discussions and I'm glad to be here.

15 As mentioned, I'm from SMUD, Sacramento  
16 Municipal Utility District, who owns the Rancho Seco  
17 Nuclear Generating Stations. We call ourselves SMUD.  
18 It's a medium-size public utility. We operate for the  
19 benefit of our owner ratepayers and how much impact can  
20 owner ratepayers have on utility's operations. Well,  
21 in a unique event in 1989 as the result of a public  
22 referendum, the owner ratepayers voted to cease  
23 operations of Rancho Seco, so we've actually been shut  
24 down since 1989.

25 I could talk for quite a while about our

1 decommissioning, but that's not what we're here to talk  
2 about. Every different plant has a different story,  
3 but as we're here today, we all end up in the same  
4 place, with fuel on the pad at our facilities.

5 At Rancho Seco, we've had the fuel in dry  
6 storage since 2002. Other facilities have had fuel and  
7 dry storage for a longer period and I would just like  
8 to state that that's kind of an example by doing, that  
9 this can be done safely.

10 Now, it's not what we'd prefer to do, we'd  
11 prefer to have the DOE actually fulfill their  
12 obligations and take the fuel away and I think many of  
13 us can agree on that.

14 As Chris mentioned earlier, the  
15 Decommissioning Plant Coalition, SMUD was an early  
16 member of the Decommissioning Plant Coalition when  
17 there weren't quite as many members and we do work  
18 through that organization to try to influence federal  
19 policy.

20 As a public utility, we try to remain neutral  
21 on political issues, but we do advocate on the behest  
22 of our -- or on behalf of our owner ratepayers. I  
23 think we've seen some benefit from our efforts. One  
24 example of that would be that the recognition by the  
25 Blue Ribbon Commission that it's a good idea to take



1 the stranded fuel from the shutdown and decommissioning  
2 facilities first, so it's probably a logical  
3 conclusion, but SMUD firmly supports that ideal.

4 As far as the national politics go, we have  
5 taken efforts to work closely with our local  
6 federally-elected officials, the local Congress people  
7 as well as the state senators and developed a good  
8 relationship with them.

9 We have a limited ability to influence what  
10 they do, but as a group, through the Decommissioning  
11 Plant Coalition, we have a little bit of a stronger  
12 voice. We work with them on many issues that affect  
13 public utilities, not just the nuclear issues, but by  
14 developing that relationship, I think we've been able  
15 to have some influence.

16 All the things that we've talked about here,  
17 SMUD supports. As we work together with the  
18 communities and the elected representatives, we need to  
19 find a solution to this. And like I mentioned, SMUD  
20 doesn't play politics, but we do advocate and I think  
21 we can find a common solution.

22 While a solution is being developed, as  
23 pointed out, you know, SMUD and the rest of the  
24 industry remains dedicated to the safe storage of the  
25 materials as long as it's on our sites, and we just

1 hope that's not forever.

2 CHAIRMAN VICTOR: Thank you very much, Einar. And  
3 last, I'd like to introduce Marni Magda, who's  
4 well-known in the local community here, has been  
5 heavily involved in the various resolutions and  
6 petition processes here.

7 It may be an unfair question to you, Marni,  
8 but help us understand what you think is working and  
9 not working and where we should -- where we should go,  
10 and then after Marni, makes our three to four minute  
11 comment. I'm going to open up to the CEP members to  
12 ask questions.

13 MS. MAGDA: Thank you for this opportunity. As  
14 I've listened tonight and for the last three and a half  
15 years, my concern is that the public is not informed  
16 and we sit here calmly in a situation that is urgent  
17 and we must not be calm and we must get the information  
18 to all of the California residents.

19 Any time I talk either to a congressman or to  
20 anyone in the public that I stop on the way to the  
21 ocean or walking anywhere in town, they have no idea  
22 that we're going to be leaving 150 casks, 1,632 tons of  
23 spent fuel at San Onofre on the bluff for the next 60  
24 to 240 years or indefinitely.

25 With an industry that is still so young, that

1 this radiation can't have been tested to know what the  
2 future will bring, that we must re-look at the nuclear  
3 industry. We must force bipartisan pressure from local  
4 communities, from our state legislators, through all  
5 ranges of our government, to begin to solve what we  
6 have not been looking at for 50 years.

7 We have a radiation mess on our hands and we  
8 are not coming up with the solutions. Stop pointing  
9 fingers. It has been bipartisan mess-up and now it's  
10 time to have it be bipartisan fix-up. What we're  
11 looking at as a possible, and everyone says "That's not  
12 possible."

13 Well, something must be possible. We cannot  
14 afford to leave this fuel where it is. We're in the  
15 Ring of Fire. We have terrorists. We've known since  
16 the Bush administration in 2002 that our nuclear plants  
17 are in the plans of Al-Qaeda and we cannot let ISIL  
18 leave -- have us this vulnerable.

19 So with that in mind, we are suggesting that  
20 the geographic -- the laws be made as it has been  
21 suggested by everyone tonight so that the 33 states  
22 that have their reactor fuel have the clout to start  
23 creating the solution for their own fuel.

24 Every time we try and move 70,000 metric tons  
25 of fuel to one location in this country, we have a lot

1 of states who don't want it, of course. If we open up  
2 an interim solution on a military base in California  
3 where it would be protected from flyover, that our tax  
4 dollars would be saved because we're not going to have  
5 to multiple-pay forever for this fuel to be watched for  
6 10,000 years.

7 It goes to a military base, but only  
8 decommissioned fuel from only California reactors,  
9 that's 2,700 metric tons. Would we want 70,000 pushed  
10 here into one of our military bases in California? No,  
11 we would not. No state wants that. So the state's  
12 rights must be honored, it must be a hard look at hard  
13 choices. We must all show up as Germany did, 100,000  
14 people in the street and they began to find the  
15 answers.

16 Right now, our government, every time I talk  
17 to someone, they look the other way, because there is  
18 no imperative to go after this. We have three problems  
19 with what the industry says to us about it being safe:  
20 That their paradigms are all based on probability  
21 models and what we have watched is that sabotage, human  
22 error, and mother nature can take this deadly fuel and  
23 turn places into a dead zone.

24 We have watched the proof of Chernobyl, Three  
25 Mile Island, Fukushima, and now, sadly, the Waste

1 Isolation Pilot Plant. The tax dollars that are going  
2 into these projects and wasted are insane.

3 CHAIRMAN VICTOR: All right.

4 MS. MAGDA: So I know I can't go any further, but  
5 what I want to say is, 2 billion dollars now at WIPP  
6 let's go after. I have two pages of the legislation  
7 because I read all the information you gave us. We  
8 have much legislation that must change. We have to go  
9 after it all the steps at once. We have to have it  
10 pushed from the public of every city in California and  
11 we have to sit down and make this happen.

12 CHAIRMAN VICTOR: Great.

13 MS. MAGDA: We cannot wait.

14 CHAIRMAN VICTOR: Thank you very much for that.  
15 There's a lot -- folks. Folks. Folks. Come on.

16 There's a lot that has to happen, and the  
17 question is "How do we get started? How do we make  
18 practical progress?" And that's what we want to focus  
19 on now. So I want to see, members of the Community  
20 Engagement Panel, if you want to raise questions.

21 To get it started, I want to ask a question to  
22 Rob Oglesby, which is: The California Energy  
23 Commission is the coordinating body for getting things  
24 done at the state level, and we've heard from various  
25 speakers, this panel, previous panel, that given what's

1 going on in Washington, it looks like the state-driven  
2 solutions are going to be the way to go, whether it's  
3 an interim storage, whether it's on military bases, and  
4 so on. It seems like there's a lot of open questions  
5 about what the state-level strategy should be.

6 So, what would we do here in these local  
7 communities to help the CEC develop some state-level  
8 strategic options? What would you -- what would you  
9 need from us? Do you need a request from the governor  
10 to do this? Do you want communities to write in? How  
11 would the CEC start to focus on this? Because it seems  
12 like this is now becoming an urgent California problem.

13 MR. OGLESBY: Well, this isn't a new role for the  
14 Energy Commission and we've done it and as a result of  
15 two primary avenues: One specific state legislation  
16 that tells us to do something and make an assessment or  
17 recommendation or study an issue.

18 But the second is -- is the process that we do  
19 to inte -- Integrated Energy Policy Report or IEPR and  
20 we've visited issues and made policy recommendations in  
21 that process, it's a public process, and we workshop it  
22 and there is opportunities for input and we build a  
23 record and develop policy recommendations that are put  
24 forward.

25 CHAIRMAN VICTOR: So if we asked Einar and the

1 policy makers and legislators that have been engaged by  
2 SMUD, if we did the same thing for Edison, if we did  
3 the various communities that Marni and many other  
4 people are involved with and organize that a little  
5 bit, it sounds like that would help with the CEC make  
6 this a priority and then we can start to see what state  
7 level -- what a state-level strategy would look like  
8 and whether it would make no sense or sense to work on  
9 it as a California problem as opposed to a western  
10 problem?

11 MR. OGLESBY: Yeah, and we've already made a number  
12 of policy recommendations on waste.

13 CHAIRMAN VICTOR: Let me ask Dad Stetson. Dan.

14 MR. STETSON: Tim, I want to bounce this question  
15 to you. You mentioned earlier that one of your  
16 recommendations is really to move the authority from  
17 the Department of Energy? Would it be make sense to  
18 distribute that to the gentleman over here at the state  
19 level?

20 CHAIRMAN VICTOR: He'll be thrilled to have it.

21 MR. FRAZIER: And I think, we would be thrilled for  
22 him to have it. Not really, because we looked at -- we  
23 looked at a federal solution. Our idea was and  
24 remains, which is, some of this is contained in the  
25 Waste Management Act that Murkowski, Feinstein, Widen,

1 and Alexander built is really a standalone -- in the  
2 Blue Ribbon Commission report we call it a federal  
3 Corporation. Come to find out, we should've called it  
4 something else, but we called it what we called it.

5 But it is, essentially, what we try to do is  
6 to get it insulated from politics as much as you could.  
7 We follow the TVA model, TVA is -- has the great  
8 capability of being a federal corporation when --

9 CHAIRMAN VICTOR: TVA is the Tennessee Valley  
10 Authority, which is the utility state-owned company  
11 that provides electric power service in parts of the  
12 South.

13 MR. FRAZIER: Yes, it has the -- it's a potential  
14 fed corp, but it has the luxury of being a federal  
15 entity when it wants to and then a very  
16 private-oriented corporation when it doesn't want to be  
17 federal, so it plays both sides of the field.

18 But it's interesting. The state solution, I  
19 think, is intriguing. And that's -- I have to think  
20 about it a little more. One of the problems -- and I  
21 hate to be a naysayer, but one of the things you should  
22 think about is, who's going to pay for it, because the  
23 ratepayers have already paid into the waste fund.

24 So if you -- if you're going to do something  
25 like -- if I think if we're expecting the Department of



1 Energy to pay for it, they're going to tell you what  
2 they're telling everybody now is, they don't have any  
3 authority to do anything like that, so.

