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

TRANSCRIPT OF VIDEOTAPED PROCEEDINGS
LAGUNA HILLS, CALIFORNIA
THURSDAY, MARCH 22ND, 2018

Reported by:
Katherine Magner
CSR No. 14083
Job No. 2846039

1 SAN ONOFRE DECOMMISSIONING
2 COMMUNITY ENGAGEMENT PANEL MEETING
3 STATE OF CALIFORNIA, COUNTY OF ORANGE
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11 Transcript of videotaped proceedings, taken at
12 25555 Alicia Parkway, Heritage Room, Laguna Hills,
13 California 92653, commencing at 5:30 p.m., Thursday,
14 March 22, 2018.

1 COMMUNITY ENGAGEMENT PANEL MEMBERS :
2 DR. DAVID G. VICTOR
CEP CHAIRMAN
3
4 JERRY KERN
CEP SECRETARY
5 DAN STETSON
VICE CHAIRMAN
6
7 BILL HORN
SAN DIEGO COUNTY SUPERVISOR
(Not Present)
8
9 TOM CAUGHLAN
CAMP PENDLETON
10
11 MARNI MAGDA
SIERRA CLUB, ANGELES CHAPTER
12 TED QUINN
AMERICAN NUCLEAR SOCIETY
13
14 STEVE SWARTZ
CITY OF SAN CLEMENTE
15 GARRY BROWN
ORANGE COUNTY COASTKEEPER
16
17 MARTHA MCNICHOLAS
CAPISTRANO UNIFIED SCHOOL DISTRICT
18 CAPTAIN MEL VERNON
SAN LUIS REY BAND OF MISSION INDIANS
19
20 SERGIO FARIAS
MAYOR, SAN JUAN CAPISTRANO
21 DONNA BOSTON
ORANGE COUNTY SHERIFF'S DEPARTMENT
22
23 TOM PALMISANO
VICE PRESIDENT, DECOMMISSION
CHIEF NUCLEAR OFFICER AT SONGS
24
25 RICH HAYDEN
CALIFORNIA STATE PARKS

1 COMMUNITY ENGAGEMENT PANEL MEMBERS :

2 PAUL WYATT

DANA POINT

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1 LAGUNA HILLS, CALIFORNIA; THURSDAY, MARCH 22ND, 2018

2 5:30 p.m.

3 ***

4 CHAIRMAN DR. VICTOR: Let's -- we're going to
5 get started. 17:34:43

6 Okay. Good evening, everyone. Thank you for
7 joining us tonight. Thank you, again, to the community
8 of Laguna Hills for letting us use this terrific
9 facility. It's great to be back here.

10 My name is David Victor. I'm Chairman of the 17:35:15
11 Community Engagement Panel. I just want to remind you,
12 as we get started, two points of safety. First, should
13 you need to evacuate this room for any reason, you can go
14 back out the door you came in, or out any of the side
15 doors, or these three marked exit doors over here. 17:35:32

16 And we have two officers with us in attendance
17 today from the Orange County Sheriff's Department. Thank
18 them for their service, and they're here for our safety
19 and for your safety.

20 The Community Engagement Panel was set up 17:35:45
21 shortly after Edison and the other co-owners made the
22 decision to shut the plant and decommission the plant as
23 a two-way conduit to help Edison, in particular, as
24 operator of the facility, understand the interests and
25 concerns of the community, and also help the communities 17:36:04

1 that are affected in various ways by the closure of the
2 plant to understand what's going on in the
3 decommissioning process, and where possible, to -- to
4 shape that process.

5 It's not a decision-making body. So we have 17:36:15
6 discussions and conversations, and then those help
7 catalyze interest in various topics and help focus Edison
8 and others on important actions. But this body itself is
9 not a decision-making body. It's a group of volunteers
10 who spend four Thursdays -- Thursday evenings a year 17:36:31
11 working on these issues.

12 And thanks to all of you for joining us tonight.
13 www.SONGScommunity.com, which is our electrifying
14 website. You can find meeting reminders, and sign up to
15 get meeting reminders by e-mail. You just need to go 17:36:51
16 there and opt in to the list.

17 You will also find all materials that are shared
18 inside this panel. So you'll find the draft slide deck
19 for tonight that was shared with the CEP, Community
20 Engagement Panel, late last week. You'll find meeting 17:37:04
21 materials, including materials -- thank you to members of
22 the community that pointed out that we did not have
23 enough information about public transportation. We now
24 do. And you'll find that information there about public
25 transportation resources to get to the various meetings. 17:37:16

1 And you can also find these meetings
2 livestreamed and archival copies of full video from these
3 meetings -- from these meetings. There are hard copies
4 of the agendas on everyone's chair, so you'll know where
5 we are in the agenda. 17:37:31

6 As you came in, many of you spent some time at
7 the various information booths back there. A bunch that
8 are organized in various ways by Edison. And also, I'm
9 really delighted to see -- I see Department of Public
10 Watchdogs has one. Citizens Oversight has one. ROSE has 17:37:46
11 one, Gene Stone. And if others want to have a booth in
12 the future, let us know, and we'll get you a booth.

13 If you would like to make a comment in the
14 public comment period, which will be after the break,
15 please sign up at the table in the back of the room. If 17:38:03
16 you want to give us your questions ahead of time -- we
17 always make this offer, and no one ever does it, but
18 we'll make the offer again -- if you want to give us the
19 questions ahead of time, you can write it on a comment
20 card. 17:38:15

21 And if for some reason you don't want to stand
22 up and offer your question or comment, but you wanted to
23 be part of the official record and raise questions that
24 get answered in the way that all questions -- major
25 questions get answered each -- each night, just send them 17:38:25

1 to that (indicating) within five days of the end of the
2 meeting to that e-mail address nuccomm@songs.sce.com, and
3 they'll be part of the official -- the official record.

4 As is our practice, Dan Stetson and Jerry
5 Kern -- I'll introduce Jerry in his new role in just a 17:38:43
6 moment -- we'll help organize the comments, as they're
7 made, during the public comment period, and help
8 facilitate answers to those comments and a structured
9 dialogue around those -- those comments.

10 Panel members, as you make comments tonight, 17:38:56
11 please state your name for the -- for the livestream
12 people watching at home. And if you want to get my
13 attention, you can do this (indicating), and I'll get you
14 on the list. And if you have a comment directly on the
15 comment, you can do two fingers. And then if you think 17:39:09
16 I'm not seeing you, I guess you can wave the flag. If
17 that doesn't work, you can throw something at me, I
18 suppose. But please just put your tent up, so that I can
19 keep track of who would like the floor.

20 The topic tonight is the SONGS decommissioning 17:39:22
21 plant update, and in particular, we're focusing on the
22 transport of used fuel out of the pools and into dry cask
23 storage. And so we'll get to that topic in just a
24 moment.

25 I want to acknowledge, first of all, the new 17:39:39

1 officers of the Community Engagement Panel. Dan Stetson
2 is now Vice Chairman, and Jerry Kern is now Secretary.
3 And both Dan and Jerry were on the Panel before, so
4 they're familiar faces to this group. But thank you --
5 thank you both for working with me and with Edison to 17:39:55
6 help organize these meetings and get our agendas and
7 materials under control.

8 I want to welcome three new members to the CEP.
9 Sergio Farias -- Sergio, where -- excellent. Sergio,
10 thank you very much and the City of San Juan Capistrano. 17:40:10
11 Steve Swartz, Councilmember Steve Swartz, from the City
12 of San Clemente. Steve, welcome. And Captain Mel Vernon
13 from the San Luis Rey Band of Mission Indians. Captain
14 Vernon, thank you very much for joining -- joining us.

15 And Merri Lopez-Keifer who, as you know, was on 17:40:25
16 the CEP going back to the second quarter last year,
17 unfortunately, is home sick with the flu. And we wish
18 her a speedy recovery. And so Captain Mel is going to
19 step in starting today in your official roles as a member
20 of the CEP. So thank you very much for doing that. 17:40:41

21 I'm just going to pause for a moment and see,
22 Tom, if you have any additional comments you want to --
23 and acknowledgements you want to make about the CEP.

24 MR. PALMISANO: Just that I would like to
25 reiterate and thank everyone for their service on the 17:40:53

1 Panel, the outgoing members, and thank the incoming
2 members for joining us. Again, Merri is unable to join
3 us, and we -- we have Mel joining us, so thank you very
4 much.

5 CHAIRMAN DR. VICTOR: Thank you very much. I 17:41:08
6 want to thank, also, Pam Patterson and, as I just
7 mentioned a moment, Merri Lopez-Keifer for their services
8 for the CEP over the last few years.

9 Okay. So the first major agenda item we have
10 tonight are some updates from the CEP. I want to say a 17:41:19
11 few things about what's going on in Washington. In
12 particular, around Consolidated Interim Storage -- which
13 travels by different names -- but is the idea that until
14 a permanent facility like Yucca Mountain or some
15 successor to Yucca Mountain is opened, there's no place 17:41:39
16 to send spent fuel in San Onofre or other facilities like
17 San Onofre, like Diablo Canyon or all the other reactors
18 around the country.

19 And so spent fuel is accumulating at these
20 sites. Sixty -- more than sixty of these sites around 17:41:51
21 the country, and that's not a good policy. And so this
22 panel has been spent a lot of time focused on how do we
23 make Consolidated Interim Storage a reality.

24 Multiple sites that are interim facilities,
25 where spent fuel -- in particular spent fuel from 17:42:05

1 decommissioned plants like San Onofre, could be sent on
2 an interim basis and would help us address our need --
3 our urgent need to get the spent fuel out of here, while
4 not making that entire process hostage to a permanent --
5 to success of a permanent facility like Yucca Mountain, 17:42:21
6 which I think is a very, very difficult lift.

