Case: **Community Engagement Panel Public Meeting**

**Transcript of Proceedings**

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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
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.
PANEL MEMBERS IN ATTENDANCE:

DR. DAVID G. VICTOR
COMMUNITY ENGAGEMENT PANEL CHAIR

CEP MEMBERS:

EDWARD "TED" QUINN
AMERICAN NUCLEAR SOCIETY, SAN DIEGO
CHAPTER

RICH HAYDON
CALIFORNIA STATE PARKS

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

DAN STETSON
OCEAN INSTITUTE

JEROME M. "JERRY" KERN
OCEANSIDE CITI COUNCILMEMBER

GARRY BROWN
ORANGE COUNTY COASTKEEPER

DONNA BOSTON
ORANGE COUNTY SHERIFF'S DEPARTMENT

GENE STONE
RESIDENTS ORGANIZED FOR A SAFE
ENVIRONMENT

MAYOR TIM BROWN
SAN CLEMENTE

JIM LEACH
SOUTH ORANGE COUNTY ECONOMIC COALITION

TOM PALMISANO
VICE PRESIDENT AND CHIEF NUCLEAR OFFICER
SONGS

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

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

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

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

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

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

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

And we're not going to agree on everything, we
already have seen that, but it's crucial that we have
dialogue and discussion and we be fully transparent
about that process. This is not a decision-making
body, this is a conduit that is designed to help
provide this two-way flow of information.

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

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

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

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

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

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

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

Because of that, when you do take the floor, specially during the public comment period, please identify yourselves so that we have a proper record of
this and so the people who are listening on the live-streaming will know what's happening.

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

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

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

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

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

We'll go ahead and jump right into the panel.
Let me introduce first David Wright. David is a former 
president of NARUC, National Association of Regulated 
Utility Commissioners, former chairman of the Public 
Utilities Commission in South Carolina, he's also on my 
advisory council, brings that perspective of the 
regulated environment, all the discussions that we have 
about nuclear waste and how we can try to move forward 
with nuclear waste.

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

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

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

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

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

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

CHAIRMAN FRAZIER: That's right, yeah.

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

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

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

CHAIRMAN FRAZIER: Yeah, absolutely.

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

CHAIRMAN FRAZIER: Yeah, we're going to do Q and A.
I will start off with some softball questions that I know they can answer, and then the CEP members can -- can hit them with more questions and we'll just have a discussion. All right, Per.

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

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

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

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

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

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

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

We need to think a little bit about what will
be important for that legislation to do. I think that
the first thing is that to simply start appropriating
money to restart the Yucca Mountain Project is not
sufficient, nor is it likely to work, unless a number
of other problems are also corrected, which were
outlined in the Blue Ribbon Commission's reports.
Now, if you -- sitting at public meetings like this over the last several years, it's my observation, there is a number of areas where we find broad consensus in this country about things that need to be done and other areas where we have significant disagreement.

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

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

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

One is to transfer the responsibilities for implementing this program out of the Department of
Energy to some type of new entity that will have this task as its soul mission.

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

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

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

Geoff, go ahead.

MR. FETTUS: Okay. Thank you, Per. That was, actually, a good summary of some of the issues. NRDC. My name is Geoff Fettus, a senior attorney at the National Resources Defense Council. And I'll try not to use acronyms, like NRDC, but then you have to be
I actually don't have a lot of hope for this Congress moving forward on the legislation that Per described would very likely be necessary to move forward with a nuclear waste program, but that's a political discussion that we can probably get to in a talk or in a question-and-answer session.

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

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

And I could go through a long, long slide show that you don't want to see about the history of failure of the repository program and why we're here today,
maybe that's for another day.

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

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

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

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

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

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

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

And by the way, I agree with Per, that it's going to be multiple repositories, it's not going to be
one, ultimately.

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

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

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

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

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

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

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

You've got -- right now we lack the political
will as a country to do anything and that's part of the
-- that's really a big part of the issue. You know, we
have the Congress that passed the law, we have the
Nuclear Waste Policy Act, we follow the pol -- the act.

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

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

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

Yet, we have a new Congress and I -- I do kind
of agree with what Geoff said that the likelihood of
anything really substantial coming out of Congress
without a presidential veto might be remote, but that
doesn't mean we can't try to put some markers down and try to put some things together so that we can at -- at some point move forward and very proactively and progressively.

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

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

I think, in the end, it's going to be a bottoms-up process to where the communities are going to tell the federal government, "Look, we will do this, but here's what we need," and there'll incentives and there'll be agreements or whatever stuff that helps the community maybe it's R&D, maybe it's other stuff, some people like the idea of reprocessing and recycling and
looking at the back end of the fuel cycle; others don't. You've heard that.

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

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

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

MR. PETERSON: In fact, one of the major recommendations was that the process for citing new facilities should include negotiation of legally binding contracts with the state and local governments that would transfer to them rights and responsibilities
that they felt necessary in order to properly protect the citizens that would live in those states.

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

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

MR. STONE: More louder, please.

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

MR. FETTUS: The debate is so polarized over Yucca/not Yucca and there's very little focus on what was the foundational problem in the Nuclear Waste
Policy Act and that's its allowance of -- of this federalism problem that I've described to bubble up. And I think it will doom any process. If we -- if Yucca gets restarted, which I think, by the way, would be unwise and years-long process, to start the licensing process again with 300 contentions filed by the state of Nevada, challenging it, without -- without addressing this fundamental process necessary to solve the federalism problem, different people, hopefully not us, will be here 25 years from now, with the same conundrum in front of them.