4 CHAIRMAN VICTOR: But do you think it's the case --  
5 just to pick up on this issue, that might be a much  
6 easier piece of legislation to get passed at the  
7 federal level if you simply amended the current law so  
8 that if a state comes back with a serious game plan,  
9 that then they have claim on some of the resources that  
10 have already been collected; that would be easier to do  
11 than --

12 MR. FRAZIER: Oh, yeah.

13 CHAIRMAN VICTOR: -- to amended the Atomic Energy  
14 Act.

15 MR. FRAZIER: There is no doubt. And Per pointed  
16 that the money has been spent. Theoretically, the  
17 money is in notes in the treasury, but the minute they  
18 try to give anybody money out of the waste fund,  
19 they're going to have to go borrow it, so it's going to  
20 be --

21 CHAIRMAN VICTOR: Did you -- did you have a follow  
22 up on this? Because I wanted to get Ted Quinn in and  
23 then Tim Brown and Marni. Ted?

24 MR. QUINN: Thank you. I wanted to ask the  
25 panelists, this state -- I'd like to follow up on the

1 state issue, so what are the implementing actions and  
2 the pros and cons to do this? You must have thought  
3 this through. And that includes the pros being "Okay.  
4 We would -- we would need a law to bring it down, have  
5 it occur."

6 But are the cons, are the things against it  
7 that would say we would have 33 interim storage sites?  
8 Is it better to take the technology and apply at a more  
9 regional basis, like the Western Region? What have you  
10 thought about in options in pros and cons?

11 CHAIRMAN VICTOR: Does anyone want to deal with  
12 that?

13 MS. MAGDA: I'd like to.

14 CHAIRMAN VICTOR: Hold on. I just want to ask --  
15 Jim? I mean, Jim, you guys have been engaged with this  
16 in various steps.

17 MR. WILLIAMS: The implication before I was trying  
18 to say here is as long as the final disposition of  
19 spent fuel is very uncertain, which it is now, and as  
20 long as it is important to remove it from its existing  
21 sites, then the idea, in my view, is that it -- is to  
22 take count of these 890 potential communities that  
23 don't have any stake in this game and move it a  
24 shortest way as possible.

25 So regional storage, like you suggest a

1 version of in California, I think is a remarkable idea.  
2 And I am, you know, very weary of going East in this  
3 country and seeing a general, vague assumption that,  
4 "Yeah, it's all going West. That's what's going to  
5 happen here."

6 And why this idea of states or regions  
7 addressing their needs on a sub-national basis, I think  
8 it's brilliant.

9 CHAIRMAN VICTOR: So let me get, Marni, is your  
10 comment on the same theme?

11 MS. MAGDA: Yes, it is.

12 CHAIRMAN VICTOR: Okay. So I want to bring, can I  
13 just remind everybody that something that Per Peterson  
14 said in the previous session, which is, "We know  
15 technically that deep geologic storage is where you  
16 want to put this for the long haul."

17 So we need to find some -- if we're going to  
18 do consolidated interim storage and state-based  
19 strategies, we need to find some way to connect those  
20 to deep geologic storage so that we do not create for  
21 our grandchildren and great-grandchildren a problem  
22 that is then unsolvable because we basically bought  
23 ourselves time, as we should, by consolidating the  
24 storage but, then, not paying attention to what we have  
25 to do for the long haul.

1 Marni, do you have comments on this? Then I  
2 want to bring in --

3 MS. MAGDA: Yes.

4 CHAIRMAN VICTOR: -- Tim Brown.

5 MS. MAGDA: Yes. Thank you. The laws all have to  
6 change to do any of this because interim storage is not  
7 legal right now for the DOE to take the fuel to interim  
8 storage, so that law must be changed. As we look at  
9 changing this, I hear this panel speak, specially now  
10 with Rob's knowledge, to create an outside totally  
11 United States trust fund of the rate payer's money,  
12 creates the same kind of bureaucracy that is difficult  
13 to deal with and things get lost along the way.

14 Well, the idea of 33 states have the fuel, 33  
15 states have to make the hard decisions about what to do  
16 with that fuel, 33 states need to take their rate  
17 payers' money in order to do that. So to set up --  
18 since the law has to be changed, make the change so  
19 that the federal government is getting the permission  
20 of the state where the fuel has been made and it's  
21 currently allowed to be left for 60 years and give that  
22 rate payers' money to begin to find an interim solution  
23 in that state.

24 CHAIRMAN VICTOR: So I want to ask just before I go  
25 to Tim, I just want to put Chris -- I want to ask Chris

1 Thompson, I mean, lots of laws would need to be  
2 changed, but we need to be very strategic about what  
3 needs to change or what doesn't need to change,  
4 otherwise we're going to get ourselves back in the box  
5 where nothing gets done.

6 And so, private fuel storage, which you  
7 were -- your company was a member of, went pretty far  
8 down the road without a change in laws, so what -- is  
9 there a perspective from Edison as to how -- is there a  
10 perspective from Edison as to how much the law would  
11 need to change for some of these consolidated interim  
12 storage strategies?

13 MS. THOMPSON: I can't give you a definitive answer  
14 on, you know, which sections of the Code need to  
15 change. You're correct, this was a group, a consortium  
16 of utilities who were -- took the action to license a  
17 facility.

18 For long-term storage or consolidated storage,  
19 there -- there is a number of issues: One is that --  
20 as it has been pointed out, our rate payers, SMUD'S  
21 rate payers, PG&E's rate payers have paid into the  
22 waste fund, the end result is supposed to be that that  
23 money was paid into the waste fund so that DOE takes  
24 title and possession and responsibility and that is  
25 relieved, that burden is relieved, from the state and

1 from the rate payers.

2 There -- you know, I think there's some  
3 thought that -- this is an interesting idea that  
4 deserves further thought. I don't have a good answer.

5 CHAIRMAN VICTOR: Right.

6 MS. THOMPSON: The other is, there are third-party  
7 entities that are seeking to license facilities now and  
8 there's --

9 CHAIRMAN VICTOR: Like Texas, yeah.

10 MS. THOMPSON: Right, there's a number of them, who  
11 are seeking to do this on their own. And part of what  
12 they want is for DOE to provide them access to the  
13 fund, so the --

14 MS. MAGDA: The problem is the taxes. But this  
15 is --

16 CHAIRMAN VICTOR: I need -- I've got very limited  
17 time, Marni, and Tim has been very patient, so I'd like  
18 him to raise his question.

19 MR. BROWN: So my question is for Rob. Rob, is  
20 there currently a framework in place where there is  
21 delegated authority from the Department of Energy to  
22 State of California that fits this type of framework,  
23 where they would, you know, have you acting, you know,  
24 under certain, you know, restrictions or with a certain  
25 authority to execute on power? And there is nothing

1 like that currently in the frame work?

2 MR. OGLESBY: No.

3 MR. BROWN: And the second question I have on this  
4 is, in terms of management, when -- you know, when you  
5 look at something where the state would have to take on  
6 this -- this type of responsibility, does -- just  
7 looking at your view, would you have the capacity to be  
8 able to create an infrastructure or any type of -- I  
9 guess, I hate to use the word bureaucracy, but would  
10 you have the capacity to be able to take on a role like  
11 this and to do so in a way that would be up to the DOE  
12 standards?

13 MR. OGLESBY: Well, let me add a couple of --

14 MR. BROWN: And I will hold you to this answer.  
15 I'm kidding.

16 MR. OGLESBY: Please, please do.

17 MR. BROWN: I'm -- you know, I'm asking.

18 MR. OGLESBY: Because I'm not going to respond to  
19 every hypothetical the panel can think -- think of.  
20 But the fact of the matter is that there's some  
21 principals that we think would have to be respected in  
22 any solution that we're talking about, and we did  
23 support the Feinstein Bill, that -- that was pending in  
24 Congress.

25 But having said that, there is a lot

1 challenges that would be associated with that, but in  
2 doing that the principals that any agency would have to  
3 overcome would be to find a real safe way -- a safe way  
4 to handling that. And there is so many unanswered  
5 questions about what the appropriate location would be,  
6 transport. The same things that exist today, don't get  
7 how to solved out automatically by shifting  
8 jurisdictions.

9 In terms of resources, no, the State of  
10 California doesn't have the -- an in-place NRC and one  
11 would have to -- we have expertise in certain areas,  
12 but we don't have standing by a complete infrastructure  
13 that would be able to, without additional augmentation,  
14 and a lot of building duplicate would now exist  
15 elsewhere.

16 CHAIRMAN VICTOR: I want to bring Einar in on this.  
17 You and Edison and others are part of this  
18 Decommissioning Plant Coalition, a political group  
19 basically, pushing for certain things like getting the  
20 decommissioned plants fuel ahead in the schedule.

21 To what degree should that coalition be urged  
22 to expand its mission, to take on some of these  
23 consolidated interim storage questions and other  
24 things? Because it seems like there's a lot of  
25 clenching and gearing going on where it's not quite



1 clear who's going to push for what.

2           Maybe this coalition, which already exists,  
3 should be doing more on this front or maybe that's not  
4 practical for some reason.

5           MR. RONNINGEN: Well, we do work on that front. We  
6 support the Feinsteins, the Big Four Bill, so very much  
7 in support of consolidated interim storage. Whenever a  
8 bill gets drafted and gets published and we become  
9 aware of it, you know, we come together as a group to  
10 try to support anything that looks like it might be a  
11 solution.

12           So I would say, you know, we are active in  
13 seeing what's going on, we meet with the elected  
14 officials in Washington and try to take the pulse of  
15 who might be supportive of those things and then act  
16 with our members in our local elected representatives  
17 to try to get support for those.

18           CHAIRMAN VICTOR: Okay. Thank you. I want to  
19 bring Gene Stone in. Gene and then Marni.

20           MR. STONE: I would just like to make us stop and  
21 think for just a moment here. We talked about  
22 conventional wisdom, but it's conventional wisdom that  
23 has got us where we are today with millions of pounds  
24 of nuclear waste.

25           So I'm not convinced that traditional wisdom

1 is the best way to go and I'm not at all convinced that  
2 putting nuclear waste in one, two, or three spots in  
3 the nation is the safest thing to do for the long term,  
4 as you suggested, not creating problems for our  
5 descendants.

6 And I think having only stored nuclear waste  
7 for 50 to 60 years, when you talk in terms of 10,000  
8 years, I think we have to go beyond conventional wisdom  
9 and really research what's ahead of us for long-term  
10 storage. And I know it's a topic that's been talked  
11 about a lot and conventional wisdom is storage, but I'm  
12 not convinced.

13 CHAIRMAN VICTOR: I think we all -- it's going to  
14 get a little abstract, but I think we're all interested  
15 in wisdom, conventional or not. And my only concern,  
16 and what I heard from the previous panel, which is  
17 crucial to the politics in Washington, for better or  
18 worse, is that if we did something that then took the  
19 focus off deep geological storage as part of the  
20 overall solution in tandem with consolidated interim  
21 storage that the political support you would need for  
22 the legislative changes, including legislative changes  
23 that might be modest yet essential to fund this, that  
24 that political support would be hard to keep mobilized.

25 Chris, on this same theme here, and then I

1 want to see very briefly if Marni wanted to add an  
2 additional comment.

3 MS. THOMPSON: Well, I had an observation and a  
4 question kind of to the panel. There's a lot of  
5 discussion and interest, it seems to me, around a  
6 notion of state-based repository. A lot of what we  
7 heard from the previous panel was Look at multiple  
8 locations simultaneously because some of them are --  
9 are going to fall away, some of them aren't going to  
10 work out.