7 There's been a lot of progress on this on the
8 private sector front. And I would say that there has
9 been -- there's a gap opening between what the private
10 sector is willing and able to do in this area, and what 17:42:35
11 the government needs to do, in terms of changing federal
12 law and federal appropriations. So I want to talk for a
13 little bit about what's happening in the private sector,
14 and then I'll talk a bit on the federal side.

15 The private sector, there are two sites that are 17:42:48
16 now emerging as the leading interim storage facility
17 sites. And presumably, with the success of those sites,
18 other facilities will open as well. The more, the better
19 for us because we do not benefit from a monopoly. We
20 benefit from having as many places to send the spent fuel 17:43:03
21 as possible.

22 So one of these is in Andrews County Texas,
23 Western Texas. You may remember that a year or so ago,
24 we had a meeting, and we talked about interim storage,
25 and we invited the leaders from the community and both 17:43:16

1 facilities here. The leaders from this facility could
2 not join us because they were in the middle an
3 acquisition, being acquired. So their lawyers did not
4 allow them to talk in public about major projects, like
5 building an interim storage facility. 17:43:31

6 That acquisition is now complete, as of two
7 months ago by J.F. Lehman & Company. And they have now
8 announced about 10 days ago the intention to resume the
9 licensing process at the Nuclear Regulatory Commission
10 for their -- for their site. 17:43:46

11 We'll give you updates as that unfolds. And I
12 think we've already put an invitation for them to come
13 visit us sometime, so we can learn what their local
14 community cares about. And we can tell them what we care
15 about. And we -- it's really beneficial to us to have 17:44:00
16 relationships with the local communities and the
17 developers of these interim storage facilities.

18 In addition to Waste Control Specialists, which
19 is in west Texas, there is a much more advanced site that
20 Holtec is putting together with the Eddy Lea Energy 17:44:12
21 Alliance, or the political community in eastern
22 New Mexico. It's actually very close to the Waste
23 Control Specialists' site. But it's on the New Mexico
24 side of the border.

25 They're proposing a site that would take, I 17:44:28

1 think, up to about 10,000 canisters, maybe more, if it
2 proves financially viable. They have submitted an
3 application to the Nuclear Regulatory Commission. That's
4 been accepted, and the current schedule of the Nuclear
5 Regulatory Commission would give them a license something 17:44:42
6 around July 2020.

7 So they would be ready to accept spent fuel from
8 San Onofre and other sites within the next couple years.
9 That, I think is very encouraging news, and it's very
10 encouraging news to see the Waste Control Specialists' 17:44:58
11 site move forward.

12 Ted Quinn, who is not here yet but has just
13 landed from a trip in the Middle East, and is on his way
14 from LAX to here. And given the traffic, he might be
15 here in a few weeks. But Ted -- Ted and I have spent 17:45:13
16 some time talking with various regulators in the Federal
17 Government to try and understand how -- when do these
18 private facilities need a change in federal law.

19 We've spent a lot of time, as a panel, talking
20 about the changes of federal law that would be needed 17:45:30
21 around liability, around funding, around making sure that
22 spent fuel from sites like San Onofre gets first in line
23 and a variety of other things. That can't happen without
24 a change in federal law.

25 And our sense is that within the next couple 17:45:43

1 years, these sites will need to see a change in federal
2 law. Otherwise, they're going to lose confidence in that
3 process. And if they lose confidence in that process,
4 then we might see a slowdown in the private investment.
5 And that's not in our interest. So that's my sense of 17:45:57
6 where it is, in terms of when they need to see a change
7 in federal law.

8 Earlier last year, just after the election,
9 there was a lot of enthusiasm about the possibility of a
10 change in federal law. And we can go to the next slide. 17:46:12

11 Here we are. There is a piece of legislation
12 that's been put together by John Shimkus from Illinois,
13 that would achieve not all but many of the things we need
14 for a change in federal law. That's in the House.

15 And as of last summer, basically nothing has 17:46:28
16 happened in the House, and there's no legislation in the
17 Senate. So there's no mechanism right now under the U.S.
18 federal process to get a bill into Conference Community,
19 let alone get a final bill that could go to the
20 president, who -- who might then sign it. 17:46:43

21 So that's where we are on the legislation side.
22 I think knowing what happens during election year, it's
23 unlikely anything is going to move this year. And so I
24 think we need to start gearing up, and that might include
25 putting pressure on the California delegation, gearing up 17:47:00

1 for getting these bills reintroduced next year -- next
2 year after the election, and taking another run at this.
3 But I'm very concerned about this. And this is, I think,
4 an area where we need to make a lot more progress.

5 If you go to the next slide. There are also 17:47:16
6 some very important issues related to the funding. This
7 morning we all got a chance to look at the 2,232-page
8 appropriations bills, that's working its way through the
9 House. And I didn't read everything, but I did look
10 carefully to see if there was funding in there for Yucca 17:47:32
11 Mountain and funding in there for Consolidated Interim
12 Storage, and there's nothing.

13 So it's a huge problem. Again, the process can
14 kind of nip along for another year or two, but we're
15 going to need to get funding for these activities. And 17:47:46
16 Yucca Mountain -- I have no great love for the Yucca
17 Mountain project, but it's key to the politics of this.
18 To put together people who want Yucca Mountain along with
19 people who want interim storage and to get funding for
20 all that. And that's -- that's not there right now. 17:48:01
21 This is a problem. It's a big problem.

22 Last slide here in terms of my updates from the
23 Washington picture, the Department of Energy is in charge
24 of overseeing the development, and then procuring the
25 railcars that will be used to move the spent fuel from 17:48:17

1 places like San Onofre to these interim storage
2 facilities in New Mexico, Texas, possibly others.

3 That testing program is moving along exactly on
4 schedule. And so I will circulate an update from that
5 process. They've just been -- delivered the next phase, 17:48:33
6 and they're now moving into actual testing.

7 The problem is that -- nobody expects any
8 significant problems during the testing phase. And so
9 we'll have a railcar, and the whole system that will be
10 moved on the railroads. And we now also have approved 17:48:46
11 transport casks. And so all the pieces of the technical
12 side of transportation are coming in to focus, but the
13 political side isn't there.

14 We don't have the strategy for developing the
15 roots. And we don't even have the authorization, let 17:49:00
16 alone the appropriations to buy more railcars. So right
17 now, the only railcar that exists is the one that's being
18 tested. And so that's going to send, you know, a
19 shipment or two a week. It will take forever to move the
20 spent fuel out of here. 17:49:14

21 And so I've been spending a lot of time with
22 Scott Peter's office and a bunch of other folks on this.
23 And I know Edison's office in Washington has been working
24 in this area. This is something we need to -- in future
25 meetings, probably come back and talk about how we're 17:49:24

1 going to develop a strategy.

2 Sorry for all the bad news in some sense about
3 Washington, but I think the overall picture is that the
4 private sector sees an opportunity here, and that's in
5 our interest. And we need to help raise the odds that 17:49:37
6 the government does at least the minimum thing the
7 government can do, which is to change federal law and
8 create the appropriations needed to move this.

9 I'm going to stop for a moment to see if there
10 are other updates from the Panel about related issues. 17:49:49
11 Jerry?

12 MR. KERN: Thank you. Jerry Kern for the
13 record. I have been talking to the congressional
14 candidates. You know, some -- David alluded to it.
15 We're kind of in a political vacuum now with 17:50:03
16 Congressman Issa stepping down. And it's an open seat.
17 There's enough people to fill the football team running.
18 And so we don't know the outcome of that.

19 But the top three Republican candidates, I have
20 given full briefings about what we've tried to accomplish 17:50:19
21 here at the CEP. And then the top two Democratic
22 candidates, I have had conversations with, but I haven't
23 had the chance to give them the full briefing.

24 So I've talked to at least the five top
25 candidates, and they're very aware of this issue. They 17:50:32

1 all seem sympathetic to what we're trying to do and kind
2 of promise -- of course, I'm a politician, so I promise a
3 lot -- so they promise to work with us to try to get this
4 issue resolved.

5 But until we have some clarity, hopefully after 17:50:48
6 June, about who the two frontrunners will and may -- I'll
7 circle back with them and give them a full briefing. And
8 maybe I'll drag David and Dan with me, and we can sit
9 down with them and tell them where we're at.

10 But right now, we don't -- you know, Darrell 17:51:02
11 Issa, for good or ill, has done -- doesn't matter how you
12 feel about him -- he was a champion for us, and he tried
13 to push stuff for us. But now with him gone, it's going
14 to be more difficult.

15 Scott Peters has also been very helpful. So we 17:51:17
16 met with Scott last year, and David's been talking to him
17 regularly. So I have a feeling Scott's going to return
18 any way, so I think we at least have some continuity on
19 that side.

20 So this is not a political body. So we talk to 17:51:32
21 everybody and -- because we just have one agenda, and
22 that's to get the fuel moved. Thank you.

23 CHAIRMAN DR. VICTOR: Thank you very much.

24 We also spent a lot of time with Senator
25 Feinstein and her staff. Senator Harris is still a 17:51:44

1 sphinx on this matter. It would be nice to know where
2 she stands and to get her a little more focused on that.

3 Any other comments or updates?

4 Tom Palmisano?

5 MR. PALMISANO: Yeah. I would just add, you 17:51:54
6 mentioned transportation of the rail car and
7 transportation casks are licensed. I was in the Holtec
8 facility last week, and they're actually building two
9 transportation overpacks for an international client that
10 are the same design that will be used for our canisters. 17:52:09
11 So a lot of pieces and parts are coming together in that
12 sense. So I just want to report on that.