CHAIRMAN FRAZIER: All right. Per, quickly.

PUBLIC MEMBER: What is the federalism problem?

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

My objection to that, from a simple legal matter is, no future Congress is bound by what a prior Congress did, so if they just decide to do away with that contract, then that's what will happen.
MR. PETERSON: Of course, the same applies to the law they just passed. But let me -- let me go ahead and point towards what I think it's the fundamental area of disagreement between the House and the Senate, is about how and -- whether and how to proceed with the project at Yucca Mountain.

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

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

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

MR. WRIGHT: A lack of sense of urgency because of no political will as a result of there being no national pride on the issue to take care of it.
CHAIRMAN FRAZIER: All right. So we're going to take questions. I see that David has a question.

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

CHAIRMAN FRAZIER: Seeing none.

DR. VICTOR: You've got --

MR. STONE: Oh, there you go.

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

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

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

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

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

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

An RFP process that the federal government puts out might attract some willing hosts, but you've
got a number of sites around the country that are now considering it, but they're not considering being just an interim storage facility, there is other components they'd like with it.

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

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

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

And in the past with the research reactors, we took back spent fuel that had significant levels of security risk. I recommended to people to go back and look at what we were doing in California back in 1998 when we were returning highly enriched uranium spent
fuel from South Korea and other foreign countries.

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

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

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

   It seems like none of the problems here are technical problems, they're political problems. And so the question that we're grappling with is, strategically, where are the real opportunities to move -- to make progress politically? I mean, there's a lot of moving parts.
I guess I wanted to ask you, Gentlemen, from Washington, who all have snow shovels, and spend more time there than we do, where -- where's the real opportunity for progress?

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

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

The third is do consolidated interim storage and advance documents for this meeting, which are
posted online, is an article in the Bulletin of Atomic Scientists with yet another case for doing consolidated interim storage and let local communities, basically, bid for the right to store and watch the waste.

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

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

And so I'm just wondering, from the panel, yeah, there is a lot of things that can be done and there are a lot of barriers, but if you had to put -- if you were representing a local community here and you had to -- to bet on an area where we can actually make progress or make a big effort and, at least, have some chance of progress, where would you push?
MR. WRIGHT: Well, I'll take this first and go the other way. I think that, and you're absolutely right, David, everything that you said, I agree with it. Not everybody else agrees with all of it or parts of it.

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

DR. VICTOR: So, like this facility here?

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

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

The transportation issues, I totally agree
with, can be solved. I mean, we're doing it in South Carolina all the time. You know, we are moving stuff to WIPP, you know, from Savannah River Site.

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

MR. STONE: Louder, please.

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

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

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

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

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

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

MR. PETERSON: The first -- well, another thing, part of the reason I'm a little bit excited about this is that this month Russia announced that it was ending a long deal -- a long-term deal that we had with them
to help them secure all of their direct used nuclear weapon material.

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

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

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

  Now, right now we no longer really have the
functional ability to do that sort of thing. And if we can't get our own act together here in the United States, it's difficult for me to see how it is that we're going to be able to manage problems that will crop up in the future in other parts of the world.

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

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

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

But three areas where I think there could be progress in the next few years is, some sort of combination of hardened on-site storage with a commercial industry in terms of substantially improving
safety that almost everybody agrees that when the fuel
is not in the pools, when we don't have densely-packed,
overstuffed pools and they're in hardened, on-site
storage, that's much safer.

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

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

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

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

Is that kind of what you're recommending?

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

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

MR. FETTUS: Well, I think -- I think if someone in
it -- I think the Senate were likely to target and even
that, for the reasons I said, I don't think is that
likely. I think -- I think it's something very, very
smart. We haven't seen anything like that from the
House in a very long time, so there is an instinctive,
if anything is going to be happen, it's going to come
from the Senate committees where they do occasionally work together to create something, whether we like it or not.

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

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

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

CHAIRMAN FRAZIER: Gene?

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

DR. VICTOR: In your mic.

MR. STONE: The talk of see if anything is nuclear waste and federal level solutions, barriers to
progress, and opportunities to break through these barriers.

PUBLIC MEMBER: We can't hear you.

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

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

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

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

Thank you.

CHAIRMAN FRAZIER: Any comments?

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

As I mentioned before, there is strong consensus around the idea that when we start collecting the fee again, it should be put into its own fund and not appropriated and spent for other purposes, so I think that's a no-brainer unless it's a congressional
budget office or -- otherwise you should do that, likewise, the idea that we should transfer these responsibilities to a different entity that has brought consensus.

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

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

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

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

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


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

And I find it, you know, kind of this NIMBY-ism on a state level, you know, the idea that, you know, the people in Arizona don't want spent fuel from California, so I don't think it's the politics so much on a party line, but it's on a state-by-state issue, so I think that's the one.
So is this -- do we give up on Congress and find a state-by-state solution? You know, we look at the size of California to find California to solve its own problem? I know that's 48 lower states that would have to deal with this, but -- and I see people shaking their heads.