11 CHAIRMAN VICTOR: I think that was for deep  
12 geologic.

13 MS. THOMPSON: Right. Well, and for interim, I  
14 believe. We, as a company, are looking at multiple  
15 solutions or private solutions, there's interim  
16 solutions, there is deep geological solutions.

17 Does -- the question to the panel is, does the  
18 panel want to narrow its focus to -- it feels, it seems  
19 like a consensus it's kind of jelling around the notion  
20 of state-based repository and Do you want to put all  
21 your eggs in one basket or pursuit multiple solutions?

22 CHAIRMAN VICTOR: And this is a question to the  
23 Community Engagement Panel or the panel of speakers  
24 here?

25 MS. THOMPSON: Yep. It's a question to the panel.

1           CHAIRMAN VICTOR: Well, let me offer my impression  
2 of what I've heard and having read a lot in this area,  
3 which is that, if you don't know what you're doing and  
4 you don't know what's feasible, the worse thing in the  
5 world you can do is create a monopoly.

6           And so you want to have options because you  
7 want to create pressure on each of the options to  
8 perform better, and so I would think that the logic  
9 that was outlined in the earlier panel for deep  
10 geologic, which is to have multiple options, partly  
11 because that'll raise the game on Nevada to really want  
12 the waste, if they do, or not, and then it'll create  
13 other options.

14           I would think the same logic would probably  
15 apply to these consolidated storage. But, you know,  
16 there is some balance to be struck here because at some  
17 point you have so many options going that is no longer  
18 consolidated, it's just a lot of storage pads.

19           And so I don't know if Tim Frazier -- you have  
20 views on this, having watched this for a while and I  
21 want to see if there's last brief comments before I  
22 make a couple of closing remarks.

23           MR. FRAZIER: You know, one of the -- one of the  
24 key things, you know, regional consolidated storage has  
25 kind of always been on the table, regional, not

1 state-by-state. And I just want to caution, if you're  
2 talking storage, make sure you say "storage," and if  
3 you're talking the deep disposal repository, say that,  
4 because you certainly don't want to have 33 states with  
5 deep geologic repositories, that's -- that's silly.

6 But, you know, you can envision where you  
7 would have, as Per and Geoff and David and myself, you  
8 know, more than one repository is a good thing. In  
9 the -- in the total of the nuclear waste regime, there  
10 are -- there are some wastes that get lumped in with --  
11 and this is in particular defense waste, which I know  
12 isn't relevant particularly to your concern but it's  
13 relevant if you look at potential risks from material  
14 to be disposed of, it could very easily be disposed of  
15 in a different medium that wouldn't require as much  
16 particular rigor.

17 You know, I think the state solution is an  
18 interesting idea for storage. I worry about, like  
19 Chris does, where do you get the funding for something  
20 like that? And if, you know, the department has  
21 already stopped collecting the 750 million a year it  
22 was collecting, which I hope drove OMB crazy, the  
23 Office of Management and Budget, in Washington.

24 But I think it's something that bears some  
25 further review and discussion. And, you know, the

1 BPC -- I mean, we'll take a look at it, as well.

2 CHAIRMAN VICTOR: Thank you. So what I want to do  
3 is, we're out of time for this segment, but we're going  
4 to keep everybody seated where they are and we're going  
5 to have a focused public comment period.

6 So let me just remind people, if you want to  
7 make a comment, indicate what the comment is and the  
8 theme it's about, and Tim and Dan and I are going to  
9 lump them together, and the benefit to you of  
10 indicating your theme is that the comments will be  
11 clustered and there's going to be some back-and-forth.

12 If you want to just make a three-minute  
13 comment on whatever your topic is, ideally, broadly  
14 related to San Onofre, then you can still do that, but  
15 indicate on your card you just want to make your  
16 three-minute comment and we're going to segment the  
17 public comment period so we have some back-and-forth,  
18 focused comments and then some time for people who want  
19 to say whatever they want to say.

20 And the idea is to strike a balance. The  
21 focused conversation strategy worked extremely well at  
22 our meeting in October, we're going to try and do more  
23 of that in the future.

24 I wanted to say, though, before we break, I  
25 thought these last two panels were just terrific. This

1 is a difficult, complicated topic. And I think -- to  
2 me, what's interesting, and I hope to all of the  
3 Community Engagement Panel it's interesting is, we're  
4 now beginning to identify some elements of a playbook.

5 And I think maybe this is something that the  
6 BPC can help us with and some of the things that we can  
7 do here, getting our communities around with the  
8 SMUD-related communities and others. I've already  
9 identified, I think, five things where we might have  
10 elements of a playbook: Maybe, as Per Peterson  
11 suggested, maybe there's actually some international  
12 strategy that could be involved here related to  
13 consolidated interim storage, maybe that's far off.

14 Second, what does smart politics look like  
15 that brings in both Houses, including -- including the  
16 House of Representatives, for legislative change? And  
17 maybe the BPC can help us identify and help everybody  
18 identify as you do your national tours, what are some  
19 smart elements of -- of real legislative possibilities?

20 We have some bills a number of companies are  
21 already supporting, that's going to change overtime,  
22 but you could -- you could keep that up to date.

23 Third, state driven solutions. What's  
24 feasible to be done at the state level with legislative  
25 change and without legislative change. It would be

1 helpful, maybe for BPC, to help us identify and all the  
2 communities identify what's possible, what can we push  
3 forward and so on.

4 Fourth, at the state level here in California,  
5 I think it's very clear that the CEC is the -- is the  
6 right institution and they could play a big role here,  
7 but we need to organize and then make an ask of them  
8 and help them respond to that -- respond to that ask.

9 And I would urge us to make that ask not only  
10 focused on state-level solutions but also What is the  
11 CEC's view about regional solutions and the tradeoffs  
12 between state-level solutions and regional solutions?  
13 So we don't end up necessarily with 33 states doing  
14 different things.

15 And the fourth -- or the last, fifth and last  
16 is just a reminder, which Jim Williams said, which is,  
17 this corridor communities are crucially important, a  
18 private fuel storage I thought was a good idea. It  
19 died, in part, because of a strategy with corridor  
20 communities that didn't work. I think we have to  
21 really pay attention to that because the number of  
22 corridor communities, as Jim mentioned, is much larger  
23 than the number of communities that are actually  
24 directly next to these sites.

25 You're going to have other items for that



1 list. I urge you to help us focus on them. I think we  
2 can end up with a playbook or playbooks that then can  
3 lead to some practical action and that can help even in  
4 the local communities as societies here figure out what  
5 should town and council resolutions look like, what  
6 should we be asking for and so on.

7 We're going to take a break now for 5 to 10  
8 minutes and we're going to set up the public comment  
9 period. And, please, put your comments in the box.  
10 Manuel and others are coming around to get them.

11 And, please, join me in thanking our panelists  
12 for this last session. They were terrific.

13 (A brief recess was taken.)

14 CHAIRMAN VICTOR: Let's get -- let's get started.  
15 We have a number of questions here I'm going to ask Per  
16 Peterson. Before he sits down, to stand up and  
17 maybe --

18 MR. BROWN: Did we pass the law?

19 CHAIRMAN VICTOR: Maybe, Per, you could help us  
20 with the first couple of questions here. There are a  
21 couple of questions, one from Richard MacPherson and  
22 Richard Gardner, concerning where does Canada put  
23 its -- its spent fuel? Per, are you here?

24 MR. PETERSON: Yes.

25 CHAIRMAN VICTOR: I think that is on, all mics are

1 on for the NSA and some of them are on for us.

2 MR. PETERSON: Thank you. So, currently, Canada  
3 stores its spent fuel on site at its reactors. It has  
4 -- it also went through a sort of a very difficult and  
5 ultimately unsuccessful effort to develop a repository,  
6 it rebooted about 10 years ago and it's actually well  
7 along the way and moving forward with the consent-based  
8 process to develop geologic disposal for the CANDUs.

9 CHAIRMAN VICTOR: CANDUs are kinds of reactors they  
10 have over there.

11 MR. PETERSON: Yes, it's a kind of reactor. One  
12 just quick point that's useful to know is that the  
13 CANDU reactors are designed to run with heavy water,  
14 which means they can use natural uranium. The  
15 consequences is that they generate much larger volumes  
16 of spent fuel actually than the types of reactors that  
17 we've developed and used here in the United States, so  
18 they face a somewhat slightly different set of  
19 challenges, but ultimately they're also focused on  
20 developing geologic disposal.

21 CHAIRMAN VICTOR: Let me just ask, Richard, is that  
22 responsive to the question?

23 MR. MACPHERSON: No. I actually wanted to make a  
24 comment about that.

25 CHAIRMAN VICTOR: Why don't you come up to the

1 microphone? Very briefly comment about this and then  
2 I'm going to move on to new topic.

3 MR. MACPHERSON: He's definitely right and, yeah,  
4 currently doing it and they're looking for long-term  
5 solution. Everything we're talking about tonight, I  
6 spent four years at the International Atomic Energy  
7 Agency with five other people, studying.

8 Canada, a guy from Canada, who happens to be  
9 MacPherson also, M-a-c-P-h-e-r-s-o-n, and got to  
10 talking and we got to talking, and we looked at Canada  
11 and the United States, we basically split it down the  
12 Mississippi River. And we split it down the  
13 Mississippi River for a number of reasons, a lot of it  
14 had to do with what was talked about earlier with 890  
15 counties, thousands of cities being affected and the  
16 fact that we can have water-born transportation system  
17 for most of it.

18 We flew to Argentia in Newfoundland and we  
19 talked to the folks up there and we looked at the land  
20 that was north of Argentia, Newfoundland. Now,  
21 Argentia, Newfoundland was at the time a U.S. Navy base  
22 and had been a U.S. Navy base since War World II and  
23 has a natural deep-water port.

24 Well, if you go from the mesa there and you  
25 look as far as you can see or fly a plane as far as you

1 can see just about, that's an ideal place to put the  
2 long-term storage. And we're really talking about  
3 long-term storage because we're going to reprocess this  
4 some day.

5 CHAIRMAN VICTOR: Okay. Thank you very much. I  
6 want to ask a question from Casey Thornhill --  
7 Thorn-Ellen, and maybe put this to Tim Frazier: "If  
8 we're concerned about waste storage, why is the CE --"

9 I'm sorry. I'm going to put this to Rob  
10 Oglesby: "If we're concerned about waste storage, why  
11 is the CEC suing to stop Yucca Mountain?"

12 MR. OGLESBY: It's because we're concerned about  
13 waste storage and there are a number of issues related  
14 to ground water and other -- that we've made a record  
15 on, that's available. We can talk about it in more  
16 detail, but we just have concerns that remain with that  
17 at that facility.

18 CHAIRMAN VICTOR: Okay. Thank you very much. Sir?

19 MR. GARDNER: Well, I'm the other Richard.

20 CHAIRMAN VICTOR: Okay.

21 MR. GARDNER: I just wanted to bring a little -- a  
22 point on the long-term repository possibility: It  
23 doesn't necessarily have to be a very deep geological,  
24 a mile, two miles underground into some remote cavern,  
25 it can be nearer the surface.