13 CHAIRMAN DR. VICTOR: Marni Magda.

14 MS. MAGDA: I just wanted to add that Kamala
15 Harris did, in February of this year, put a bill out 17:52:24
16 that's Safe and Secured Decommissioning Act 2018, where
17 she's working to make sure that the spent fuel is
18 ensured, that we don't let go of the Price-Anderson Act.
19 And that hasn't moved anywhere yet, but it's a very new
20 bill. 17:52:46

21 It makes me believe, Jerry, that it would be a
22 very important meeting to have with her, to talk to her
23 about this, you know -- the moving forward of the fuel,
24 and especially the issues of transportation, and who then
25 would have the responsibility for liability of the fuel 17:53:05

1 when it moves.

2 So she seems to be becoming aware but stepping
3 gently yet.

4 MEMBER OF THE PUBLIC: Chairman, it's hard to
5 hear the ladies. Could you recap, please? 17:53:22

6 CHAIRMAN DR. VICTOR: The point that Marni Magda
7 was making is that Senator Harris, Kamala Harris, has a
8 bill out, which so far has not attracted any attention,
9 but is formally a bill, that would clarify some of the
10 insurance rules around storing -- around moving spent 17:53:37
11 fuel. And in particular around the so-called
12 Price-Anderson Act.

13 The Price-Anderson Act is the insurance -- part
14 of the insurance coverage over the nuclear industry that
15 makes it possible to do some things like this. And 17:53:49
16 there's been some ambiguity about whether that also
17 applies to transportation.

18 MEMBER OF THE PUBLIC: Thank you.

19 CHAIRMAN DR. VICTOR: Did I accurately
20 summarize... 17:53:58

21 MS. MAGDA: Thank you.

22 CHAIRMAN DR. VICTOR: Okay. Martha.

23 MS. MCNICHOLAS: One more comment. I know that
24 Congressman Mimi Walters is on the House Energy and
25 Commerce Committee and did support the Shimkus bill. So 17:54:08

1 I don't know if we can go back to her and get any effort
2 to put it to the full House or not, but she is
3 supportive.

4 CHAIRMAN DR. VICTOR: So we did a great -- we
5 did -- not just us the Panel and folks in Southern 17:54:21
6 California but a lot of people did a lot of great work to
7 increase the number of co-sponsors on that bill and on
8 the original that Senator Issa co-authored with -- I'm
9 sorry, Congressman Issa co-authored with a congressman
10 from Texas. 17:54:39

11 And so I think a lot of work has been done to
12 create awareness by the members of congress around the
13 actual facilities that are directly affected. But we
14 need -- we need to get it broader, otherwise we're not
15 going to have a viable bill. 17:54:51

16 MS. MCNICHOLAS: Okay.

17 CHAIRMAN DR. VICTOR: Any other comments?

18 Okay. Excellent. So now with the next agenda
19 item, which is the general updates before we move into
20 the main topic tonight. So I'm going to give the floor 17:55:01
21 to Tom Palmisano.

22 MR. PALMISANO: Okay. Thank you very much.
23 Thank you everybody for joining us tonight.

24 I've got a number of topics I'm going to cover.
25 First, a general update on a couple miscellaneous topics. 17:55:12

1 Then I'm going to talk particularly about the
2 decommissioning plant, show you a video that we have not
3 shown before. It's just been developed to show you how
4 the plant will someday be dismantled. And then I'll talk
5 about fuel transfer status and an update on that topic. 17:55:26
6 And then I've got a short topic on Wheeler North Reef, if
7 we have time. So we'll -- we'll monitor that.

8 Very quickly, our Decommission Principles are
9 safety, stewardship, and engagement. And that's what
10 tonight is all about, talking about what's going on. 17:55:41

11 Decommissioning Rule Making, this is something
12 that the NRC started back in 2016. It's approaching the
13 period for public comment. If you see the milestones
14 here. The Commissioners will approve the proposed rule.
15 That's expected in May. It will open up for public 17:55:59
16 comment.

17 This plays out for two more years as comments
18 are incorporated, and the NRC staff works on the
19 comments. And then ultimately, this will be issued in
20 late 2019, probably, effective in 2020. 17:56:12

21 The reality is this really is not going to have
22 much effect on SONGS. This deals with the changes in
23 rules that we've been through.

24 For those of you who have been with us since
25 2014, you remember we've changed the emergency plan, some 17:56:27

1 items like that. We had to get exemptions for some of
2 that activity because the NRC rules are written for
3 operating plants and not decommissioned plants.

4 What the NRC has decided to do is basically
5 institutionalize those changes in a new rule that would 17:56:42
6 apply to decommissioned plants to make it clearer for the
7 public, more straightforward for the Utilities in the
8 future. I don't anticipate this is going to have a lot
9 of effect on us. Okay? But we will monitor that and
10 keep you posted on that. But I wanted you to be aware of 17:56:58
11 the public comment period because that is an important
12 part of the public participation.

13 We've recently named an expert team. If you
14 remember, I've talked in the past about a lawsuit over
15 the new independent spent fuel storage installation or 17:57:11
16 dry cask storage. As part of that, we committed to
17 retain a team of experts who will advise us on -- on
18 options and ways to secure an offsite location for spent
19 fuel transportation options, et cetera.

20 We announced this last week, so I made the 17:57:30
21 announcement to the Community Engagement Panel, as well
22 as we made that publicly available. A very well
23 credentialed group with policy experience, with actual
24 experience in dealing with high-level waste
25 transportation, siting facilities. 17:57:44

1 Several people worked on the Department of
2 Energy's Waste Isolation Pilot Plant in New Mexico, which
3 is essentially like a spent fuel storage or disposal
4 facility for the government.

5 So we will have the kick-off meeting next week 17:57:59
6 and form this panel, and then over the next one to two
7 years, we expect to work with this panel to develop the
8 appropriate plant. And obviously, there's a linkage here
9 with what the CEP has been providing leadership on for
10 the last three years, in terms of public discussion, and 17:58:12
11 political support, et cetera.

12 So we're excited to have that panel in place and
13 looking forward to better integrate our efforts as we go
14 forward. So I wanted to make you aware of that. And
15 again, I sent out the bios last week. 17:58:26

16 Next topic was my general updates. Any
17 questions on that before I move on?

18 CHAIRMAN DR. VICTOR: Let's see if anybody has
19 any general questions about this.

20 Garry, did you happen to have a question or were 17:58:37
21 you --

22 MR. BROWN: No, I did not.

23 CHAIRMAN DR. VICTOR: You were welcoming coming
24 a guest.

25 Marni. 17:58:44

1 MR. PALMISANO: Use your mic this time, Marni.

2 MS. MAGDA: Thank you.

3 Marni Magda. My question on this, Tom. There
4 are many people here who will want to be able to get
5 information to that panel of experts. Probably those of 17:58:53
6 us here on the Panel and the public will be concerned
7 about, you know, how do the people -- you know, how does
8 the team work on things that we're concerned about? Do
9 we have a chance for input? How can we make sure that
10 we're all involved? 17:59:14

11 MR. PALMISANO: We're just kicking this off next
12 week. I've got a draft charter to work out with the
13 Panel members. And, again, this panel is set up
14 particularly to focus on developing plans to facilitate
15 the development of an offsite storage options and 17:59:21
16 transportation options.

17 So what I would ask is, I need to meet with the
18 Panel for a meeting or two get them organized, get the
19 charter established. And that will include in that a
20 mechanism to have some linkage and ability to give input. 17:59:36
21 So right now I don't have a ready answer for you, but
22 that is certainly on our list to look at how we can best
23 utilize the Panel.

24 MS. MAGDA: Thank you.

25 CHAIRMAN DR. VICTOR: Yeah. I think that's very 17:59:47

1 important because they can't answer every question
2 obviously, but this panel can help focus some of the
3 issues that particularly germane to the question of
4 development and implementation of a strategy for moving
5 the spent fuel. 17:59:58

6 Martha?

7 MS. MCNICHOLAS: Martha McNicholas, Capistrano
8 Unified School District.

9 On the same issue, will this panel meet in
10 public, or is this kind of they do their own research and 18:00:06
11 discussion offsite?

12 MR. PALMISANO: We haven't decided that.

13 MS. MCNICHOLAS: Okay.

14 MR. PALMISANO: That's why we need to kick them
15 off, and talk about their roles. Since this is driven by 18:00:13
16 a loss, and so there are certain constraints. So what I
17 ask is once we get the Panel organized, the charter in
18 place, and then I'll be able, certainly by the second
19 quarter meeting, talk about how that would work.

20 MS. MCNICHOLAS: Okay. Thank you. 18:00:28

21 CHAIRMAN DR. VICTOR: Thanks. Just to pile on
22 that, we should invite them here some time.

23 MR. PALMISANO: Right. This would be the venue,
24 in reality.

25 CHAIRMAN DR. VICTOR: And we should be able to 18:00:34

1 have a focused conversation, maybe a whole meeting about
2 it, some of what they're talking about, and some of our
3 observations. That might be quite productive. Thank
4 you. Other comments?

5 Sergio, I think you just speak. It's a live -- 18:00:46
6 it's a live mic.

7 MR. FARIAS: Yeah. So for the lawsuit, what is
8 their actual role? Because it sounds like it's undefined
9 so far.

10 MR. PALMISANO: Well, no. The role is specified 18:00:57
11 in the lawsuit settlement. A couple meetings ago, I went
12 through like the five or six key bullets. I didn't bring
13 that slide back tonight.