MR. FETTUS: It's a --

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

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

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

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

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

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

Or, for example, what happened with WIPP, which is a great example, because WIPP had a disaster happened and they had a sitting radioactive release.
WIPP has -- the State of New Mexico, and I
unfortunately know this far too well, having litigated
it for the state years ago, the state has limited
authority over the site, and without that fundamental
state control, you're going to have exactly the problem
that I think you're articulately described.

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

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

There is another really important point behind
all of this, which I think needs to be emphasized, and
that is that there is a very strong scientific and
technical consensus that deep geologic disposal
properly designed and located can provide safe and
effective long-term isolation of nuclear waste, that
is, that this is a problem for which there is a
technically and scientifically viable solution.

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

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

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

That is, the consequence in the long-term from
having geological repositories not work that well is
quite small compared to other things that our
generation is doing with chemicals it's manageable
because you can move your wells or you can treat the
water.
And it is quite a bit different from the consequences of what we're doing with all of the coal that we're burning in states like Nevada and elsewhere, which is something that will never be practical to get out of the atmosphere.

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

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

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

So, trying to keep things in perspective is a
very important thing to do in this overall area of endeavor. That said -- and sorry for going on and on -- it does require careful --

DR. VICTOR: I'm used to it.

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

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

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

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

CHAIRMAN FRAZIER: It's his passion.

MR. PETERSON: Tim?

MR. BROWN: Yes. So, actually, it dove tails very nicely with what Jerry was saying and, that is, you know, it feels as if these problems have been generated at the federal policy level and, ultimately, we keep turning back to the federal Government, the DOE, for the solutions for the problems that they've generated.
systemically. Didn't we say it was a systemic problem?

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

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

Do we see the cycle here?

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

And I would also say, if I was in Nevada, "I don't want -- we didn't generate this. Why would we be
the ones stuck with it?" But if every state has the ability to pursue their own solution that ultimately will allow for the elected to engage in a better level with the -- with the public, that allow for them to meet the criteria established by the DOE and also make them co-state holders along with the DOE maybe on a state level that it allows for them to engineer solutions under strict criteria issued by the federal government that will be managed locally and ultimately be a better environment than what we currently have, which is all of the sites stuck in this perpetual state of storage because the federal government can't and won't get its act together.

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

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

I was very dismissive of this idea and now
that I'm hearing more and more and more about it, I can see each state engineering a solution, an interim storage solution, to be far better than what -- than what we're stuck with right now.

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

So that was just my two cents.

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

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

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

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

MR. QUINN: Okay. I'd like to ask the three panelists what your belief is on the consensus towards the final solution. In my mind, the final solution is not just a geological repository but, in fact, it's in
something that addresses the fuel cycle back-end, what
is the -- what is the disposition? Is it in the rods
that we currently have physicality on? Or is it in a
different solution that's been recommended by the Blue
Ribbon Commission, I believe, by MIT professor?
Could the three of you discuss your opinion on that?

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

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

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

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

I think we're more likely to end up over the
next few decades with multiple repositories, as in two
or more. If the process works well and the way we hope and we think it's going to be spent fuel, we don't see any future for reprocessing or close cycle, certainly not on an economic level.

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

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

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

But there's no need to worry about that question today. There's plenty of other things we do have that are immediate problems to get working on.
MR. WRIGHT: You never say "never" because nobody ever thought we'd get on the moon and we did that. So there is a time when I believe reprocessing and recycling will be something we will look at because it will be economic. So to, out of hand, just rule it out, I think that's wrong.

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

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

I mean, there are solutions out there, it just takes a combined effort of people willing to work, willing to compromise, willing to listen to each other, and willing to check the other person's viewpoint,
listen to their own and see how it goes. So, thank you.

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

(A brief recess was taken.)

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

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

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

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

CHAIRMAN VICTOR: And now I want to focus on the regional, so West State California and local level levels and be as pragmatic as possible. A lot of you in the communities here are focused on this question and want to know what to do and we're all grappling with this in different ways, and so I'm hoping that our next panel will help us think about what might work,
what might not work, how we can move the needle on this question.

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

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

We're going to have initial comments five to seven minutes from the first two speakers and then we're going to hear from Edison for a little -- for a little briefer time about what they're doing, and then
we're going to go and have some brief comments from these different regional and local perspectives.

So let me first give the floor to Tim Frazier.

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

CHAIRMAN VICTOR: I'm sorry.

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

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

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

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

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

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

And we traveled all over, had a series of meetings across the country, went to Finland, Sweden, to -- to France, the UK, we went to Russia to talk to them about how they handle these things.
And it was -- it was an interesting across-the-board, it was a lot more consent-driven than the Yucca Mountain process had been. So we came up -- but once again, it was all about recommendations. There wasn't -- we weren't trying to take any action.

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

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

You know, at the meetings we have utilities, at the meetings we have nuclear industry, not utilities, these are the nuclear supplies. We have
environmental organizations, we have NGOs, grassroots organizations. Beatrice Brailsford is from Snake River Alliance and she's on my advisory council.

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

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

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

So, yes, the congressmen or the staff they're talking to then goes and the next appointment is a different group that comes in, talking about the same thing, but they're talking points are entirely different because they haven't tried to normalize the
things that they both can agree on, the things that could raise the conversation to a level where everybody can get behind it and everybody can support it.