1           And one of the discussions I heard from  
2 hydrogeologists is that there are areas in the Northern  
3 United States and in Canada where the geology is clay  
4 and it is so solid and so deep in the clay -- well, the  
5 Great Lakes are an example, they're very clay-bottom  
6 lakes -- and they can be a water barriers, so that you  
7 can use clay as your repository source without having  
8 to go so deep, you know, just an idea.

9           CHAIRMAN VICTOR: Okay. Thank you very much. I  
10 don't want to -- I don't want to spend a huge amount of  
11 time on this. But, Tim, you've been in this business  
12 for a while, why are we all thinking about ultra-deep?  
13 Are there shallower options? Would this kind of play  
14 into the idea that we should actually be, as Per  
15 Peterson suggested, looking at multiple possible sites?  
16 Your views about that.

17           MR. FRAZIER: Well, it's not so much -- it's really  
18 particular to the medium in which you're disposing it.

19           CHAIRMAN VICTOR: So if you're doing salt, that's  
20 in the case?

21           MR. FRAZIER: Yeah, it's 2,000 feet down, more or  
22 less. If it's granite -- you know, the farther down  
23 you go with granite, the permeability of the granite  
24 decreases, so you've got less ground water, less  
25 potential of migration, so it's -- and they're not

1 ultra-deep.

2 I mean, the Department of Energy is now  
3 evaluating deep-bore holes, which are kilometers deep.  
4 The in-placement zone for the waste is between 3 and 5  
5 kilometers, so it's very dependent on the media. One  
6 size does not fit all in this case, so it's -- it's  
7 kind of tough to say.

8 CHAIRMAN VICTOR: So does this -- I mean, Gene  
9 Stone said earlier that we need to have a broader view  
10 about what the right strategy is. Is this an area  
11 where there is a lot of technological and geologic  
12 innovation going on and so actually there might be a  
13 lot of wisdom in not spending a bunch of time on the  
14 deep geologic storage and kind of waiting a little bit  
15 longer? How urgent is the deep geologic part of this?  
16 Is it more to keep the House on board and to the  
17 politics?

18 MR. FRAZIER: Well, no. I don't think -- so the  
19 kind of -- the international standard has always been  
20 deep geologic repository. Now, deep to them is 500  
21 meters, so it's, you know, 1,500 feet, more or less.  
22 So it's not -- it's not -- I'll go back to one of the  
23 things that Per said, which was a great thing, I think  
24 it was Per that said it, that there's not a lot of R&D  
25 to be done here, there's not a lot of technology that

1 needs to be developed to dispose of this waste in a  
2 careful, thoughtful, environmental-friendly manner.

3 Quite frankly, if you had a site, you can  
4 start the characterization -- if you had site, willing  
5 host, and stayed on board, you know, all caveats apply,  
6 you could start tomorrow with your core drillings and  
7 putting together the safety basis and putting together  
8 the analysis that was going to be required to get an  
9 NRC license. It's really not rocket science, it is, in  
10 fact, all the technologies known. We know how to do  
11 it, we just continue to kind of step over our feet on  
12 where to do it.

13 CHAIRMAN VICTOR: Let me ask Den --

14 MR. STONE: David, could I comment on what Tim  
15 just -- Tim and Richard MacPherson just said?

16 CHAIRMAN VICTOR: Sure.

17 MR. STONE: Richard MacPherson just said something  
18 that was very, very telling because of his history of  
19 who he's worked for, for a long time, he said "We are  
20 going to reprocess this at some point in time."

21 Now, Tim just talked about storage versus  
22 repository and long-term deep repository, if we're  
23 going to reprocess this sometime, and this is the  
24 given, the GOE -- the GOA just had this report out just  
25 recently for the nuclear -- for people who requested

1 the information on a report of November 2014 and they  
2 said that these public meetings are important to  
3 facilitate people accepting the government's ideas  
4 about liabilities for nuclear waste.

5 Meaning, these meetings are far too often  
6 covered for repeatedly over time and time and time the  
7 years that we've been doing it, the many other years  
8 that other people have been doing it, to get us to a  
9 place where we're going to accept these answers that  
10 someone other than us have come up with. And I don't  
11 think that's acceptable.

12 If the public process is important, then  
13 listening to the public is just as important.

14 CHAIRMAN VICTOR: Yes.

15 MR. STONE: And we have to be part of this  
16 solution.

17 CHAIRMAN VICTOR: I think that's -- I think  
18 everybody agrees with that. Let me ask Dan, who's got  
19 a perspective from the State of Nevada. Let me ask  
20 Dan, Schinhofen has a comment here that there is  
21 bipartisan support in the House and support from 9 of  
22 the 17 counties in Nevada. Dan, can you tell us  
23 what -- this is very different from the picture we have  
24 in Nevada, which is you don't want our stuff.

25 MR. STETSON: Yes.



1           CHAIRMAN VICTOR:  And so what explains this  
2 support?

3           MR. SCHINHOFEN:  I'm a commissioner from Nye  
4 County, the host county for the only repository in the  
5 United States by law.  We -- I wrote a resolution four  
6 months -- four years ago.  It's been signed by 9 of the  
7 17 counties.  They call on the NRC and DOE to move  
8 forward with the licensing process.  We're not going to  
9 finally know all the answers until we get this all the  
10 science heard.

11           We have a new congressman, who has spoken in  
12 favor of it, and an older congressman who says if it  
13 includes reprocessing, he would be interested in  
14 talking about it.  So there is -- there is an appetite,  
15 I think, for us to move forward.

16           I think most reasonable people want all the  
17 facts before they make a decision and that's what would  
18 happen if this moved forward.  We would hear the  
19 science, those who say that science isn't any good or  
20 the people who are trying to stop it most from moving  
21 forward.

22           Real briefly, there is a thousand feet of rock  
23 above, this is a big hole in our mountain, and then a  
24 thousand feet below before it gets to water.  These  
25 casks, these fuel rods have ceramic pellets in them and

1 they're in a cask that'll be in cask, so both of those  
2 would have to fail and then water would have to run  
3 over that to run down into the aquifer, which has been  
4 irradiated over years with about a thousand nuclear  
5 tests. So this is the only use this property could  
6 have. So this is the answer.

7 CHAIRMAN VICTOR: Well --

8 MR. SCHINHOFEN: And moving forward, I'll be real  
9 short, we're not opposed to the second repository, but  
10 the quickest way to move this to get this forward is  
11 let's continue with Yucca Mountain while we look for  
12 another repository. We can have Yucca Mountain open by  
13 2025, the other one by 2048, and in the meantime my  
14 county has property you can store it on.

15 CHAIRMAN VICTOR: Okay. Well, that's -- that's a  
16 good pitch.

17 MR. SCHINHOFEN: I've been saying it a lot for the  
18 last four years.

19 CHAIRMAN VICTOR: We've got some casks that are the  
20 door price.

21 MR. SCHINHOFEN: I've got casks -- you've got casks  
22 --

23 MR. BROWN: It's just sitting right down there,  
24 just throw it into your truck.

25 MR. SCHINHOFEN: You've got cash, I've got land;

1 let's negotiate.

2 MR. BROWN: I think we have an agreement here.

3 CHAIRMAN VICTOR: Can I just -- before you leave,  
4 can I just ask, if there's anybody in the panel,  
5 clearly the politics are different everywhere locally.  
6 Is there anybody in the panel who wants to -- to ask a  
7 question specifically about what's happened in Nevada  
8 and why that might be different?

9 PANEL MEMBER: I have a question.

10 CHAIRMAN VICTOR: Please.

11 PANEL MEMBER: I mean, my understanding of Yucca  
12 and that mountain, I haven't looked in a while, it's  
13 just one senator. I heard the discussion about two  
14 congressmen, so you've got a junior senator there.  
15 What's his position on it?

16 MR. SCHINHOFEN: Junior senator has been following  
17 our senior senator. When you asked earlier about what  
18 the barriers were to Yucca Mountain, I think the one  
19 gentleman who said it's not seen as urgent, that's a  
20 big barrier. The other barrier is Harry Reid.

21 CHAIRMAN VICTOR: Okay. I need to move on because  
22 we have a lot of other themes here.

23 MR. SCHINHOFEN: Okay.

24 CHAIRMAN VICTOR: So we have a comment -- I'm going  
25 to take this as a comment from Sharon Griswald, which

1 is about, "Can we work to find long-term storage for  
2 California nuclear waste in California?" I think a lot  
3 of people are interested in that, I think there are  
4 open questions as to whether this is California or  
5 maybe other states together.

6 But I want to pick up, connect that to a  
7 comment from Audrey Prosser. Maybe, Audrey, you could  
8 come and help us understand this more fully, which is,  
9 "Wouldn't the cost be less than the current cost to  
10 manage the waste if it were put on a California  
11 military base?"

12 We heard this option now many times. I don't  
13 want to unfairly put Tom Caughlan on the spot, but  
14 unfairly putting you on the spot, has this -- is this  
15 something that Pendleton has been thinking about or is  
16 it the opposite that Pendleton has been thinking about?  
17 Or can you help us understand the perspective of at  
18 least one important military base?

19 MR. CAUGHLAN: I think, when you ask to put it on a  
20 military base, you've got a couple of issues there:  
21 First, the responsibility for managing this stuff is  
22 not appropriately Marine Corps or part of the Navy,  
23 it's not our expertise.

24 The Marine Corps is there to be a 911 force  
25 for the country. The Department of Energy has its

1 responsibility and that's where the expertise lies and  
2 you don't want amateurs doing this, you want experts  
3 doing this, and you all knew that. That's why you're  
4 all here and you're all concerned.

5           Clearly, the Marine Corps interest is in  
6 returning that land to useful training ground and  
7 that's what the lease in place says it's going to do.  
8 The Department of the Navy, through the Naval  
9 Facilities Engineer and Command, put in place a lease  
10 that obliges the operators to remove and restore the  
11 facility to its as-was condition. That's what the  
12 Marine Corps is looking to have happen.

13           If you want to remove the fuel to another  
14 military base here, you simply double your location  
15 of -- or triple your location of concern, that's not  
16 something that the Marine Corps or I don't think  
17 anybody would advocate and you've also not solved the  
18 local concern, so even if you put it in the middle of  
19 the desert, somebody is concerned.

20           CHAIRMAN VICTOR: Can I --

21           MR. CAUGHLAN: So I hope, that's kind of the maybe  
22 a longer answer than you wanted, but --

23           CHAIRMAN VICTOR: No, I think this is -- the idea  
24 behind this format is to have some back-and-forth. I  
25 just want to see if Audrey Prosser is here and if

1 that's been responsive to your -- I understand the  
2 spirit of the comment and that's been responsive to  
3 the -- to what you were trying get information on.

4 MS. PROSSER: Hi. Well, I've heard a lot about  
5 appropriations and it seems like we go in a circle,  
6 just listening to this as a community person that's  
7 concerned about the dangers in the military guarding  
8 this waste. We've been told it's safe, yet there is  
9 not a guard in the shack when you go there. There's a  
10 gate open. I followed one in one day. We were left  
11 alone.

12 So I have a twofold concern: If we're talking  
13 about appropriations, which we know, we haven't been  
14 able to get anything bipartisan in 50 years to address  
15 this and we already paid military. I'm not -- of  
16 course, I wouldn't know all the security that's in  
17 place now.