14 At a high level, what we committed to is,
15 Number 1, develop a strategic plan to -- my words, not 18:01:08
16 the settlement words -- to facilitate the development of
17 offsite options for storage of spent fuel. Number 2,
18 develop a conceptual transportation plan that would
19 consider a location in the southwest, in general terms.

20 Number 3, look at a Palos Verdes option since we 18:01:27
21 are minority owners in Palos Verdes. Then there's some
22 other things related to some mitigating plans for the
23 ISFSI. I accelerated some activities I committed to
24 Coastal Committee.

25 But the heart of this panel is to advise us, 18:01:40

1 provide input and human comment on the development of
2 these two plants. That's the heart of their mission.
3 And then, obviously, with their experience, many of these
4 people will site facilities, transport high-level waste
5 as well -- 18:01:54

6 MR. FARIAS: If I could just follow up. For our
7 interest, for the Community Engagement Panel, and I think
8 that's -- just to follow up, I think, the previous
9 question, I think our concern is more of how do we
10 disseminate the information and the work that they're 18:02:05
11 doing. So we just want -- hopefully we can figure that
12 out.

13 MR. PALMISANO: Right. And we will. I've got a
14 commitment to provide status reports monthly on the
15 progress under the settlement. We're very interested in 18:02:15
16 the nexus between this work, the Community Engagement
17 Panel work, as well as the activities that cause for a
18 solution. So we will look for a way to bring these
19 together.

20 MR. FARIAS: Thank you. 18:02:28

21 MR. SWARTZ: Yeah. And on --

22 CHAIRMAN DR. VICTOR: Say your name for the --

23 MR. SWARTZ: Steve Swartz. And -- and to follow
24 what everyone's been saying, I would like to strongly
25 recommend that the Panel have a permanent item on our 18:02:38

1 agenda for the quarterly meetings, so that we get a
2 current status and input. And at least have one
3 representative here that if we have any questions, we can
4 go to.

5 MR. PALMISANO: Yeah. And the Panel members are 18:02:51
6 diverse across the country. I don't know that I can
7 commit to having a representative here. But we certainly
8 will have a standing record for report. Yes.

9 CHAIRMAN DR. VICTOR: Yeah. Let's put that in
10 the CEP updates, so that's a good idea. Okay. 18:03:00

11 Any other comments?

12 Okay. Now, let's talk about fuel transfer.

13 MR. PALMISANO: Well, decommission update first,
14 then I'll get into fuel transfer.

15 CHAIRMAN DR. VICTOR: I'm very keen to move the 18:03:10
16 fuel transfer as quickly as possible. Get on with it.

17 MR. PALMISANO: As am I. As am I.

18 But this is important because we're -- you know,
19 spent fuel certainly is a key issue we're all interested
20 in. But also, we're in the planning phase to actually 18:03:23
21 start dismantling the site. And this means a lot of
22 shipments of materials offsite. And there's impact for
23 that. So I want to tell you where we stand.

24 So we announced last year we hired SONGS
25 Decommissioning Solutions. This is a joint venture of 18:03:35

1 AECOM, a large, worldwide architect engineering firm,
2 very capable; and Energy Solutions, who are experts in
3 radioactive waste management, transport, and disposal.
4 That's SONGS Decommissioning Solutions.

5 They mobilized in January of 2017. They have 18:03:51
6 100 people onsite, and they have been actively planning.
7 Right now, I would forecast, pending the environmental
8 permitting process -- and you'll see more on that in a
9 minute -- they would actually start significant, physical
10 dismantlement work within 2019 -- early 2019. 18:04:06

11 The initial part of the project is 8 to 10 years
12 to basically remove what you see above ground. And
13 you're going to see more about that in at minute.
14 Staffing is always a question. I said they have about
15 100 people onsite now. They will peak around 400, and 18:04:20
16 we -- last year we brought in Matt Marston, who's the
17 senior guy onsite, and we'll bring him back in here at an
18 appropriate time to talk more. Their numbers are about
19 400, their peak. That's not a steady level. That will
20 go up and down based on the work. 18:04:37

21 What they'll do in the first one to five
22 years -- you're going to see a video on that. They
23 really work largely inside the big buildings, removing
24 the big components like the reactor vessels, the steam
25 generators, etc. 18:04:51

1 They remove the radiological hazards. They do
2 the decontamination, removing radiological hazards,
3 shipping that material out. To perform very carefully
4 with a lot of expertise, a lot of experience within
5 controlled environments. And the components are then 18:05:06
6 shipped offsite for disposal.

7 And then they will also -- you'll see in the
8 video, some early building demolition as they clear space
9 on the site for staging equipment and materials.

10 Then in the latter years -- and these years are 18:05:19
11 approximate, because once they actually get started,
12 we'll have a much better schedule. In the latter years,
13 they get into open air demolition of the bigger, heavy
14 concrete buildings. You'll see major building
15 demolition. They will backfill and grade the site. 18:05:32

16 We will then modify the NRC license to -- once
17 all the radioactivity is remediated, we go through a
18 process with the NRC to demonstrate that. The license
19 will be reduced to cover the spent fuel storage facility.
20 And then at the end of that six-to-eight-year period, not 18:05:49
21 only the spent fuel storage facility and the switchyard
22 will remain. And then subsequent deep structure removal
23 will be done in later years.

24 After the spent fuel is transferred -- again,
25 hopefully sooner rather than later -- the dry fuel 18:06:06

1 storage facility is demolished. We complete that to the
2 NRC's satisfaction, and then the property is returned to
3 the department of the Navy. So that's kind of an
4 overview.

5 So what I have now, this is the first time we've 18:06:17
6 played this video in public. I believe this is about
7 four minutes long. It's got a narration, so let's play
8 the video, please. Do we need to dim the lights at all?

9 (Video played.)

10 MR. PALMISANO: Okay. Here we go. Do we have 18:07:09
11 the audio?

12 Bear with us just one second, please.

13 Guys, so we have the video. Do we have the
14 audio, or do I need to narrate this?

15 TECHNICIAN: We don't have audio. 18:07:09

16 MR. PALMISANO: Okay. So let's back up then.

17 TECHNICIAN: I'll do it.

18 MR. PALMISANO: So back up, and I'll tell you
19 when to start.

20 So what -- what -- Okay. Click one -- one click 18:07:18
21 forward, Manuel, so we have the video in front of us, and
22 then pause it, please.

23 (Video played.)

24 MR. PALMISANO: Pause it there.

25 Okay. So what you're going to see is the 18:07:33

1 external work. Now, during the first part of this
2 period, there's a lot of work going on inside the
3 buildings that we don't display on the video. So when I
4 talk about major component removal, remediating the
5 radioactivity, all that's going on inside, basically, the 18:07:47
6 big containment domes and the buildings in and around
7 containment.

8 So assuming -- we'll see if the audio plays. If
9 it doesn't, so what you're going to see then is how -- at
10 least conceptually right now -- they will dismantle the 18:08:00
11 buildings onsite while those components are being dealt
12 with internal to the buildings.

13 So, Manuel, I'm going to ask you to pause a
14 couple times if we don't have audio here.

15 TECHNICIAN: Got it. 18:08:15

16 (Video played.)

17 MR. PALMISANO: So what you'll see in a northend
18 of the site where my office is. They've targeted that to
19 go first for some reason. They open up space around the
20 site. So those of you who can see the pointer, they're 18:08:26
21 removing some of the collateral buildings. Nothing
22 radioactive in those buildings -- water storage tanks, my
23 office, and on -- retired diesel generators.

24 Pause right there.

25 Okay. So they open up really -- space on the 18:08:43

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1 site for staging equipment, for staging materials,
2 because there's lots of trucks that are coming in and
3 out. They'll expand the rail spur to give them the
4 ability to move materials in and out of the site by both
5 rail and truck. 18:08:57

6 Then what you're going to see next -- again,
7 inside these large buildings, there's a lot of work going
8 on to remediate radioactivity, to dismantle the large
9 components, et cetera. That's not visible to you, but
10 that's going on during this period. 18:09:11

11 Then you're going to see on the turbine building
12 side -- this is the non-radioactive part of the plant --
13 they actually start taking down the components.

14 So click -- click the video again, please.

15 (Video played.) 18:09:25

16 MR. PALMISANO: So they're taking the turbines
17 apart using the installed turbine cranes. Then you're
18 going to see them drive these pedestal cranes off the
19 end. That's how this is done in decommissioning. The
20 cranes are then done. They drive them off the rails as 18:09:34
21 part of the dismantling.

22 You'll then see them taking apart the turbine
23 building. Now before this, they remediated any lead
24 paint. They've remediated any asbestos. And we don't
25 have asbestos in our plant. But all that has been done 18:09:47

1 prior to these building being demolished. So they clear
2 away the turbine buildings.

3 So pause right there.

4 So at this point, they've cleared away the
5 turbine buildings and you see some turbine pedestals 18:10:01
6 which will stay below grade for a number of years, yeah.
7 And then we're clearing up some office and shop buildings
8 and warehouse buildings at the southend of the site.

9 In a minute you're going to see them start into
10 what will be the true nuclear part of the site, the 18:10:14
11 containments, the control building, the Radwaste
12 building, et cetera.

13 Go ahead.

14 CHAIRMAN DR. VICTOR: And where are we? I'm --
15 this is a couple years to get to this stage? 18:10:22

16 MR. PALMISANO: Let's say at this point, I'd say
17 four years in, five years in. Okay. That's approximate.
18 We're going to know a lot more first quarter of 2019 when
19 they start, but thank you. Yeah.

20 (Video played.) 18:10:36

21 MR. PALMISANO: So now they start taking the
22 control building, now the Radwaste building. Now they
23 build tents because the radioactive work will be done
24 under tents with a controlled environment and controlled
25 ventilation. So, you know, any low levels of radioactive 18:10:47

1 materials don't enter the environment.