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

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

Our position for the project is, we're not -- we're not for nuclear, we're not against nuclear, we've got nuclear waste. If you shut all the plants down tomorrow, you're still going to have nuclear waste, you're just going to have a lot more of used nuclear fuel or spent nuclear fuel, depending your view of things.
We are optimistic unlike Geoff that -- that the 114th Congress being republican-controlled in both House -- a House and Senate could try to move forward on some collaborative bill to try to address nuclear waste.

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

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

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

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

MR. OGLESBY: Well, first let me thank you for convening this, and the Bipartisan Policy Center and
the local community group for pulling this together. I think it's really important to have these kinds of forums to bring together leaders and activists and experts in this subject and to have an opportunity to have a public forum to discuss the issues.

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

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

So the Energy Commission doesn't have
jurisdiction over nuclear facilities or waste, but our
history is really born from nuclear policy and nuclear
development energy resources in the state.

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

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

Shortly after that, in '76, the state
legislature passed the law that was the moratorium on
new power plants, it was kind of modeled after the
First Rule of Holes: If you're digging a hole and you
find yourself at the bottom, stop digging. And the
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
informational input to the Nuclear Regulatory Commission and working on proceedings and as a participant in proceedings.

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

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

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

The lower right-hand picture shows the spent
fuel pool just -- it's that rectangular structure. Now
let me go to San Onofre where you have the NUHOMS
horizontal units on the left and the -- what the plants
are to move the -- the waste and fuel rods into the
Holtec System, which is on the right, and the diagram
of where that would be is below.

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

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

And I want to close with this review of some
of the major points of a publication that we do every

And this report has been, since 2005, the
place for input and policy recommendations on nuclear
power and issues related to nuclear power in
California. And among the -- and there are many
recommendations and I encourage you to access them on our website. There are many issues that are covered in the Integrated Energy Policy Report, many relating to nuclear power.

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

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

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

MS. OSBORN MILLS: (Complies.)
MR. OGLESBY: And she's available and focuses on nuclear issues in the State of California at the Energy Commission. So with that, I'll pass the microphone.

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

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

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

And I think this is clearly an area of common ground between Edison as the operating agent and decommissioning agent for the plant and the surrounding communities, that we all have an interest in the movement of the spent fuel off-site as soon as possible to permanent storage solution.
As long as we have the fuel on site, we have -- we're committed to safely storing either in wet or dry configurations. We currently are safely storing 2,668 fuel assemblies in our spent fuel pools and 1,187 fuel assemblies in the dry cask storage system that is on site. We will continue to state -- to safely store that fuel until DOE takes possession and title of the fuel. Some of the things that we've done as a company over the years is advocating for and investing in off-site storage solutions.

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

The tribe was interested in hosting a storage facility; the State of Utah was not. And the State of Utah advocated with the federal government to block access by rail and road to the site, so the site was licensed in 2006 for 20 years, but the Bureau of Land Management and other agencies declined to give access to the sight through right-of-way and the site never broke ground and has not made progress since then, and
I think that is a good illustration of the importance of getting consent prior to moving forward with the storage solution.

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

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

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

As I mentioned, SCE is an advocate for the Nuclear Waste Administration Act, which is the formal
We've lobbied in support of the bill, both with its authors, with Senators Murkowski and Landrieu, who were at the time -- well, Landrieu and Murkowski, Landrieu was the chairman of the Senate Energy and Natural Resources committee, Lisa Murkowski was the ranking republican member we lobbied in support of that bill.

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

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

CHAIRMAN VICTOR: Thank you very much, Chris. I think one of the themes of tonight's meeting is, in addition to all the things you're doing to press on these various fronts, whether there are some additional fronts or some areas where there are higher priorities than others and we need to, in part, hear from the local communities about that.
So now we're going to have three interlocutors, each make comments of three to four minutes each, to give some different perspectives on what they're seeing. And so first we're going to hear Jim Williams, from the Western Interstate Energy Board, to give us a regional perspective, because this maybe -- maybe there are state-focused solution, as Tim Brown urged us to pay attention to, and maybe there are regional multi-state solutions.

Jim, what are your views on this?

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

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

I'm not saying this is easily done. Most of these downstream communities don't even know that they're slated for this role in this national program, but potentially there lots of them. Disposal at Yucca
Mountain, for example, would require spent fuel shipments through 890 counties in every region of the country, all right, that's about 12 corridor counties for every sending county, such as yourselves.

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

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

But what about the people in these communities? And I think in each of the 890 potential corridor communities will have deep concern about the highly radiological content of the material being shipped, they will reflect that they do not directly benefit from this transport, they will worry about their economy and their property values, and they'll soon understand that spent fuel shipment is logistically complex and that it presents many
opportunities for things to go wrong.

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

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

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

CHAIRMAN VICTOR: Okay. Great. Thank you.

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

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

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

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

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

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

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

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

As a public utility, we try to remain neutral on political issues, but we do advocate on the behest of our -- or on behalf of our owner ratepayers. I think we've seen some benefit from our efforts. One example of that would be that the recognition by the Blue Ribbon Commission that it's a good idea to take
the stranded fuel from the shutdown and decommissioning facilities first, so it's probably a logical conclusion, but SMUD firmly supports that ideal.

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

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

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

While a solution is being developed, as pointed out, you know, SMUD and the rest of the industry remains dedicated to the safe storage of the materials as long as it's on our sites, and we just
hope that's not forever.