18 But I hear a lot of focus on what we can't do  
19 and we can't get here, we can't get there, but I want  
20 to know what we're doing to guard this because it is  
21 vulnerable.

22 CHAIRMAN VICTOR: Let me -- so I think, other than  
23 military right now we'd do other things. But let me  
24 ask Chris Thompson, obviously, one can't speak in  
25 detail about security provisions, but help us

1 understand a little bit about the layers of security  
2 around the spent fuel pad.

3 MR. THOMPSON: I'm going to defer that to Tom, he's  
4 got more --

5 CHAIRMAN VICTOR: Tom Palmisano. Thank you very  
6 much.

7 MR. PALMISANO: Okay. Thank you. I'm Tom  
8 Palmisano, Chief Nuclear Officer at San Onofre. The  
9 independent spent fuel storage facility of the dry cask  
10 facility at San Onofre meets NRC requirements for  
11 protection, so what you don't see necessarily, if you  
12 were on site and walked inside a gate, you were not  
13 inside the fence around the ISFSI. You cannot get  
14 inside that fence without somebody opening it.

15 It is monitored by close-circuit television  
16 with infrared capability, for example, you cannot climb  
17 the fence without being detected, there are watchtowers  
18 that you're under constant visual surveillance, with a  
19 fairly, heavily armed response force that can interdict  
20 within minutes.

21 And this is canisters that are stainless  
22 steel, sealed in concrete canisters, not something that  
23 can be breached quickly or easily. So it's got quite  
24 heavy security that meets NRC requirements, and they  
25 continue to review that.

1 I can't disclose anymore without crossing the  
2 line of what we can't disclose. It may not be as  
3 visible if you're standing there looking at it, but it  
4 is surveilled continuously and defended continuously.

5 CHAIRMAN VICTOR: Thank you.

6 MS. PROSSER: Would those air vents that are  
7 sticking up out of these casks, would they be easily  
8 penetrated and 5/8 inch stainless steel is pretty  
9 easily penetrated.

10 CHAIRMAN VICTOR: We're going to come back. If  
11 there's questions about that, we'll come back in just a  
12 second. But can I just ask Tom while we're on this  
13 broad theme, and let me first make an observation: I  
14 was at a meeting last week in Switzerland with 40 heads  
15 of state, and I am struck, there are a lot of police  
16 and military there.

17 I am struck though the extent to which  
18 security around that facility, and I've been going  
19 there for 8 or 10 years, security has becoming  
20 increasingly automated and the confidence around the  
21 automated security system is actually greater than the  
22 confidence around the peopled system, so I think we  
23 should not just assume the security comes from a person  
24 with a gun, the security comes from layers and --

25 MR. PALMISANO: Right, it's multi-layered. It



1 starts with the design of the system, etcetera.

2 CHAIRMAN VICTOR: Can I ask Tom, while I have the  
3 floor, we have a couple of questions here, well, one  
4 question from Brian Johnson, "Why should I feel safe?"  
5 It seems like -- that's a big question. But related to  
6 that from Ben or Ren Wicks, Jr., "How vulnerable are  
7 the pools that store the spent fuel at San Onofre to an  
8 8.5 earthquake?" This is a topic that this panel has  
9 looked at in the past, that's in our records.

10 But do you want to give us very briefly since  
11 we have another question related to this --

12 MR. PALMISANO: Sure.

13 CHAIRMAN VICTOR: -- what we know about this and  
14 then I want to move on to some other questions?

15 MR. PALMISANO: Yes, the pools at San Onofre are  
16 very well-designed and constructed. They're  
17 steel-lined, they're in heavy concrete reinforced  
18 buildings, the majority of the fuel in the pool sits  
19 below grade at San Onofre, which is different than a  
20 lot of plants. I think that's something that  
21 California Energy Commissions recognized in their  
22 various reports.

23 The pools are inside a building that is  
24 protected, much like I described the protection for the  
25 dry cask storage protected, again, by both, you know,

1 systems, automated systems as well as personnel  
2 response for security, so the pools are well-protected.

3 The other thing, San Onofre has not operated  
4 for over three years now so the fuel has decayed  
5 significantly, which reduces the risk related to the  
6 pools.

7 CHAIRMAN VICTOR: Okay. Thank -- thank you very  
8 much. We have spent some fair amount of time on this  
9 issue and I think this is the basic logic behind the  
10 CEC's advise and the advise from any other groups to  
11 move the fuel out of the pools into casks nonetheless  
12 has --

13 MR. PALMISANO: Right. For a plant that is no  
14 longer operating, it makes sense to -- again, as CEC  
15 has recognized and as we have stated, our desire and  
16 intent is to move the fuel out of the pools safely as  
17 quickly as we can in a dry cask storage.

18 CHAIRMAN VICTOR: Okay. So we have three or four,  
19 depending on exactly how you count, comments of people  
20 who just want to speak in their three minutes, so let's  
21 take those now and I'm going to come back to a few more  
22 thematically group questions. So, first, Gary Headrick  
23 and then Ray Lutz and then Court -- I'm sorry if I  
24 mispronounce your name -- Kortzfar or -bar. Gary.

25 MR. HEADRICK: Yes, thanks for the opportunity to

1 speak. My name is Gary Headrick. I represent about  
2 5,000 people in our community that are concerned.

3 And, you know, but what I'm really speaking to  
4 you about is from the average person's point of view,  
5 because I have no credentials that make me an expert.  
6 I've been thrown into this situation because the sense  
7 of urgency was thrust upon me from whistle blowers when  
8 they were concerned about the steam generators that  
9 actually turned out to fail.

10 And when there is a sense of urgency, there is  
11 no stopping the average American citizen. You can  
12 imagine perhaps what I might have gone through is,  
13 uninformed as I was, being thrown into this situation,  
14 I can tell you that there was nothing I would stop at  
15 to prevent them from restarting a defective reactor  
16 without fixing it first.

17 And that sense or urgency is missing. We've  
18 talked about that tonight. And when we, as citizens,  
19 just our average citizens, we talked about the  
20 solutions coming from the ground up, we hear a lot of  
21 broken promises.

22 We see technology and scientists fail at  
23 suppositions about the powers of nature, what we're  
24 capable as human beings. And we need to be very  
25 honest, brutally honest, with the American public about

1 what we can and what we can't do, and there are no  
2 apparent serious long-term solution.

3 We hypothesize about what could be and what  
4 can't be, and what might be, but we have a situation  
5 here that I think warrants a sense of urgency and that  
6 is the inevitability of -- wait --  
7 inescapability of the next major earthquake and we all  
8 know it's due.

9 But, I mean, I just want to remind you we're a  
10 150 years past due for an earthquake that they're  
11 expecting is the size of an earthquake that happened  
12 maybe 400 years ago. We're talking about geological  
13 time. This is urgent. But we have to get that message  
14 to the public and we can't, you know, sweeten it and  
15 hide it and, you know, try to soften it.

16 So, what I'm proposing is, let's just -- let's  
17 just buy yourselves sometime, let's do what we can to  
18 put the dry cask storages into effect and reduce the  
19 number of rods in the pools, which are overcrowded,  
20 let's buy ourselves enough time so that we can explore  
21 interim sites and maybe they have some sense of  
22 academia there, maybe we're going to find new ways to  
23 use the waste or -- you know, let's just do it around a  
24 place that's designed to do that in a sensible way  
25 that's going to provide real solutions.

1           But let's don't waste this opportunity to  
2 protect eight and a half million people from the next  
3 earthquake. We've got to get this stuff in dry cask  
4 storage and buy ourselves --

5           CHAIRMAN VICTOR: Okay.

6           MR. HEADRICK: -- enough time to really deal with  
7 the problems we don't know about. And, please, just be  
8 honest with the public, and be brutally honest with us.  
9 We need this.

10          CHAIRMAN VICTOR: Okay.

11          MR. HEADRICK: We need the honestly.

12          CHAIRMAN VICTOR: Excellent. Thank you very much,  
13 Gary. Next is -- next is Ray Lutz.

14          MR. LUTZ: Hello, my name is Ray Lutz. I'm with  
15 citizenoversight.org. Thank you very much for letting  
16 me speak at this good meeting tonight. I've got two  
17 topics to talk about: First, the storage that I've  
18 heard and what seems reasonable. I hear we know how to  
19 do it, from a couple of people. We know how to do  
20 that.

21                 The fact is, we don't know how to do it.  
22 We've never done it for a long period of time. We've  
23 never stored this stuff successfully. Whenever you  
24 think you know how to do something -- I'm an  
25 engineer -- it always seems easier before you get in

1 the midst of all the little details and then you find  
2 out "We don't know how to do it," and that's why WIPP  
3 is failing. So this is not an easy problem. If it was  
4 easy, we would have done it. It's a hard problem.

5 Now, I think this idea of a state interim  
6 storage facility is a good idea to pursue, at least, to  
7 consider very, very seriously. I don't even know if I  
8 like the idea yet, but I think we need to really  
9 consider that because national solution is not going to  
10 happen. So I want to work on that and I want to work  
11 on that with anybody who wants to work with me to try  
12 to get the California Energy Commission or somebody  
13 else to take the steps to make that happen.

14 No. 2, decommissioning fund oversight: This  
15 is something that this committee has explicitly decided  
16 it doesn't want to do. Therefore, Citizen's Oversight  
17 has been taking the lead, we're a party in the  
18 proceedings. We'd like to invite anybody, maybe set up  
19 some meetings to review this.

20 Why is it important? It's because the utility  
21 wants to use "expand and explain" mode of spending.  
22 This is their normal mode. This is where they get a  
23 big bunch of money and they spend it and then they have  
24 a reasonableness review later, at least, they claim to  
25 be able to have one, but it never happens because the

1 CPUC doesn't have a reasonableness review. They  
2 decided to settle and they never even looked at it.

3           Instead, most people that do these kind of  
4 projects have a budget with change orders. They have a  
5 basically explain and then spend. And that's the way  
6 we need to do it. We need to be careful because if  
7 we're not careful, then we're going to see -- we're  
8 going to be left with no money in the pot and a whole  
9 bunch of nuclear waste sitting here and a bunch of  
10 executives sitting out on a yacht, enjoying their  
11 martinis on their big pension plans and big bonuses.

12           So Citizen's Oversight would like to -- we put  
13 in a protest on the proceedings that are starting.  
14 We'd like to invite anybody that's interested in  
15 watching the 4.4 billion dollars that will be stolen  
16 under our noses if we're not careful.

17           And so I'm in the back of the room, come by  
18 and talk to me at the end so we can set these meetings  
19 up and we can take -- we can do the oversight that is  
20 our responsibility to do and make sure this 4.4 billion  
21 dollars is not stolen under our noses.

22           CHAIRMAN VICTOR: Okay. Thank you very much.

23           MR. LUTZ: Thank you.

24           CHAIRMAN VICTOR: Thank you very much, Ray. I  
25 wanted to just make two -- I want to make -- first I

1 want to ask Per Peterson, if you might come up, if  
2 you're still in the room, to help us a little bit on  
3 understanding what we know and what we don't know in  
4 terms of geological storage, in particular, related to  
5 WIPP.