2 Now, what they -- what you see here, they've
3 taken those buildings down, and they actually poke holes
4 through the heavy concrete so they can start taking heavy
5 construction materials or deconstruction materials out of 18:11:03
6 the buildings and out of containment. So under these
7 tents, you have the ability to move that out and lower it
8 on trucks, et cetera.

9 So at this point -- pause -- pause in just a
10 minute here. Okay. 18:11:15

11 So they're backfilling. At this point, the
12 radioactivity is remediated, the major components are
13 removed and shipped offsite, and it's basically just
14 industrial demolition at this point of big, heavy
15 concrete buildings. So the radioactivity is gone at this 18:11:30
16 point.

17 Go ahead, please.

18 (Video played.)

19 MR. PALMISANO: So, again, these building have
20 largely been gutted, if you will. Now, they're just 18:11:45
21 taking down the structure.

22 No comment. Okay. So that's about the
23 eight-year point, the eight years plus, maybe depending
24 on how the first couple years ago.

25 CHAIRMAN DR. VICTOR: So eight years is 2027 18:12:05

1 or --

2 MR. PALMISANO: 2027, yeah.

3 CHAIRMAN DR. VICTOR: 2028. Okay. So I'm sure
4 there's some questions like what happened to the domes?

5 Dan Stetson? 18:12:15

6 MR. STETSON: Tom, the -- aside from the spent
7 fuel rods themselves, the other materials that are
8 radioactive, how are those boxed up, and where are we --
9 what are we doing with those?

10 MR. PALMISANO: So a couple things. Inside the 18:12:24
11 reactor vessels themselves are the highest radiator -- or
12 radioactive materials. The very internals of that are
13 cut apart, and there's a small subset that's high-level
14 waste. Like we have from Unit 1, one of the canisters.

15 So there will be -- let's say 8 to 12 canisters 18:12:41
16 loaded with the internals of the reactor vessel stored
17 onsite as high-level waste because that is spent fuel.
18 All the rest is low-level waste. Okay?

19 So the big chunks to the reactor vessel are
20 low-level waste. The steam generators are low-level 18:12:55
21 waste. All of that is three categories, A, B, or C. "A"
22 being the lowest. B, C. All of that can be disposed of
23 in disposal facilities today, in Utah and Texas, et
24 cetera.

25 So that, in general, will be boxed up. The 18:13:11

1 higher categories, B and C, are in special engineered
2 containers. The lower categories from appropriate
3 shipping containers by rail or truck and shipped to the
4 appropriate disposal facilities.

5 And then most of the waste is not radioactive. 18:13:22
6 It's just general construction debris. That then is
7 shipped to the appropriate disposal facility.

8 Does that answer your question?

9 MR. STETSON: It does.

10 MR. PALMISANO: Okay. 18:13:35

11 CHAIRMAN DR. VICTOR: Any other comments?

12 Gary?

13 MR. BROWN: Tom, I notice in the video --

14 CHAIRMAN DR. VICTOR: You've got a mic, use your
15 microphone. Garry Brown. 18:13:43

16 MR. BROWN: I noticed in the video that as you
17 remove facilities, you were -- and your term was
18 "backfilling."

19 MR. PALMISANO: Right.

20 MR. BROWN: Is the intent to put an earthen cap 18:13:50
21 over the whole thing?

22 MR. PALMISANO: It's not a cap. It's -- we're
23 just going to level -- we -- we -- what the contractor
24 will do, they will determine the appropriate depth to
25 remove the material at this point. We'll stay above the 18:14:04

1 water table. Okay.

2 So we'll remove enough material so we can do all
3 of our sampling and satisfy the NRC that there's no
4 residual radioactivity that is any hazard. And the NRC
5 is very stringent on rules about this. This has been 18:14:18
6 done a dozen times a power plants across the county.

7 So they'll stop at that depth. If you remember,
8 probably, two meetings ago, I talked to a change in our
9 project execution strategy. And what we decided is
10 instead of getting all the deeper embedments and pilings 18:14:33
11 and mats out at this point -- two things, we need some
12 direction from the Navy. That's up to them as to whether
13 we remove all that or leave something below grade that
14 will be covered forever. And that decision is several
15 years out with the department of the Navy. 18:14:47

16 And then secondly, whatever depth we go to,
17 we've got to do the same thing over on the ISFSI where
18 all the fuel has gone, and we've got to decommission
19 that, remediate any radioactivity, and the remanence of
20 Unit 1 are under the ISFSI. 18:15:01

21 So we're going to excavate deeply at that point.
22 So we decided from a practicality standpoint, to put all
23 the deep excavation together and do it once a number of
24 years down the road.

25 So don't think of it as a "cap," -- as you would 18:15:12

1 cap a landfill. This is basically putting the site in a
2 safe condition at an appropriate grade.

3 MR. BROWN: Thank you.

4 CHAIRMAN DR. VICTOR: Ted.

5 MR. QUINN: Okay. Ted Quinn. 18:15:26

6 Tom, in the decommissioning, there's a lot of
7 non-radioactive material, a massive amount of material
8 that's -- that's available. Is there any chance in using
9 that for one of the reefs or for another purpose?

10 MR. PALMISANO: No. First of all, no, it won't 18:15:40

11 be used on the reefs. We're already in the process of
12 engineering and planning for the reef, and that's all new
13 material.

14 MR. QUINN: Okay.

15 MR. PALMISANO: So, yeah. There's no use of our 18:15:48

16 material on the reef. In other states, some plants have
17 used -- reused some materials. Some plants have not.

18 Right now, our plant is up to -- really, as we go through

19 the CEQA process with the Lands Commission and several --

20 we'll sort that out. And really, we need to talk to the 18:16:05

21 Navy. You know, nothing radioactive will certainly be
22 reused.

23 But there's non-radioactive material, but we'll

24 look at what makes sense. But ultimately, we'll have to

25 align with the land owners' expectation. 18:16:15

1 MR. QUINN: Okay. Okay. Thanks.

2 CHAIRMAN DR. VICTOR: Marni Magda.

3 MS. MAGDA: Marni Magda.

4 Tom, when you say "reactor vessel," I'm sorry,

5 are you meaning the -- what's inside the domes? 18:16:25

6 MR. PALMISANO: Yes. Yes.

7 MS. MAGDA: Okay. Thank you.

8 MR. PALMISANO: Inside the domes are big, heavy

9 components to the reactor vessel, the steam generators,

10 components like that. 18:16:34

11 MS. MAGDA: Great.

12 MR. PALMISANO: That's what I'm talking about.

13 MS. MAGDA: Then as we -- and that's all gone.

14 And then as we watched those domes come down, I'm still

15 thinking for all of us over there at the ISFSI, we've got 18:16:43

16 the spent fuel, and I'm just wondering what is the

17 process of those huge domes coming down?

18 MR. PALMISANO: It's a very controlled process.

19 And I've got another video. This was done -- you know,

20 containments have been taken down on about a dozen 18:17:00

21 commercial plants in the country. This is going to be

22 done similar to what was done in Connecticut Yankee. No

23 explosives were used. And it was -- it was taken down

24 about three- to five-foot sections at a time, where they

25 actually chip out the concrete, and it just settles of 18:17:14

1 its own weight.

2 CHAIRMAN DR. VICTOR: They start from the
3 bottom.

4 MR. PALMISANO: Yeah. And it just -- it almost
5 virtually just settles. I know our little graphic was 18:17:20
6 kind of humorous. But that's especially what happens.
7 It's very controlled. It's not disruptive at all, and it
8 is well analyzed, and does not affect the spent fuel
9 storage or the switchyard for that matter.

10 CHAIRMAN DR. VICTOR: When -- I'm sorry. Other 18:17:35
11 comments before we --

12 We did a field trip, which will be reported on,
13 I think, at the last -- or one of the last two meetings,
14 to the Zion plant north of Chicago, where everybody got
15 to wear pink vests and walk around and see this process, 18:17:51
16 and looking into the containment dome as they're removing
17 these -- this. They showed us a video of the dome
18 removal that I think it would be great to share at an
19 appropriate time with these --

20 MR. PALMISANO: Yeah. We have that video as 18:18:04
21 well. It's about 90 seconds long, so we'll bring it into
22 the next meeting. And it'll show -- actually, it's very
23 short, not the best quality, but it does show you how the
24 dome...

25 CHAIRMAN DR. VICTOR: I think it's worth us 18:18:13

1 trying to organize some subset of the CEP that wants to
2 spend some quality time in Clive, Utah to go visit the
3 facility where the debris is going to most likely be
4 sent, because the more we understand what this process is
5 going to be, I think the better questions we can ask and 18:18:32
6 the better job we can do. So let me see if I can be
7 travel agent and organize a trip to Clive. And then
8 anybody that wants to come...

9 MR. PALMISANO: And our partners SONGS
10 Decommissioning Solutions, I'm sure, will be glad to have 18:18:43
11 a subset of us out there. So we'll work with them.

12 CHAIRMAN DR. VICTOR: Okay. It's in Utah.
13 Beyond that, I don't know. My geography is not good
14 enough. I believe it's in western Utah.

15 MR. PALMISANO: Are there questions about this? 18:18:59
16 I know we went kind of fast -- it's the first time you've
17 seen this, but it's important to understand what the next
18 10 years will hold, as far as decommission.