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

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

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

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

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

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

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

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

Every time we try and move 70,000 metric tons of fuel to one location in this country, we have a lot
of states who don't want it, of course. If we open up an interim solution on a military base in California where it would be protected from flyover, that our tax dollars would be saved because we're not going to have to multiple-pay forever for this fuel to be watched for 10,000 years.

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

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

We have watched the proof of Chernobyl, Three Mile Island, Fukushima, and now, sadly, the Waste
Isolation Pilot Plant. The tax dollars that are going into these projects and wasted are insane.

CHAIRMAN VICTOR: All right.

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

CHAIRMAN VICTOR: Great.

MS. MAGDA: We cannot wait.

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

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

To get it started, I want to ask a question to Rob Oglesby, which is: The California Energy Commission is the coordinating body for getting things done at the state level, and we've heard from various speakers, this panel, previous panel, that given what's
going on in Washington, it looks like the state-driven solutions are going to be the way to go, whether it's an interim storage, whether it's on military bases, and so on. It seems like there's a lot of open questions about what the state-level strategy should be.

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

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

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

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

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

CHAIRMAN VICTOR: Let me ask Dad Stetson. Dan.

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

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

MR. FRAZIER: And I think, we would be thrilled for him to have it. Not really, because we looked at -- we looked at a federal solution. Our idea was and remains, which is, some of this is contained in the Waste Management Act that Murkowski, Feinstein, Widen,
and Alexander built is really a standalone -- in the Blue Ribbon Commission report we call it a federal Corporation. Come to find out, we should've called it something else, but we called it what we called it.

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

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

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

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

So if you -- if you're going to do something like -- if I think if we're expecting the Department of
Energy to pay for it, they're going to tell you what they're telling everybody now is, they don't have any authority to do anything like that, so.

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

MR. FRAZIER: Oh, yeah.

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

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

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

MR. QUINN: Thank you. I wanted to ask the panelists, this state -- I'd like to follow up on the
state issue, so what are the implementing actions and
the pros and cons to do this? You must have thought
this through. And that includes the pros being "Okay.
We would -- we would need a law to bring it down, have
it occur."

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

CHAIRMAN VICTOR: Does anyone want to deal with
that?

MS. MAGDA: I'd like to.

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

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

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

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

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

MS. MAGDA: Yes, it is.

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

So we need to find some -- if we're going to do consolidated interim storage and state-based strategies, we need to find some way to connect those to deep geologic storage so that we do not create for our grandchildren and great-grandchildren a problem that is then unsolvable because we basically bought ourselves time, as we should, by consolidating the storage but, then, not paying attention to what we have to do for the long hall.
Marni, do you have comments on this? Then I want to bring in --

MS. MAGDA: Yes.

CHAIRMAN VICTOR: -- Tim Brown.

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

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

CHAIRMAN VICTOR: So I want to ask just before I go to Tim, I just want to put Chris -- I want to ask Chris
Thompson, I mean, lots of laws would need to be changed, but we need to be very strategic about what needs to change or what doesn't need to change, otherwise we're going to get ourselves back in the box where nothing gets done.

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

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

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

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

   CHAIRMAN VICTOR: Right.

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

   CHAIRMAN VICTOR: Like Texas, yeah.

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

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

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

   MR. BROWN: So my question is for Rob. Rob, is
there currently a framework in place where there is
delegated authority from the Department of Energy to
State of California that fits this type of framework,
where they would, you know, have you acting, you know,
under certain, you know, restrictions or with a certain
authority to execute on power? And there is nothing
MR. OGLESBY: No.

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

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

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

MR. OGLESBY: Please, please do.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Chris, on this same theme here, and then I
want to see very briefly if Marni wanted to add an
additional comment.

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

CHAIRMAN VICTOR: I think that was for deep
geologic.

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

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

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

MS. THOMPSON: Yep. It's a question to the panel.
CHAIRMAN VICTOR: Well, let me offer my impression of what I've heard and having read a lot in this area, which is that, if you don't know what you're doing and you don't know what's feasible, the worse thing in the world you can do is create a monopoly.

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

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

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

MR. FRAZIER: You know, one of the -- one of the key things, you know, regional consolidated storage has kind of always been on the table, regional, not
state-by-state. And I just want to caution, if you're talking storage, make sure you say "storage," and if you're talking the deep disposal repository, say that, because you certainly don't want to have 33 states with deep geologic repositories, that's -- that's silly.

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

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

But I think it's something that bears some further review and discussion. And, you know, the
BPC -- I mean, we'll take a look at it, as well.

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

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

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

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

I wanted to say, though, before we break, I thought these last two panels were just terrific. This
is a difficult, complicated topic. And I think -- to me, what's interesting, and I hope to all of the Community Engagement Panel it's interesting is, we're now beginning to identify some elements of a playbook.

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

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

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

Third, state driven solutions. What's feasible to be done at the state level with legislative change and without legislative change. It would be
helpful, maybe for BPC, to help us identify and all the communities identify what's possible, what can we push forward and so on.

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

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

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

You're going to have other items for that
list. I urge you to help us focus on them. I think we can end up with a playbook or playbooks that then can lead to some practical action and that can help even in the local communities as societies here figure out what should town and council resolutions look like, what should we be asking for and so on.

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

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

(A brief recess was taken.)

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

MR. BROWN: Did we pass the law?

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

MR. PETERSON: Yes.

CHAIRMAN VICTOR: I think that is on, all mics are
on for the NSA and some of them are on for us.