6 I want to just say very briefly, this panel is  
7 not situated to provide financial oversight on the  
8 trust fund. There are trustees that do that and, in  
9 particular, there is a California Public Utilities  
10 Commission, and so there is a lot of really important  
11 financial accounting and administrative legal questions  
12 that need to be taken seriously and that's done -- you  
13 may agree or disagree with what the California Public  
14 Utilities Commission does, that's done by another body,  
15 which is why our view has been to not work on that  
16 question. We weren't set up to that. We aren't ready  
17 to do that. We aren't staffed to do that. And so we  
18 can spend a bunch of time on this and make no progress.

19 So I understand the sentiment of making sure  
20 the money is spent wisely, it's just handled in a  
21 different part of the State administrative oversight.

22 So, Per, I want to ask you, it is much in the  
23 news that this WIPP facility in new Mexico caught on  
24 fire because of actually operations in the non-nuclear  
25 part, some trucks had been caught on fire and then this



1 fire spread, but it's a reminder that you have to have  
2 kind of nuclear operations through the entire system to  
3 make it really safe.

4 So help us understand because I think it was  
5 you who said some of these storage questions are really  
6 not technical questions. Help us understand how -- how  
7 confident we are that we know the right strategy here  
8 and should we be worried about the nuclear storage site  
9 because of what's happened in WIPP?

10 MR. PETERSON: That's a very good question. I  
11 think that I can describe a little bit what happened at  
12 WIPP. We should always be trying to learn from  
13 experience and we know that, for example, in Europe  
14 they transported quantities of spent fuel that are  
15 quite close to the total that we need to move, as well,  
16 already.

17 We do have examples of onsite storage. Doing  
18 transportation properly is something that requires a  
19 lot of effort to set up all of the local response into  
20 involved communities and, I think, Jim Williams has  
21 pointed to that. But if it's done well, then the  
22 experience has been that it can be done with high  
23 levels of safety.

24 What happened at WIPP was that, first of all,  
25 there is an underground fire with the diesel-driven

1 hauling equipment that they have, so they had,  
2 essentially, a truck fire and this exposed some  
3 deficiencies in their maintenance.

4 The proper thing, of course, is then to do  
5 corrective action in order to make sure that you don't  
6 make the same kind of mistakes again. The more  
7 important event that occurred was, a major mistake that  
8 was made at Los Alamos and they're still trying to  
9 figure out the root cause for why it was that they  
10 switched to using organic material to soak up liquids  
11 in waste that they were loading into drums that they  
12 classified as a difficult waste strain.

13 And this was nitrates that had accumulated,  
14 that had been produced in chemical processing of  
15 plutonium and, inadvertently, it sounds -- the best  
16 root cause apparently is that somebody forgot to write  
17 in in front of "organic" and specify in the type of  
18 kitty litter. This is what I read.

19 But they -- they mixed in organic materials  
20 and also other chemicals and essentially put together  
21 oxidizers and built what was a small fertilizer bomb.  
22 They actually packaged about 100 drums this way. Now,  
23 this is a really boneheaded thing to do and it's  
24 unlikely to happen again because, if you think about  
25 things rise to -- no, no.

1           I mean, this specific one, if you think about  
2 things that rise to the level of really being paid  
3 attention to in the future. But the interesting point  
4 is that that drum three weeks before it was placed into  
5 WIPP was sitting in fabric tent on a mesa outside of  
6 Los Alamos and, by far, the most fortunate thing that  
7 happened was that it got moved and put into that  
8 repository for that material was actually contained by  
9 the ventilation system that worked remarkably well,  
10 noting that it was -- it had not been designed. This  
11 was beyond the design basis.

12           As a consequence, I think, you know, one of  
13 the interesting things is that there's strong support  
14 for reopening that facility at both the local community  
15 and the state level and it's -- I think it's testimony  
16 to the effectiveness of consent-based processes that  
17 that's the case.

18           CHAIRMAN VICTOR: Okay. Thank you very much. It  
19 seems like whenever something like this happens there  
20 is always an explanation, but it sounds like one of the  
21 underlying stories that you have here, the community  
22 has here, is that what happened in WIPP is because you  
23 have all this commingled waste and nobody is quite sure  
24 what's going on on all these different casks, whereas  
25 what we have here is a situation where we have a single

1 kind of waste with single highly-monitored technology  
2 and that's actually something very important.

3 MR. PETERSON: That's correct. And the challenge  
4 in cleaning up the weapons complex is the fact that  
5 there is this extraordinary diversity of stuff and much  
6 of the early stuff is very poorly characterized in  
7 terms of what you actually have.

8 CHAIRMAN VICTOR: Okay.

9 MR. PETERSON: Fortunately, with spent fuel, it is  
10 much more homogenous and simple to deal with than the  
11 defense waste are.

12 CHAIRMAN VICTOR: Right.

13 MR. PETERSON: But that doesn't mean that we  
14 need -- we can be complaisant about making sure that  
15 we're not doing the very best we can to handle it  
16 safely and to learn from mistakes to make sure that  
17 they're not repeated.

18 CHAIRMAN VICTOR: Thank you very much. I want to  
19 get Kortzbar.

20 MR. STONE: David, one comment.

21 CHAIRMAN VICTOR: Okay. I want to -- I just need  
22 to make sure that we get more public comments in here  
23 because we're on the segment. Is Kort, Kurtzbar? It  
24 just says "speak" here. Okay. Well, if you just wrote  
25 speak and you have not spoken, then you are this person

1 and it's your turn to speak.

2 PANEL MEMBER: Your command.

3 CHAIRMAN VICTOR: So, okay. We have a number of  
4 comments here related to the casks and cask choice  
5 coming from Dennis Nelson about the Holtec casks and  
6 the emissions from those and the private fuel storage  
7 and license being withdrawn, we have a comment from  
8 Chris Johnston about canisters cracks and leaks, two  
9 comments from Donna Gilmore on the same theme, in  
10 particular, related to the use of thick cask  
11 technology, and a comment from Jennifer Massey, which  
12 is the thick casks don't crack.

13 We have spent in this panel a lot of time  
14 addressing this. What I'd like to do is, ask Tom  
15 Palmisano to give us a brief summary of what actions  
16 are being taken and have been taken very briefly on the  
17 question of cask choice, and then I want to ask  
18 Jennifer Massey if that's -- since there's been many  
19 different people commenting on this, I want to ask  
20 Jennifer Massey if that response is responsive.

21 MR. NELSON: Am I suppose to speak or not?

22 CHAIRMAN VICTOR: Are you the one that wrote speak  
23 on your card?

24 MR. NELSON: Yeah. I have some issues on it. I  
25 don't know whether I'm suppose to speak or not.

1           CHAIRMAN VICTOR: Okay. I'm sorry. I didn't see  
2 you. And so why don't we -- why don't we address the  
3 theme that I just picked up? We'll get Tom Palmisano  
4 and then I'll get to you next. Okay. Is that okay?

5           MR. NELSON: Sure.

6           CHAIRMAN VICTOR: Okay. Tom Palmisano.

7           MR. PALMISANO: Okay. So the question is where we  
8 are with our cask decision and the actions we were  
9 take?

10          CHAIRMAN VICTOR: Yes, in particular, this question  
11 has been raised about thick casks and other vendors.  
12 Give us a summary of what's happened.

13          MR. PALMISANO: Sure. So, you know, I think  
14 everybody is aware we have selected Holtec for the next  
15 design, which is a stainless steel canister and a  
16 concrete overpack. It's the vertical system similar  
17 which I think you saw on the CEC slide that's in use at  
18 Humboldt Bay.

19                 We evaluated the licensed U.S. cask designs  
20 and the designs that are being licensed in the U.S.  
21 Holtec is currently licensed for Humboldt Bay for the  
22 vertical, their next license will be published in the  
23 federal register in the next two weeks. They've  
24 completed the licensing process.

25                 We looked at the question of the thicker

1 canister design or the thick cask design particularly  
2 would suggest Castor. We brought Castor over from  
3 Germany. We met with them. We interviewed Dominion,  
4 which owns the Surry Plant where there, I believe, are  
5 26 thick-walled Castor casks in use.

6 Castor never licensed them for transport in  
7 this country. They withdrew their application. We  
8 have met with the NRC staff to understand why they  
9 withdrew their application. The company that selected  
10 Castor and loaded 26 casks went on to stainless steel  
11 canisters and concrete overpack because Castor at the  
12 time was not able to license or elected not to license  
13 them for transport.

14 So in looking at all this, we were not  
15 satisfied that Castor was a viable choice for  
16 San Onofre to license the canisters or the casks to  
17 have them available to load in a timely manner to  
18 support off-loading fuel in the fuel pool.

19 And we heard from a number of people about the  
20 importance of off-loading fuel as early as we can,  
21 including from the California Energy Commission, as an  
22 example. So for those reasons, we've selected Holtec.  
23 It is a suitable cask design for its purpose.

24 It would be subject to NRC reviews for  
25 re-licensing for continued use in storage, as all the

1 canisters and casks, thick-walled or thin-walled, in  
2 this country are subject to re-licensing and we're  
3 satisfied with the choice.

4 CHAIRMAN VICTOR: Okay. Thank you. Let me ask  
5 Jennifer Massey if you -- I know that at the end of the  
6 day, we're not all going to agree on this. But do you  
7 have additional comments about this?

8 MS. MASSEY: I have a number of them.

9 CHAIRMAN VICTOR: Can you just come up and take  
10 the --

11 MS. MASSEY: I would prefer if Donna, who is much  
12 more the authority on this issue than I am, so I would  
13 like --

14 CHAIRMAN VICTOR: Okay. Then, Donna, you have  
15 three minutes. Can you just --

16 MS. MASSEY: Do you want to go before Donna?

17 CHAIRMAN VICTOR: Yes, because it's on this theme.

18 MR. NELSON: It's my theme, too.

19 MS. BOSTON: Oh, is it? Okay.

20 CHAIRMAN VICTOR: Okay. But how would I know that  
21 because you just said "speak"?

22 MR. NELSON: No, I didn't said speak, I said Holtec  
23 cask.

24 MR. FRAZIER: Okay. Donna?

25 MS. BOSTON: All right. Okay. The Diablo Canyon



1 has a Holtec canister that has all the conditions for  
2 cracking after only being loaded for two years. The  
3 NRC was surprised that the temperature was low enough  
4 for the humidity to be able to dissolve salt. There is  
5 salt, magnesium chloride, highly corrosive magnesium  
6 chloride, found on that canister.

7 No one knows if it's cracking right now  
8 because the industry does not have inspection  
9 technology to even examine the surface of those  
10 canisters. So this is a critical issue. We have  
11 similar canisters here already at San Onofre and around  
12 the country. Nobody can inspect any of them, nobody  
13 knows if they're cracking, nobody is even doing surface  
14 scraping, except for a few.

15 And so this is a time's urgent issue while  
16 everybody is diddling about long-term and interim,  
17 we've got a ticking time bomb here, ready to go off any  
18 time. And in terms of the thick cask technology, it's  
19 the only other option we have besides this thin stuff.

20 The thick cask has been loaded for over 40  
21 years with no problem. The thin cask is a relatively  
22 immature technology, 20 years or less. The Simple Camp  
23 Company manufactures the Castor casks and they also  
24 have their own version. The German company or the  
25 German government that owns the G&S Castor design, they

1 don't want to have anything to do with us in the U.S.