19 CHAIRMAN DR. VICTOR: Anything else?

20 Okay. Thank you very much. 18:19:08

21 MR. PALMISANO: Okay. So let me move on now.
22 So this -- this shows you what today looks like, and at
23 the end of that six- to eight-year period, roughly, late
24 2020s, you'll see the dry fuel storage facility, and
25 you'll see the switchyard. 18:19:23

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1 And you see there what has been backfilled and
2 graded. Again, there are substructures below that will
3 be dealt with down the road, but that's what the site
4 will look like roughly at the end of the 2020s.

5 MR. STETSON: Tom, real quickly. The security 18:19:38
6 building, is that --

7 MR. PALMISANO: Yeah. It's just not shown on
8 our artist's rendition. The new security building is
9 right at the edge of the dry fuel storage facility.

10 MR. STETSON: Thank you. 18:19:47

11 MR. PALMISANO: So in this picture of today, you
12 see this white building -- you can't see it because I'm
13 circling it behind you -- but it's at the -- that's the
14 new security building. That will remain. Yeah.

15 CHAIRMAN DR. VICTOR: So the switchyard remains 18:19:55
16 because this remains the dominant interconnection
17 point --

18 MR. PALMISANO: This is the major inter-tie
19 between -- yeah, Los Angeles and San Diego.

20 CHAIRMAN DR. VICTOR: So I know a lot of people 18:20:03
21 that ask me why do the wires still go across the road,
22 and --

23 PANEL MEMBER: To get to the other side.

24 CHAIRMAN DR. VICTOR: To get to the other side,
25 yes. That's what I say. 18:20:12

1 But then they say, but why do they want to get
2 to the other side, and I say that because the side -- the
3 land on the east side of the 5 is going to back to the
4 Navy already, and the whole infrastructure for the
5 switchyard is already there. In fact, they're upgrading 18:20:26
6 with going with ultracapacitors and so on.

7 MR. PALMISANO: Right.

8 CHAIRMAN DR. VICTOR: Is that answer right, or
9 does it just sound good on TV?

10 MR. PALMISANO: No. You know, it's already 18:20:33
11 there. If you look at -- you still need a switchyard or
12 some sort of interconnection. In fact, San Diego is
13 putting in a synchronous condenser at CAISO, the
14 independent system operator's request for voltage
15 control. 18:20:45

16 So, as you said, it's a major inter-tie. We
17 need an inter-tie of some kind. So your choices are
18 either keep it where it is, move it across the 5, and --
19 you know, it's on leased Navy land either way -- or
20 eliminate a switchyard and move your interconnection 18:20:58
21 points north and south.

22 So when you look at this practically, it's a
23 fully functional switchyard, in good shape. It simply
24 makes sense at this point to keep it. A longer-term
25 decision for both Utilities and the Navy would be, do 18:21:08

1 they want to do something different. In the near term --
2 again, as we talk near term, 10, 20, 30 years, it's going
3 to stay where it is.

4 CHAIRMAN DR. VICTOR: Jerry Kern.

5 MR. KERN: One of the things I have to say, this 18:21:18
6 is a very important piece of infrastructure. I don't
7 know how many people remember when STG system went down a
8 few years ago --

9 MR. PALMISANO: Right.

10 MR. KERN: -- that facility saved Los Angeles 18:21:28
11 from going down.

12 MR. PALMISANO: Right.

13 MR. KERN: So that was, you know -- it's a very
14 important piece that we need to keep in place.

15 MR. PALMISANO: Yeah. That was September, 18:21:37
16 October 2011. The event started in Arizona, dropped to
17 San Diego, where -- this is where the system separated,
18 the middle of the switchyard. The interconnects open.
19 San Diego went dark. We were able to preserve power
20 north. So yeah. It is an important facility. 18:21:52

21 CHAIRMAN DR. VICTOR: Any more wiring questions,
22 Tom?

23 MR. CAUGHLAN: Just a couple. The Navy's been
24 mentioned three or four times here. So just let me go on
25 the record and say that the Navy's intention is -- or the 18:22:03

1 Marine Corp's intention -- the Navy is our naval
2 region -- I'm sorry, Naval Engineering Command Southwest
3 as the real estate agent for us.

4 We are aiming to have this returned to training
5 area. That means we have to be able to get through it, 18:22:20
6 and operate there without any risk. So the standard of
7 clean up is no hazard.

8 MR. PALMISANO: Right.

9 MR. CAUGHLAN: That's -- that's been in place
10 since the beginning of the -- of the easement, no change 18:22:30
11 there. There is also a requirement in the original
12 documents to return it to the "as was" condition.

13 MR. PALMISANO: Right.

14 MR. CAUGHLAN: That is still the position. The
15 engineering facts on the ground are that an awful lot of 18:22:44
16 excavation has been done to the site. And it's virtually
17 impossible to restore natural cliffs with man-made
18 actions.

19 Nature is pretty hard to replicate, so we have
20 to figure out what the best way to preserve the beach is. 18:23:02
21 And that may be retaining some of the subterranean
22 structures.

23 The primary rule remains no hazard. You can
24 occupy it indefinitely without any risk. Where we stand
25 on all that is a "to be determined" as we do the 18:23:18

1 environmental and engineering studies in the future, as
2 this goes on.

3 But I wanted to reassure everybody that the aim
4 here is return it to "as was" hazard condition, "as was"
5 environmental condition. And we intend to reuse it, 18:23:34
6 particularly, on the inland side of the 5 for training.

7 And as soon as we can get that back and start
8 using it for training, the happier we are.

9 MR. PALMISANO: And just to mention, the inland
10 side of the 5, what we call "the Mesa," where our 18:23:49
11 training center was, our warehouse -- that's not part of
12 the NRC license, so we're moving along with the Marine
13 Corp, State of California to, you know, do any
14 non-radiological remediation and return that.

15 That's not part of the NRC's license 18:24:03
16 termination. So we're on positive track that we'll
17 accomplish that in the next three years or so.

18 CHAIRMAN DR. VICTOR: Donna Boston.

19 MS. BOSTON: Has there been any thought about
20 the seawall? I see it's on the map here but -- 18:24:13

21 MR. PALMISANO: Yeah.

22 MS. BOSTON: -- if the Navy is talking about
23 going back to pre-existing, what -- what's to be
24 determined on the seawall?

25 MR. PALMISANO: The seawall will stay in place 18:24:24

1 while the dry fuel storage facility is there. Once the
2 dry fuel storage facility and all the fuel is shipped
3 out, we will decommission the dry fuel storage facility,
4 and at that point our plan would be to remove the seawall
5 to -- to ultimately meet the Navy's desire to have that 18:24:36
6 land as open as possible.

7 And at that point the switchyard will be the
8 remaining facility. And that's many years away, so
9 there's certainly going to be a lot of dialogue about
10 what's the right disposition to that. 18:24:47

11 CHAIRMAN DR. VICTOR: So let me flag just two
12 topics that we need to address in the future as a panel.
13 One is I just want to -- as Tom knows -- reiterate that
14 when the Navy's ready to talk in public about their
15 process and what they want to say, I know a lot of people 18:24:59
16 would be keen to talk with them about it. So we
17 should --

18 MR. PALMISANO: Yeah.

19 CHAIRMAN DR. VICTOR: -- when the time is right,
20 have somebody from the Navy here to talk in more detail 18:25:06
21 about that process. And I really appreciate the updates
22 that you've given us along the way.

23 The second thing is to Donna Boston's point, at
24 the same time, and we're looking at many decades down the
25 road -- the sea level is going to be rising -- 18:25:22

1 MR. PALMISANO: Right.

2 CHAIRMAN DR. VICTOR: -- and storms are going to
3 be getting stronger. And at some point I think this --
4 it seems to me that while the seawall is in place, those
5 kinds of risks are relatively straightforward to 18:25:32
6 mitigate --

7 MR. PALMISANO: Right.

8 CHAIRMAN DR. VICTOR: -- but that there's a
9 really important set of questions that maybe aren't front
10 and center for this panel but are important for 18:25:37
11 Californians about what life looks like at that site
12 several decades down the road.

13 MR. PALMISANO: Yeah. When the seawall is gone,
14 and the seawall is gone.

15 CHAIRMAN DR. VICTOR: Yeah. And we ought to 18:25:47
16 find a way to talk about that at some point, because we
17 should start thinking about what the site looks like
18 after the ISFSI is removed --

19 MR. PALMISANO: Right.

20 CHAIRMAN DR. VICTOR: -- because we should be 18:25:53
21 confident in our ability to get interim storage in
22 reality.

23 MR. PALMISANO: Right. Well, and we can start
24 to have that dialogue. I would -- would highlight what
25 Tom said, this really depends on the desires of the 18:26:02

1 Navy --

2 CHAIRMAN DR. VICTOR: Understood.

3 MR. PALMISANO: -- and the Marine Corp in terms
4 of we'd move everything below grade. Now that's what we
5 will factor in -- future sea level rise, what happens 18:26:11
6 with sand deposition, sand erosion. So it's a
7 complicated subject. But that's one reason we change the
8 execution strategy. Several decades from now, the fuel
9 will be gone. We'll know a lot more about sea level rise
10 projections, and Navy will have a lot better feel for 18:26:24
11 what their needs are.

12 CHAIRMAN DR. VICTOR: Right. And the Navy is
13 not immune to sea level rise.

14 MR. PALMISANO: Right.

15 CHAIRMAN DR. VICTOR: They get a little more 18:26:30
16 sea, actually.

17 Okay. Let me let you go on.

18 MR. PALMISANO: Okay. So that covers it on the
19 decommissioning plan. You will hear more about this as
20 we go through the next couple years. And at the right 18:26:39
21 point, we'll ask SONGS Decommissioning Solutions to come
22 in and talk. And I thank them for letting us to use this
23 video. That's their product, and I thought it was a very
24 good way to illustrate what's -- what's going to happen.