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

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

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

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

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

CHAIRMAN VICTOR: Why don't you come up to the
microphone? Very briefly comment about this and then
I'm going to move on to new topic.

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

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

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

Well, if you go from the mesa there and you
look as far as you can see or fly a plane as far as you
can see just about, that's an ideal place to put the
long-term storage. And we're really talking about
long-term storage because we're going to reprocess this
some day.

CHAIRMAN VICTOR: Okay. Thank you very much. I
want to ask a question from Casey Thornhill --
Thorn-Ellen, and maybe put this to Tim Frazier: "If
we're concerned about waste storage, why is the CE --"
I'm sorry. I'm going to put this to Rob
Oglesby: "If we're concerned about waste storage, why
is the CEC suing to stop Yucca Mountain?"
MR. OGLESBY: It's because we're concerned about
waste storage and there are a number of issues related
to ground water and other -- that we've made a record
on, that's available. We can talk about it in more
detail, but we just have concerns that remain with that
at that facility.

CHAIRMAN VICTOR: Okay. Thank you very much. Sir?
MR. GARDNER: Well, I'm the other Richard.

CHAIRMAN VICTOR: Okay.

MR. GARDNER: I just wanted to bring a little -- a
point on the long-term repository possibility: It
doesn't necessarily have to be a very deep geological,
a mile, two miles underground into some remote cavern,
it can be nearer the surface.
And one of the discussions I heard from hydrogeologists is that there are areas in the Northern United States and in Canada where the geology is clay and it is so solid and so deep in the clay -- well, the Great Lakes are an example, they're very clay-bottom lakes -- and they can be a water barriers, so that you can use clay as your repository source without having to go so deep, you know, just an idea.

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

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

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

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

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

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

MR. FRAZIER: Well, no. I don't think -- so the kind of -- the international standard has always been deep geologic repository. Now, deep to them is 500 meters, so it's, you know, 1,500 feet, more or less. So it's not -- it's not -- I'll go back to one of the things that Per said, which was a great thing, I think it was Per that said it, that there's not a lot of R&D to be done here, there's not a lot of technology that
needs to be developed to dispose of this waste in a
careful, thoughtful, environmental-friendly manner.

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

CHAIRMAN VICTOR: Let me ask Den --

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

CHAIRMAN VICTOR: Sure.

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

Now, Tim just talked about storage versus
repository and long-term deep repository, if we're
going to reprocess this sometime, and this is the
given, the GOE -- the GOA just had this report out just
recently for the nuclear -- for people who requested
the information on a report of November 2014 and they said that these public meetings are important to facilitate people accepting the government's ideas about liabilities for nuclear waste.

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

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

CHAIRMAN VICTOR: Yes.

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

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

MR. STETSON: Yes.
CHAIRMAN VICTOR: And so what explains this support?

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

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

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

Real briefly, there is a thousand feet of rock above, this is a big hole in our mountain, and then a thousand feet below before it gets to water. These casks, these fuel rods have ceramic pellets in them and
they're in a cask that'll be in cask, so both of those
would have to fail and then water would have to run
over that to run down into the aquifer, which has been
irradiated over years with about a thousand nuclear
tests. So this is the only use this property could
have. So this is the answer.

CHAIRMAN VICTOR: Well --

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

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

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

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

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

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

MR. SCHINHOFEN: You've got cash, I've got land;
let's negotiate.

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

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

PANEL MEMBER: I have a question.

CHAIRMAN VICTOR: Please.

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

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

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

MR. SCHINHOFEN: Okay.

CHAIRMAN VICTOR: So we have a comment -- I'm going to take this as a comment from Sharon Griswold, which
is about, "Can we work to find long-term storage for California nuclear waste in California?" I think a lot of people are interested in that, I think there are open questions as to whether this is California or maybe other states together.

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

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

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

The Marine Corps is there to be a 911 force for the country. The Department of Energy has its
responsibility and that's where the expertise lies and you don't want amateurs doing this, you want experts doing this, and you all knew that. That's why you're all here and you're all concerned.

Clearly, the Marine Corps interest is in returning that land to useful training ground and that's what the lease in place says it's going to do.

The Department of the Navy, through the Naval Facilities Engineer and Command, put in place a lease that obliges the operators to remove and restore the facility to its as-was condition. That's what the Marine Corps is looking to have happen.

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

CHAIRMAN VICTOR: Can I --

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

CHAIRMAN VICTOR: No, I think this is -- the idea behind this format is to have some back-and-forth. I just want to see if Audrey Prosser is here and if
that's been responsive to your -- I understand the
spirit of the comment and that's been responsive to
the -- to what you were trying get information on.

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

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

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

CHAIRMAN VICTOR: Let me -- so I think, other than
military right now we'd do other things. But let me
ask Chris Thompson, obviously, one can't speak in
detail about security provisions, but help us
understand a little bit about the layers of security around the spent fuel pad.

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

CHAIRMAN VICTOR: Tom Palmisano. Thank you very much.

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

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

And this is canisters that are stainless steel, sealed in concrete canisters, not something that can be breached quickly or easily. So it's got quite heavy security that meets NRC requirements, and they continue to review that.
I can't disclose anymore without crossing the line of what we can't disclose. It may not be as visible if you're standing there looking at it, but it is surveilled continuously and defended continuously.

CHAIRMAN VICTOR: Thank you.