2 But the Simple Camp has got their own version  
3 of the Castor and they are more than willing to do  
4 business. They are canisters that won't crack, they  
5 have the ability to repair, ability to inspect the  
6 outside, they have an early-warning monitoring system.

7 Our canisters that we have now, you're only  
8 going to know after they leak radiation, there's  
9 absolutely no warning. The only requirement is that  
10 once every three months somebody walks around with a  
11 monitor on a stick to see if they're leaking. They  
12 don't meet ASME certification, the German thick cask  
13 do, they also meet international for transport and  
14 storage.

15 And there was this myth that the ductile cast  
16 iron is brittle. It's a myth the NRC have. I provided  
17 them with the Sandia report that killed that myth and  
18 also said they were actually superior technology. And  
19 if you have other myths about that, please let me know  
20 so I can help dispel those.

21 They store their -- their casks in concrete  
22 buildings for extra reinforcement and extra  
23 environmental protection. The Cask at Fukushima that  
24 everybody says held up, those were not these thin  
25 casks, they were thick, they were the thicker AREVA

1       forged steel cask, which would be better than what we  
2       have.

3               Regarding licensing, I spoke to Michelle, who  
4       is the supervisor over licensing, the Holtec Umax that  
5       Edison wants to buy, they're not approved and may not  
6       be approving any of it in March. They said they --  
7       they haven't been able to adequately address the  
8       comments they receive.

9               CHAIRMAN VICTOR: Okay.

10              MS. BOSTON: Which are comments that I gave them.

11              CHAIRMAN VICTOR: Thank you very much.

12              MS. BOSTON: Okay.

13              CHAIRMAN VICTOR: For these comments, so --

14              MS. BOSTON: Oh, we have an urgent issue here that  
15       I think needs to be deal with prior to --

16              CHAIRMAN VICTOR: Thank you.

17              MS. BOSTON: -- worrying about interim and  
18       long-term.

19              CHAIRMAN VICTOR: Thank you.

20              MS. BOSTON: Thank you.

21              CHAIRMAN VICTOR: Thank you for those comments.

22                       We -- sir, did you -- can you tell me who you  
23       are because I'm a little confused?

24              MR. NELSON: My name is Dennis Nelson.

25              CHAIRMAN VICTOR: Okay. Now I understand.

1           MR. NELSON: My name is Dennis Nelson, I'm a  
2 representative of SEFRV, Support and Education for  
3 Radiation Victims. And I have concern about the Holtec  
4 cask, specially the ones that have a thin, stainless  
5 steel canister and then an overpack shielding for  
6 neutrons.

7           The problem is that these are cooled by air  
8 and the air is contains nitrogen and is moist and, if  
9 there is neutrons, then the nitrogen is converted to  
10 carbon 14 and the water is converted to tritium and  
11 both of those are noxious biochemical hazards.

12           And we have to recognize that long-term  
13 storage of these casks above ground with air cooling,  
14 as long as there's neutrons being emitted, they're  
15 going to produce those noxious chemicals.

16           Now, we know that Linus Pauling and Andre  
17 Sakharoff said they were going to be millions of people  
18 worldwide who would die prematurely over the lifetime  
19 of these radio nuclei. I think it's five years for  
20 tritium and it's 4,500 years for C-14, so these are  
21 really dangerous materials and they'll be around for a  
22 very long time. So unless you get a way to remove that  
23 or determine how much is actually being produced, but  
24 the sooner you move the fuel from the storage pools  
25 into the casks, the more you're going to get neutrons,

1 so it's a bigger problem.

2 Also, you can only put -- you can put fewer  
3 elements in the cask if it's -- if it's hot, so moving  
4 it out of the pools prematurely, you're going to have  
5 to put fewer elements in the cask and you're going to  
6 get more neutrons, so these are all problems that have  
7 to be addressed and nobody's looking at them as far as  
8 I can tell.

9 Also, it's not safe. Private fuel storage,  
10 you know, we heard about it, ended up withdrawing their  
11 license application and they did that because they had  
12 all these casks that were going to be stored above  
13 ground, 35 miles from Salt Lake City and they could be  
14 easily attacked from the air, like 9/11 kind of an  
15 attack.

16 And they were going to have 40,000 pounds of  
17 this stuff or tons. I don't know. It was an awful  
18 lot.

19 MS. BOSTON: 40 tons.

20 MR. NELSON: And it turned out that it was an  
21 environmental injustice thing. The Indian tribe  
22 eventually decided they weren't going to do it because  
23 the majority were not for it even though they were  
24 going to be paid millions of dollars each so that they  
25 could all move off the site and turn it over to the

1 companies that wanted to store fuel there.

2 So all of these are problems that are sort of  
3 swept under the rug, nobody's looking at them, and I  
4 think that until they start looking at them, we're  
5 going to have a real serious problem with  
6 oversimplification. Thank you.

7 CHAIRMAN VICTOR: Okay. Thank you very much for  
8 your comment. I'm going to ask Chris Thompson in just  
9 a moment to give us there's a variety of views about  
10 what went wrong with private fuel storage.

11 Let me just remind the public, this panel has  
12 spent a lot of time talking about these issues. We had  
13 a special meeting in October with the two leading cask  
14 vendors. Several members of the panel, including  
15 myself, has spent an enormous amount of time looking  
16 through the evidence. In some, there's actually a lot  
17 of research and a lot of evidence and we try to  
18 synthesize that material in plain english in a white  
19 paper that's up on the site [SONGScommunity.com](http://SONGScommunity.com).

20 Nobody's going to agree with everything, but  
21 it's an effort to provide a balanced perspective as  
22 to -- as to how the facts lie and what that means to  
23 the strategy of moving the fuel out of the pools and  
24 into casks.

25 I'd like to ask Chris Thompson to talk just on

1 the issue of the private fuel storage since that's come  
2 up. And, clearly, what we know about that experience  
3 is important for how we think about things like  
4 consolidated interim storage. Your views as to why  
5 that they pulled their license.

6 MR. PALMISANO: No.

7 CHAIRMAN VICTOR: You don't.

8 MR. PALMISANO: They have not pulled their license,  
9 let me clarify that. Private fuel storage license is  
10 active today. I'm on the board of Private Fuel Storage  
11 and I was affiliated with the Prairie Island in  
12 Montecillo plants and Xcel Energy, the old northern  
13 state's power was the principal owner of Private Fuel  
14 Storage.

15 Private Fuel Storage successfully got an NRC  
16 license to build an independent spent fuel storage  
17 facility. At the time it was called a way from reactor  
18 storage under 10 CFR 57(d)(2) The facility was never  
19 built. And I think Chris in his comments talked about  
20 some opposition by the state of Utah that influenced  
21 federal action for the Bureau of Land Management, the  
22 bureau of Indian Affairs, not to allow the right of way  
23 to be built to transport fuel.

24 We did submit -- we were being charged fees by  
25 the NRC as if we were an operating independent spent

1 fuel storage installation, so we wrote a letter  
2 requesting to withdraw our license. The NRC then,  
3 after looking at it, changed the fee schedule to not  
4 charge us the fees as if we were operational, so we  
5 withdrew the request to withdraw the license.

6 So today Private Fuel Storage has a license.  
7 It would realistically never be built because of, you  
8 know, the lack of the consent-based process, if you  
9 will, with the State of Utah. The Indian tribe was  
10 supportive and continues to be supportive, but time  
11 will be running out on Private Fuel Storage. At some  
12 point we will recognize, you know, that we will  
13 eventually likely pull the license.

14 It wasn't a security issue. It was a fee  
15 issue and it's the fact that it would never be built.

16 CHAIRMAN VICTOR: Okay. Thank you very much.

17 MR. PALMISANO: And I'll take them --

18 CHAIRMAN VICTOR: I want to get through three more  
19 themes before we run out of time and I've got some  
20 closing business from the panel. So I have a new theme  
21 from George Allen, George C. Allen, the topic is, he'd  
22 like to thank the NRC for its service and it says, in  
23 his comment, Greg Warnick has publicly stated that San  
24 Onofre has met the regulatory requirements.

25 Mr. Allen, is that all you wanted to say?



1           MR. ALLEN: Yes, for just a second. I work at San  
2 Onofre. I'm not a spokesman for San Onofre. And to  
3 put people at rest that are afraid of San Onofre, we  
4 did measurements. When I was there three years ago, we  
5 had a radiation leak out on one of the steam  
6 generators.

7           I'm a health physics technician. I have an  
8 ohm meter. I go down to the primary or secondary lab  
9 to check for indication of leaks. I found no canister  
10 in background. Other technicians takes air samples out  
11 on the effluent where the F-ejector -- air ejector was,  
12 calculations that you produce, we didn't have dose  
13 rates off site, so we shut down three years ago and  
14 didn't expose the public.

15           I was also involved in putting the first fuel  
16 bundle, the first ISFSI in the canister into the NUHOMS  
17 horizontal storage module. It's still there and we  
18 monitor the area, it's background radiation at the site  
19 boundary. San Onofre has been safe. We have kept our  
20 word, like Greg has kept his word. He has defended his  
21 work.

22           We have other workers that have done their job  
23 there. They've defended their integrity and it just  
24 does bother me that people make statements that are not  
25 quite true or uninformed because nuclear industry is

1 pretty straightforward and, like I said, it's not  
2 rocket science, but it's nuclear science.

3 And you have some good people there and no one  
4 died at Fukushima, no one died at Three Mile Island and  
5 you do have spent fuel on a military site and it'll  
6 probably be there a few more years and it is safe. And  
7 tsunamis do not occur as they occur in Japan. We have  
8 slip, you know, sliding faults. We don't have the  
9 subduction zone, so we don't have the same risks.

10 So you guys can probably drop the quarter.  
11 You can relax. You've got some good people watching  
12 after you. Okay? Thank you.

13 CHAIRMAN VICTOR: Okay. Thank you for your --  
14 thank you for your comment. You know, comments are a  
15 reminder that we all have a lot to learn on all sides  
16 about how each other thinks about these things and  
17 different perspectives and I think that's part of the  
18 purpose of this here.

19 I have a comment here from Roger Johnson  
20 concerning local regional state solutions.  
21 Mr. Johnson, can you tell us what your comment is?

22 MR. JOHNSON: Thank you. As an observer here  
23 tonight, I've sort of noticed two different  
24 perspectives: One that is a national perspective and  
25 one that is a local perspective. Most of you have a

1 national perspective.

2 And I think that, you know, the focus --  
3 there's a lot of lip service paid for the idea of  
4 reaching out for all solutions, going outside of the  
5 box and so on. But what I hear is a lot of thinking  
6 inside the box, focusing on plan A, and plan A, in my  
7 mind, from what I'm hearing, is a search for the Holy  
8 Grail and the Holy Grail is to come up with a plan that  
9 everybody agrees to that's permanent and satisfies all  
10 states, all governors, all branches of government, both  
11 Houses of Congress, the President, Department of  
12 Defense, Transportation, everybody; that's plan A.

13 Plan A isn't going to happen. And so remember  
14 the Rule of Holes, we heard that tonight: So you're  
15 digging a hole deeper and deeper in plan A. It's time  
16 to start looking for plan B. So I heard some locals  
17 here, try to get a word about this. It was very  
18 refreshing. I heard Councilman Kern, Councilman Brown,  
19 these are locals, Marni Magda, a local, we had Dan  
20 Stetson, from Dana Point, and they're saying "Why can't  
21 we talk more about another solution than a national  
22 solution?"