25 Real briefly, Environmental Permitting. As I 18:26:55

1 mentioned last fall, we delayed this a bit to consider
2 some of the issues like the deep structure removal, and
3 doing that once, not twice.

4 What we're waiting -- we require two real
5 actions here. Two things, we need a certified 18:27:07
6 environmental impact report by the California State Lands
7 Commission. And then we need a coastal development
8 permit issued by the Coastal Commission. And they will
9 rely on the EIR that's certified by State Lands.

10 So they found an agreement about how they're 18:27:26
11 going to do the review, and how they're going to rely on
12 that. The State Lands Commission development is in
13 progress. Show you some dates.

14 The draft EIR, the latest information I have --
15 again, this is tentative because it's up to the State 18:27:37
16 Lands Commission. I'm just reporting what they tell us.
17 Right now they would anticipate issuing the draft EIR in
18 mid-May for public comment.

19 This is important because it's a public comment
20 period. I want to make sure you're well aware of when 18:27:49
21 they would issue this. So that's the latest information
22 I have. So we expect that about mid-May. We'll make
23 sure that's announced to the CEP and on SONGS community.

24 Based on their schedule after public review and
25 comments, they may be ready to certify the final EIR in 18:28:04

1 an October 2018th meeting. That is tentative. Again,
2 that meeting date is set by the State Lands Commission,
3 not by the Utility.

4 We then also need the Coastal Commission --
5 Coastal Development Permit. We anticipate submitting our 18:28:19
6 application in June 2018. We'll wait until the draft EIR
7 is out because that's what the permit will be based on.
8 And then we'll submit that to the Coastal Commission.

9 They then will pick up, and then, you know, go
10 through their process. I would anticipate at the 18:28:34
11 earliest, the December '18 Coastal Commission public
12 hearing to approve their CDP based on the EIR. So
13 there's a relationship there.

14 Again, the dates are tentative. We don't set
15 the dates. We'll keep you updated on the dates as we get 18:28:48
16 them from the State Lands Commission and the Coastal
17 Commission.

18 Questions on that before we move on from the
19 Panel?

20 Okay. Fuel transfer update. First of all, I 18:29:00
21 want to come back to the question we've had last time
22 about why -- why do we want to off-load the spent fuel
23 pools.

24 I've covered this really for the last three
25 years. But in a decommission site where there's no need 18:29:13

1 for an operating spent fuel pool to move fuel in and out
2 of the reactor, the strong preference throughout the
3 industry -- and not just Utilities, but some strong
4 critics such as the Union of Concerned Scientists or a
5 group like the National Academy for Science or the 18:29:29
6 California Energy Commission are advocates for moving
7 fuel out of spent fuel pools to dry cask storage as soon
8 as you practically can.

9 Even for operating plants, that's been a theme
10 across the county. For a decommissioned plant, it's 18:29:43
11 particularly important, and it's preferred because it's a
12 simpler, passive storage system, passive cooling system.
13 And all the more, it's a precursor to being able to move
14 the fuel offsite in appropriate transportation casks.

15 So that's really what drives us. Some of you 18:30:01
16 may remember some of the discussions in 2014, 2015 about
17 zirconium fires in spent fuel pools. The National
18 Academy of Science in the last year or so discussed that.
19 That's probably the single biggest hazard to the public
20 in a decommissioning plant is the spent fuel pool and the 18:30:17
21 fuel stored in the spent fuel pool.

22 So dry cask storage. Used fuel that cooled for
23 several years. Typically three to five can be stored in
24 an Independent Spent Fuel Storage Installation or dry
25 cask storage system. 18:30:33

1 Fuel is cooled passively. There's no need for
2 electricity, for water, for moving parts. It's just heat
3 dissipates through a radiator -- a convection, and then
4 through the wall of the cask, which is direct radiation.
5 Not -- not -- not radioactivity, just radiative heat 18:30:48
6 dissipation.

7 And air just circulates around the canisters.
8 And the fuel is isolated by fuel rods, and in our case,
9 welded-steel canisters. And it's a passive cooling
10 system, not subject to loss of power or loss of water, 18:31:06
11 et cetera.

12 The other thing, each canister, in our case,
13 holds either 24 assemblies for the current ones of 37
14 assemblies for the new ones. And you don't have the risk
15 of the spent fuel pool with 1,300 assemblies. 18:31:17

16 Should an event occur -- whether it's a natural
17 or man-made event -- that damages the fuel pool, you have
18 1,300 assemblies at risk. These canisters, Number 1,
19 they're much more robust. Number 2, damage is isolated
20 to the canister that's damaged, not the entire set of 18:31:32
21 canisters.

22 We have a lot of experience in the industry, and
23 there are more than 2,700 casks and canisters loaded in
24 the U.S. alone.

25 Just a summary of some of the decommissioning 18:31:47

1 sites. Maine Yankee, a bit older. SONGS, that's the
2 first 50 canisters. That's really Unit 1, and Unit 2 and
3 3 fuel from the operating days. Zion is the site that we
4 visited last fall. They've completed -- they've got 61
5 canisters loaded. 18:32:02

6 Kewaunee completed their offload in 2017.
7 They've got 38 canisters loaded. Crystal River just
8 completed their offload. That's the plant near Tampa,
9 Florida, 39 canisters loaded. And Vermont Yankee is in
10 the middle of an offload, projected to complete in 2018. 18:32:17
11 And you see the different systems that are used at those
12 different sites.

13 Refresh everybody's memory, this is the existing
14 dry fuel storage system. It has 50 canisters loaded with
15 fuel from Unit 1, 2, and 3. And there's one canister 18:32:33
16 loaded with a greater than Class C waste, which was the
17 internals of the Unit 1 reactor vessel.

18 This is the new Holtec Umax system. There are
19 75 locations there. 73 will be used for fuel. One is a
20 test location to test canisters. We have processes to 18:32:49
21 test and inspect an empty canister to practice our
22 techniques. And then a spare location.

23 This is the new security building to the lower,
24 center right of the picture there. Again, that will stay
25 after the plant is gone, roughly, the end of the 2020s. 18:33:05

1 Here we -- at the time I took this picture, we had three
2 canisters loaded. You see these what look to be circular
3 devices on top. That's actually the outlet vent.

4 We now have a fourth one loaded in this location
5 here. So there are four canisters that are loaded. 18:33:26
6 There's one that is completing this week, which we move
7 to the storage facility in the next 48 hours.

8 So fuel transfer, we started in June of 2018.
9 We started with Unit 2. Our goal is to have all fuel and
10 dry -- spent fuel and dry storage by mid-2019 or earlier. 18:33:44

11 Let me pause there to see if there's a question.

12 CHAIRMAN DR. VICTOR: Ted Quinn.

13 MR. QUINN: Ted Quinn.

14 I wanted to ask, Tom, what's the role of the NRC
15 during this two-year transfer time? 18:33:56

16 MR. PALMISANO: The NRC plays an important role.
17 Prior to starting, the NRC did extensive inspections
18 through the fall, inspections of the dry fuel storage
19 facility construction, inspections of all the handling of
20 equipment, inspections of the procedures. 18:34:10

21 We had to do what are called dry runs, where
22 basically we walk through the process, including putting
23 everything in the spent fuel pool. We simply did not put
24 fuel in the canister. We used a dummy fuel assembly that
25 doesn't have fuel in it to show that it can go in the 18:34:24

1 canister locations. And then they complete an inspection
2 of the security system before we were able to start the
3 offload.

4 They continue to inspect periodically. They're
5 onsite regularly on a quarterly basis, and they come 18:34:37
6 onsite as needed, based on the activities we're doing.
7 So there's quite a bit of NRC oversight out of Region 4.

8 CHAIRMAN DR. VICTOR: What is the training that
9 you're doing with first responders now? Obviously, when
10 the plant was operational, there was a lot of other 18:34:51
11 activities. What does it look like? What's the mode
12 you're transitioning into?

13 MR. PALMISANO: So we made that transition
14 really two years ago with the Defueled Emergency Plan. I
15 should back up. We've had dry fuel storage onsite since 18:35:02
16 about 2003. So over the years, we've transferred the
17 first responders with operating reactors as well as the
18 dry fuel storage facility. Our responders out of Camp
19 Pendleton, out of Orange County, San Diego County
20 regularly practice with us. 18:35:17

21 They tour the plant, so they're familiar with
22 the location, the hazards, the equipment. And there are
23 periodic drills we train with them. And we run quarterly
24 drills with our Emergency Plan. We engage them in the
25 communications protocol. That continues. 18:35:30

1 In 2015, if you remember, we changed the
2 Emergency Plan since the reactors were defueled, and the
3 spent fuel had cooled sufficiently that -- you know,
4 meeting NRC criteria, we could no longer generate a
5 release that would require the significant response that 18:35:45
6 an operating reactor needs. It was shrunk to the spent
7 fuel pool in ISFSI. But the same training and interface
8 continues.

9 CHAIRMAN DR. VICTOR: Okay. I'm sure there's
10 going to be some questions on this. Steve Swartz and 18:35:57
11 then Marni Magda and Dan.

12 MR. SWARTZ: Steve Swartz.

13 MR. PALMISANO: Yeah.

14 MR. SWARTZ: Just could you clarify just a
15 little bit for us because it was kind of glossed over, on 18:36:04
16 the three units that you -- your photograph showed. If
17 you go back to that one slide.

18 MR. PALMISANO: Sure. Let me go back.

19 MR. SWARTZ: Forward -- right there. The one
20 that is circled. So you said -- and you said that those 18:36:18
21 are for venting.