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

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

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

MR. PALMISANO: Right, it's multi-layered. It
starts with the design of the system, etcetera.

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

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

MR. PALMISANO: Sure.

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

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

The pools are inside a building that is protected, much like I described the protection for the dry cask storage protected, again, by both, you know,
systems, automated systems as well as personnel response for security, so the pools are well-protected.

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

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

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

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

MR. HEADRICK: Yes, thanks for the opportunity to
My name is Gary Headrick. I represent about 5,000 people in our community that are concerned.

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

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

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

We see technology and scientists fail at suppositions about the powers of nature, what we're capable as human beings. And we need to be very honest, brutally honest, with the American public about
what we can and what we can't do, and there are no apparent serious long-term solution.

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

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

So, what I'm proposing is, let's just -- let's just buy yourselves sometime, let's do what we can to put the dry cask storages into effect and reduce the number of rods in the pools, which are overcrowded, let's buy ourselves enough time so that we can explore interim sites and maybe they have some sense of academia there, maybe we're going to find new ways to use the waste or -- you know, let's just do it around a place that's designed to do that in a sensible way that's going to provide real solutions.
But let's don't waste this opportunity to protect eight and a half million people from the next earthquake. We've got to get this stuff in dry cask storage and buy ourselves --

CHAIRMAN VICTOR: Okay.

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

CHAIRMAN VICTOR: Okay.

MR. HEADRICK: We need the honestly.

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

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

The fact is, we don't know how to do it. We've never done it for a long period of time. We've never stored this stuff successfully. Whenever you think you know how to do something -- I'm an engineer -- it always seems easier before you get in
the midst of all the little details and then you find out "We don't know how to do it," and that's why WIPP is failing. So this is not an easy problem. If it was easy, we would have done it. It's a hard problem.

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

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

Why is it important? It's because the utility wants to use "expand and explain" mode of spending. This is their normal mode. This is where they get a big bunch of money and they spend it and then they have a reasonableness review later, at least, they claim to be able to have one, but it never happens because the
CPUC doesn't have a reasonableness review. They decided to settle and they never even looked at it.

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

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

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

CHAIRMAN VICTOR: Okay. Thank you very much.

MR. LUTZ: Thank you.

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

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

So, Per, I want to ask you, it is much in the news that this WIPP facility in new Mexico caught on fire because of actually operations in the non-nuclear part, some trucks had been caught on fire and then this
fire spread, but it's a reminder that you have to have kind of nuclear operations through the entire system to make it really safe.

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

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

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

What happened at WIPP was that, first of all, there is an underground fire with the diesel-driven
hauling equipment that they have, so they had, essentially, a truck fire and this exposed some deficiencies in their maintenance.

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

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

But they -- they mixed in organic materials and also other chemicals and essentially put together oxidizers and built what was a small fertilizer bomb. They actually packaged about 100 drums this way. Now, this is a really boneheaded thing to do and it's unlikely to happen again because, if you think about things rise to -- no, no.
I mean, this specific one, if you think about things that rise to the level of really being paid attention to in the future. But the interesting point is that that drum three weeks before it was placed into WIPP was sitting in fabric tent on a mesa outside of Los Alamos and, by far, the most fortunate thing that happened was that it got moved and put into that repository for that material was actually contained by the ventilation system that worked remarkably well, noting that it was -- it had not been designed. This was beyond the design basis.

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

CHAIRMAN VICTOR: Okay. Thank you very much. It seems like whenever something like this happens there is always an explanation, but it sounds like one of the underlying stories that you have here, the community has here, is that what happened in WIPP is because you have all this commingled waste and nobody is quite sure what's going on on all these different casks, whereas what we have here is a situation where we have a single
kind of waste with single highly-monitored technology
and that's actually something very important.

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

CHAIRMAN VICTOR: Okay.

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

CHAIRMAN VICTOR: Right.

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

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

MR. STONE: David, one comment.

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

PANEL MEMBER: Your command.

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

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

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

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

MR. NELSON: Yeah. I have some issues on it. I don't know whether I'm suppose to speak or not.
CHAIRMAN VICTOR: Okay. I'm sorry. I didn't see you. And so why don't we -- why don't we address the theme that I just picked up? We'll get Tom Palmisano and then I'll get to you next. Okay. Is that okay?

MR. NELSON: Sure.

CHAIRMAN VICTOR: Okay. Tom Palmisano.

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

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

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

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

We looked at the question of the thicker
canister design or the thick cask design particularly would suggest Castor. We brought Castor over from Germany. We met with them. We interviewed Dominion, which owns the Surry Plant where there, I believe, are 26 thick-walled Castor casks in use.

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

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

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

It would be subject to NRC reviews for re-licensing for continued use in storage, as all the
canisters and casks, thick-walled or thin-walled, in this country are subject to re-licensing and we're satisfied with the choice.

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

MS. MASSEY: I have a number of them.

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

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

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

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

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

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

MS. BOSTON: Oh, is it? Okay.

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

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

MR. FRAZIER: Okay. Donna?

MS. BOSTON: All right. Okay. The Diablo Canyon
has a Holtec canister that has all the conditions for cracking after only being loaded for two years. The NRC was surprised that the temperature was low enough for the humidity to be able to dissolve salt. There is salt, magnesium chloride, highly corrosive magnesium chloride, found on that canister.