23 And we use the word California solution, or  
24 whatever you want to call it, but I think that needs to  
25 be studied and it needs to be studied seriously, to be

1 told that we can't have a California solution because  
2 we have to solve all the solutions, our whole world,  
3 all the country that everybody agrees to, then we can't  
4 do it.

5 Well, let's try, I think we could have a  
6 California solution and maybe it'll be a model at other  
7 states and other regions could follow. I think it's  
8 possible and I'd like to hear a lot more discussion of  
9 that.

10 I think the idea of moving it from one  
11 important military base to another less important  
12 military base where nobody lives it's a much more  
13 secure is a great idea. And we heard that we can  
14 transport this waste. We can move it, they do it all  
15 the time.

16 A hundred miles from San Onofre is the  
17 Chocolate Mountain Reserve. It's four times the size  
18 of Camp Pendleton. There is -- nobody lives there,  
19 there is no road, there is no air -- no fly-zone, it's  
20 of no interest to terrorist, it's out of earthquake  
21 fault zone.

22 And I'm not talking about a permanent  
23 solution, I'm talking about an interim solution, so I  
24 think these kinds of things are just not being  
25 discussed. I think there are possibilities and I think

1 we need to talk more about plan B and plan C and  
2 because I don't think the national solution is going to  
3 work. Thank you.

4 CHAIRMAN VICTOR: Thank you very much, Mr. Johnson.  
5 We are -- I think your comment encapsulates the spirit  
6 of this meeting and the discussions, practical  
7 discussions, people are having, given the frustrations  
8 with the situation in Washington and so I think we're  
9 actually now seeing lots of discussions about state  
10 solutions or collective solutions and I'm glad to see  
11 all of that.

12 I don't know where we are in the alphabet.  
13 We're maybe beyond plan B or plan C, we're somewhere  
14 deeper in the alphabet, but it'll be plan-something or  
15 other. And I think Rita Conn, her comment summarizes  
16 your point, as well, in the spirit of the meeting  
17 tonight, which is, "Let's think creatively about what  
18 solution have we not thought of before." And I thank  
19 you for your comment because I think that's an  
20 important one.

21 The last card that I have here for this  
22 evening comes from David Bartholomew, which has checked  
23 many of the boxes and it says that this is about a  
24 public private purchase addressing multiple needs of  
25 Native Americans, salinization space, power access jobs

1 for baby boomers in middle class and so on. And maybe,  
2 Mr. Bartholomew, you could help us understand the kind  
3 of focus of the comment here.

4 MR. BARTHOLOMEW: Thank you, David. I was  
5 participating in the closure of the El Toro Marine Base  
6 and so I drew a lot of parallels and similarities with  
7 the closure of Marine base property and the closure of  
8 a property that's adjoining the Marine base. One thing  
9 I noticed when -- for my background, basically, I'm an  
10 educator, but my career has been in advertising and  
11 marketing, master plan communities, like Mission Viejo,  
12 Irvine Company, Taylor Woodruff Homes, International  
13 Builders, Las Vegas, MGM Grand, Disney development  
14 projects there and part of the marketing and, frankly,  
15 part of the architectural stained glass, so I'm an  
16 artist, too.

17 But when I look at the Great Park project,  
18 that property, I look at the benefits that would  
19 benefit all of the counties, all of the cities, and  
20 frankly, just the opposite happened. One percent  
21 interest big business bought that property out and used  
22 it for their own special interest and the people of  
23 Orange County really haven't benefited. It's quite a  
24 joke.

25 It was -- I presented opportunities for tax

1 sharing, licensing and leasing that property having  
2 international builders and people present ideas. In  
3 this case, I think all of the universities in America  
4 could benefit by participating in a university that's  
5 located there, actually, hands-on with a nuclear plant  
6 in a small -- small portion, I think, business.

7           We could -- we could, if we come up with a  
8 good solution for burying this material, that would be  
9 a good business for Orange County and it's right off  
10 the shore. Why not ship some of the -- why not have  
11 people bring in their uranium and ship it to, you know,  
12 the Martine Islands or Martial Islands where all that  
13 nuclear bombing was going? Why not just ship it out  
14 there?

15           There is lots of ideas that really haven't  
16 been presented. I'm really surprised at the limit of  
17 what was being discussed because, as far as I know,  
18 electricity prices have not gone down like the gasoline  
19 price. You know, we're like at half of what we used to  
20 pay just a month ago. And I think the public should  
21 take over that electric plan and -- and start to look  
22 at how we can cut our electric cost in half.

23           Basically, I talked to the supervisors, I  
24 presented a Great Park idea and it was cut off. I  
25 talked to the federal rep who came in. I really didn't

1 get any back responses. And I think President Obama  
2 and most of the Congress would like to see that  
3 property used for the benefit of our economy.

4 And maybe do a land share, a land splitter or  
5 land share, something with the military so they get  
6 what they want and Orange County and San Diego County  
7 get what they want. This is an economy booster.

8 CHAIRMAN VICTOR: Great. Thank you very much for  
9 your comment.

10 MR. BARTHOLOMEW: Thank you.

11 MS. CONN: David, I'm Rita Conn. Can I just have  
12 one minute? I know that --

13 CHAIRMAN VICTOR: One minute. Okay. Because we're  
14 out of time.

15 MS. CONN: Thank you. Nike has a saying, which is,  
16 "Just do it." And so this side you guys are going to  
17 keep just doing what you've been doing apparently and  
18 we have some of our residents who want to do something  
19 different.

20 So my message is not to you guys anymore, but  
21 it's to everyone out there and that is that we have to  
22 create the political will, the People have to create  
23 the political will because we're the ones who live  
24 here, we're the ones who could lose our lives, our  
25 families, and our property, and each and everyone of us



1 that is here has a responsibility to get, at least,  
2 four other people and send the letters out and go to  
3 their council; we did that in Laguna Beach.

4 We got a very good resolution passed, the one  
5 that Tom even agreed with. Laguna Woods has done it,  
6 and every single community around us needs to do it,  
7 and we all need to get together and it's us, us, the  
8 People. Thank you very much.

9 CHAIRMAN VICTOR: Okay. Thank you very much for  
10 that comment. I want to just -- before we close, I  
11 know Jerry Kern has some business for the Community  
12 Engagement Panel that you'd like to make us aware of.

13 Jerry, the floor is yours.

14 MR. KERN: Thank you. I just -- you know, as Tim  
15 and John probably know, being an elected official at  
16 the local level, you're pretty accessible to everybody,  
17 so I had a couple of comments that people stopped me  
18 and asked me to relay to the council or this group up  
19 here, and I will probably put it in an email format,  
20 for the interest of time.

21 But the subjects were, you know, "What is  
22 Edison's plan to invest the rate payers' dollars in the  
23 local communities since they're pulling out?" I mean,  
24 that's one of the things. I have a series of questions  
25 here and I will send those to the chairman.

1           The other one that was kind of touched on  
2 tonight, but not so much in the cask system but below  
3 ground storage, when sea level rise, liquefaction,  
4 seismic changes, there were some questions that people  
5 brought up and I will email those to the chairman and  
6 he can send them to the rest of the community and  
7 hopefully in a future date we can address those issues.

8           CHAIRMAN VICTOR:    Okay.  And I think just on this  
9 issue the -- the issue of reinvestment in the  
10 community, specially the communities that have been the  
11 hardest hit this has come up over several meetings as  
12 it should and we need to spend sometime on that  
13 question and understand what's feasible.

14           And I think the questions about below ground  
15 storage, specially now that the cask vendor has been  
16 selected are related to this issue of "what does  
17 defense in-depth really look like?"  And I know we have  
18 a commitment from Edison to help articulate what that's  
19 going to look like in plain English for us and that was  
20 one of the major recommendations coming out of the  
21 white paper that we put together.

22           I know a topic that Gene Stone has helped us  
23 focus on and rightly so let's -- please do send those  
24 to me and I'll make the part of the public record.

25           If anybody else has -- members of the panel

1 comments or things you'd like to make as part of the  
2 public record and get a response on, please send them  
3 to me. I also urge members of the public, if there  
4 are -- specially related to the public comment format  
5 and how we're managing this, if you have concerns about  
6 this or advice, please send them to me.

7           And we're doing our best, but we're trying to  
8 keep the public comment, we're trying to help the  
9 public comment period focus on things, themes, and then  
10 get responses right on the spot, and that's the idea  
11 behind this. And thanks to Dan and to Tim for their  
12 help on this.

13           I wanted to say one thing in closing before  
14 we -- before we end our meeting tonight, which is: We  
15 committed about six months ago, eight months ago to  
16 have more than a meeting, but to have a discussion  
17 while we're working on the short-term issues of what  
18 the longer-term might look like and what we can do in  
19 the communities, and this meeting and this great  
20 support of the Bipartisan Policy Center and Tim Frazier  
21 is part of that effort.

22           These -- we promised these would be hard  
23 issues, hard not so much for technical reasons but hard  
24 because they're difficult, political problems that  
25 involve thousands of moving parts, and I think we've

1 delivered on that promise.

2 But I think what's more interesting is that  
3 there are plausible strategies coming into focus, and  
4 it's not obvious which are the right ones or which are  
5 the wrong ones, but I think as people write letters and  
6 they make resolutions and so on, we need a strategy as  
7 well.

8 And I think your group can help us understand  
9 what the playbook looks like and we can help work on  
10 this, but I'm -- I'm actually very encouraged that in  
11 the spirit of kind of just get it done or just do it  
12 that some strategies are coming into focus that don't  
13 require the federal government to dance all to the same  
14 tune.

15 And with that, I adjourn -- very briefly,  
16 Gene.

17 MR. STONE: You were going to let me respond to  
18 Per.

19 CHAIRMAN VICTOR: I was? Okay. Then I failed.  
20 I'm sorry.

21 MR. STONE: That's all right.

22 CHAIRMAN VICTOR: My brain is somewhere over  
23 Greenland right now.

24 MR. STONE: Well, it seems like we should, you  
25 know, on a positive note, in Kitty Litter, probably is

1 as good as it's going to get because it is the crux of  
2 the problem. We listen to the experts, we do what they  
3 say.

4           They say "We develop these projects, WIPP,"  
5 and then something as simple as Kitty Litter, by the  
6 experts, is overlooked and we have a major, major  
7 debacle in new Mexico. And so, yeah, it's going to  
8 cost us a ton of money. So it is important to listen  
9 to the public, it is important to question the experts  
10 and keep us all thinking in and out of the box.

11           CHAIRMAN VICTOR: Absolutely. And we are -- I  
12 think we, as a panel, are doing that and we needed to  
13 keep doing better and that's an important reminder  
14 because we've got to get this right. Thank you very  
15 much.

16  
17           (Whereupon the CEP meeting concluded at  
18 9:35 p.m.)

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I, the undersigned Certified Shorthand Reporter in and for the State of California, do hereby certify:

That the foregoing proceedings were taken down by me at the time and place therein set forth;

That the foregoing is a true record of the testimony and of all objections made at the time of the proceedings.

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IN WITNESS WHEREOF, I have subscribed my name on this date, Tuesday, February 10, 2015.



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CARLOS R. HICHO  
CSR NO. 13111