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

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

The thick cask has been loaded for over 40 years with no problem. The thin cask is a relatively immature technology, 20 years or less. The Simple Camp Company manufactures the Castor casks and they also have their own version. The German company or the German government that owns the G&S Castor design, they
don't want to have anything to do with us in the U.S.

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

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

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

They store their -- their casks in concrete buildings for extra reinforcement and extra environmental protection. The Cask at Fukushima that everybody says held up, those were not these thin casks, they were thick, they were the thicker AREVA
forged steel cask, which would be better than what we have.

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

CHAIRMAN VICTOR: Okay.

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

CHAIRMAN VICTOR: Thank you very much.

MS. BOSTON: Okay.

CHAIRMAN VICTOR: For these comments, so --

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

CHAIRMAN VICTOR: Thank you.

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

CHAIRMAN VICTOR: Thank you.

MS. BOSTON: Thank you.

CHAIRMAN VICTOR: Thank you for those comments.

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

MR. NELSON: My name is Dennis Nelson.

CHAIRMAN VICTOR: Okay. Now I understand.
MR. NELSON: My name is Dennis Nelson, I'm a representative of SEFRV, Support and Education for Radiation Victims. And I have concern about the Holtec cask, specially the ones that have a thin, stainless steel canister and then an overpack shielding for neutrons.

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

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

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

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

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

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

MS. BOSTON: 40 tons.

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

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

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

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

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

I'd like to ask Chris Thompson to talk just on
the issue of the private fuel storage since that's come up. And, clearly, what we know about that experience is important for how we think about things like consolidated interim storage. Your views as to why that they pulled their license.

MR. PALMISANO: No.

CHAIRMAN VICTOR: You don't.

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

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

We did submit -- we were being charged fees by the NRC as if we were an operating independent spent
fuel storage installation, so we wrote a letter requesting to withdraw our license. The NRC then, after looking at it, changed the fee schedule to not charge us the fees as if we were operational, so we withdrew the request to withdraw the license.

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

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

CHAIRMAN VICTOR: Okay. Thank you very much.
MR. PALMISANO: And I'll take them --
CHAIRMAN VICTOR: I want to get through three more themes before we run out of time and I've got some closing business from the panel. So I have a new theme from George Allen, George C. Allen, the topic is, he'd like to thank the NRC for its service and it says, in his comment, Greg Warnick has publicly stated that San Onofre has met the regulatory requirements.

Mr. Allen, is that all you wanted to say?
MR. ALLEN: Yes, for just a second. I work at San Onofre. I'm not a spokesman for San Onofre. And to put people at rest that are afraid of San Onofre, we did measurements. When I was there three years ago, we had a radiation leak out on one of the steam generators.

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

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

We have other workers that have done their job there. They've defended their integrity and it just does bother me that people make statements that are not quite true or uninformed because nuclear industry is
pretty straightforward and, like I said, it's not rocket science, but it's nuclear science.

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

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

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

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

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

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

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

And we use the word California solution, or whatever you want to call it, but I think that needs to be studied and it needs to be studied seriously, to be
told that we can't have a California solution because we have to solve all the solutions, our whole world, all the country that everybody agrees to, then we can't do it.

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

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

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

And I'm not talking about a permanent solution, I'm talking about an interim solution, so I think these kinds of things are just not being discussed. I think there are possibilities and I think
we need to talk more about plan B and plan C and
because I don't think the national solution is going to
work. Thank you.

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

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

The last card that I have here for this
evening comes from David Bartholomew, which has checked
many of the boxes and it says that this is about a
public private purchase addressing multiple needs of
Native Americans, salinization space, power access jobs
for baby boomers in middle class and so on. And maybe, Mr. Bartholomew, you could help us understand the kind of focus of the comment here.

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

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

It was -- I presented opportunities for tax
sharing, licensing and leasing that property having international builders and people present ideas. In this case, I think all of the universities in America could benefit by participating in a university that's located there, actually, hands-on with a nuclear plant in a small -- small portion, I think, business.

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

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

Basically, I talked to the supervisors, I presented a Great Park idea and it was cut off. I talked to the federal rep who came in. I really didn't
get any back responses. And I think President Obama
and most of the Congress would like to see that
property used for the benefit of our economy.

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

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

MR. BARTHOLOMEW: Thank you.

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

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

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

So my message is not to you guys anymore, but
it's to everyone out there and that is that we have to
create the political will, the People have to create
the political will because we're the ones who live
here, we're the ones who could lose our lives, our
families, and our property, and each and everyone of us
that is here has a responsibility to get, at least, four other people and send the letters out and go to their council; we did that in Laguna Beach.

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

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

Jerry, the floor is yours.

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

But the subjects were, you know, "What is Edison's plan to invest the rate payers' dollars in the local communities since they're pulling out?" I mean, that's one of the things. I have a series of questions here and I will send those to the chairman.
The other one that was kind of touched on tonight, but not so much in the cask system but below ground storage, when sea level rise, liquefaction, seismic changes, there were some questions that people brought up and I will email those to the chairman and he can send them to the rest of the community and hopefully in a future date we can address those issues.

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

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

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

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

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

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

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

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

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

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

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

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

MR. STONE: That's all right.

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

MR. STONE: Well, it seems like we should, you know, on a positive note, in Kitty Litter, probably is
as good as it's going to get because it is the crux of the problem. We listen to the experts, we do what they say.

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

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

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

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