22 MR. PALMISANO: Yes.

23 MR. SWARTZ: The blue units on top.

24 MR. PALMISANO: The round units on top. That's
25 correct. 18:36:28

1 MR. SWARTZ: Okay. So could you go just a
2 little bit more in depth just as far as, I presume
3 they're venting the air that is circulating to keep it
4 cool.

5 MR. PALMISANO: That's correct. 18:36:35

6 MR. SWARTZ: And do we have sensors on those
7 venting regarding any type of escape for any radioactive
8 material?

9 MR. PALMISANO: Yeah. So basically, in -- you
10 know, under each of those square lids is a cavity. And 18:36:44
11 we -- I'm sorry I didn't bring all the slides that we've
12 shown over the last year. But, basically, there's --
13 there's a cavity in this concrete structure. Inside the
14 cavity in those three locations is the sealed
15 stainless-steel canister. 18:37:01

16 That square lid is put back on. It's a big,
17 heavy steel and concrete shield lid, and the top vent cap
18 is put on. So what happens -- in this photograph, you
19 cannot see it. At the four corners on the side are inlet
20 vents for a cold air. 18:37:17

21 And I can bring at the next meeting a good cross
22 section that shows you. But basically, cold air flows in
23 down to the bottom of this cavity, and then flows up
24 around the outside of this stainless-steel canister which
25 is radiating heat. The heat is picked up by the air and 18:37:27

1 exhaust out the top center vent. So that's just the air
2 circulation around the sealed canister that removes the
3 heat.

4 MR. SWARTZ: But that's done without any power
5 to -- 18:37:41

6 MR. PALMISANO: No power, simply natural
7 circulation. Okay. Now --

8 CHAIRMAN DR. VICTOR: It's natural circulation
9 because hot air rises; right?

10 MR. PALMISANO: Because hot air rises. Just the 18:37:47
11 design of the system. So a couple things.

12 The current system with the 50 has temperature
13 monitoring in place, that's monitored continuously. The
14 new system will have temperature monitoring once its
15 completed. Obviously, I'm moving equipment around there, 18:38:02
16 so I don't have it all wired up.

17 So we monitor temperatures. When we place the
18 canisters in place, we periodically inspect it to make
19 sure the vents are clear and monitor the temperatures.
20 The first four canisters that were loaded, I had them 18:38:12
21 checked last week. We see about 25- to 35-degree
22 temperature rise from inlet to outlet.

23 At that -- at that date, the inlet temperature
24 was about 60 degrees. So we would see typically 85 to 95
25 degrees coming out of the vent. It will vary canister by 18:38:29

1 canister depending on the age of the spent fuel inside.

2 Those temperatures are all normal and expected.

3 We took radiation surveys, and we do periodic
4 radiation surveys. And -- and the -- the nice thing
5 about this is a heavily shielded design. The radiation 18:38:43
6 level directly on top of that vent are very low.

7 MR. SWARTZ: Yeah. I just wanted to get -- and
8 we would continue with that same process up until the
9 point in time that we have all the material off the site.

10 MR. PALMISANO: Right. So -- so -- so what we 18:38:59
11 do for the existing system -- let me just jump. I've got
12 a slide on it real quickly -- continuous security
13 monitoring, which is important. Daily rounds by the
14 operators, checking everything, continuous temperature
15 monitoring. That will go in place in the new system. 18:39:13

16 We have radiation detectors called TLDs that you
17 read. We read those every month looking for radiation
18 changes. We do quarterly radiation and contamination
19 surveys. And then if any event were to occur, we would
20 immediately go out and do a survey. 18:39:28

21 So there's good protocol, and we've got years'
22 worth of experience where basically nothing changes in
23 terms of rad levels, et cetera. And you know, no
24 contamination has ever been detected outside of the
25 facility because everything is sealed. So that protocol 18:39:42

1 will continue until the fuel is offsite.

2 CHAIRMAN DR. VICTOR: You have a proposal from
3 Gene Stone and ROSE and a lot of other people who have
4 been working on it too, offer a continuous radiation
5 monitoring device at site, and then a kind of 18:39:57
6 crowd-sourced monitoring system around the community.

7 Can you comment on that proposal and whether how
8 continuous radiation monitoring is already happening?

9 MR. PALMISANO: Well, the radiation monitoring
10 is not continuous. It's not a continuous read out -- 18:40:11
11 continuous monitoring that read every month.

12 Gene and I had a good conversation last week.
13 It's an intriguing system, so we need to research it to
14 see if it's something that's appropriate. I need to
15 understand how it's calibrated, et cetera. 18:40:24

16 I do have some direct experience. I managed two
17 nuclear plants in Minnesota. The Prairie Island Nuclear
18 Plant, which is actually on the Prairie Island Indian
19 Reservation, so I have experience with the tribal council
20 there, as well as the Monticello Plant. 18:40:39

21 So what's interesting, Prairie Island first put
22 in dry cask storage in the state of Minnesota, and
23 insisted on realtime read monitors that read out in the
24 State -- Department of Health. That data is taken daily,
25 posted to the internet daily. It's not realtime 18:40:52

1 monitoring.

2 When the next plant, Monticello, 90 miles away,

3 put in dry cask storage, the State didn't insist on it.

4 Because they had 15 years of data where nothing changed.

5 And they decided there was no need, in that case, for any 18:41:04

6 kind of continuous monitoring. The periodic surveys were

7 okay.

8 CHAIRMAN DR. VICTOR: So just one more question.

9 MR. PALMISANO: So I just wanted to share that

10 anecdote. 18:41:13

11 CHAIRMAN DR. VICTOR: So just one more question

12 on this, while we're on it and I'll go to Marni and

13 Sergio.

14 A number of people have raised questions over

15 the years about the ability to get access to the 18:41:20

16 monitoring information. Can we get that information

17 organized better on SONGScommunity.com, so that there's a

18 place where you click, and you can look at reports --

19 MR. PALMISANO: Yeah.

20 CHAIRMAN DR. VICTOR: -- in whatever the format 18:41:33

21 is?

22 MR. PALMISANO: What I'll do -- two things, in

23 response to past comments. We do report to the NRC

24 annually, and it's publicly available. To say it's not

25 user-friendly is probably understating it. Okay. 18:41:44

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1 CHAIRMAN DR. VICTOR: I've tried --

2 MR. PALMISANO: Yeah.

3 CHAIRMAN DR. VICTOR: -- and it's --

4 MR. PALMISANO: -- it's -- it's an environmental
5 monitoring report, and it's a Rad effluence report. What 18:41:51
6 we will do is we'll extract the monthly radiation data
7 and find a way to put that on SONGS website in layman's
8 terms.

9 CHAIRMAN DR. VICTOR: Okay. That'd be great.

10 MR. PALMISANO: That's easy for us to do, and 18:42:02
11 we'll do that.

12 CHAIRMAN DR. VICTOR: That'd be helpful.
13 Marni Magda and then Sergio Farias.

14 MS. MAGDA: You've answered most of my
15 questions, but I wanted to make sure -- Marni -- that we 18:42:07
16 are clear for everyone that the monitoring is something
17 people are very concerned about. And that maybe our
18 panel of experts could look at some way to listen to what
19 people are concerned about, and come back with what will
20 make the most sense. 18:42:29

21 And then I just wanted to make sure that it's
22 really clear for everyone. I think it's so easy to be
23 confused about how this -- it goes into -- when you call
24 it a "cavity," that isn't just cement, is it? Isn't
25 there a stainless steel -- 18:42:45

1 MR. PALMISANO: No. There's a stainless-steel
2 liner. There's then another steel divider plate. It's
3 about two concentric stainless-steel cylinders. The
4 outer cylinder, which is encased in concrete. Okay. The
5 inner cylinder which divides the inlet air flow from the 18:42:59
6 outlet air flow. Next meeting, we'll bring back the
7 cross-section picture. I just didn't put it in this
8 deck.

9 MS. MAGDA: I just wanted to make sure it was
10 really clear for everyone in the public, so that they 18:43:10
11 hear that and -- and appreciate that this -- when we hear
12 people talk about burying the fuel and leaving it
13 forever, that's not the intent at all. And I
14 appreciate --

15 MR. PALMISANO: No. It's sealed canisters that 18:43:23
16 are easily retrievable out of the system.

17 CHAIRMAN DR. VICTOR: But, you know, this
18 monitoring issue is one of the issues where the experts
19 consistently don't understand what the public's actually
20 concerned about. So the experts, you know, aren't 18:43:33
21 worried about monitoring protocols. And people just want
22 to know what's going on.

23 And so maybe if you engage the expert panel on
24 this, help them understand. People want to know what's
25 going on, even if the experts aren't worried about the 18:43:41

1 problem.

2 MR. PALMISANO: Yeah.

3 CHAIRMAN DR. VICTOR: Sergio.

4 MR. FARIAS: Thank you. You mentioned working
5 with the first responders, and I see there's a rep from 18:43:49
6 the Orange County Sheriff's Department. Is there
7 collaboration also with the Orange County Fire Authority?

8 MR. PALMISANO: Yes.

9 MR. FARIAS: Just to be clear, I'm also a
10 board member there. 18:44:00

11 MR. PALMISANO: Yes.

12 MR. FARIAS: Okay.

13 MR. PALMISANO: In fact --

14 MS. BOSTON: You know, I can address that a
15 little bit. We do -- one of the things that is important 18:44:06
16 is that if -- if there's an event, as Tom mentioned,
17 we -- first responders are concerned with independent
18 assessment for our community. That's our mission.

19 We respond regardless of whatever is occurring.
20 We're going in, and we're going to do an independent 18:44:24
21 radiological monitoring assessment to provide that
22 independent information.

23 So the plant will have their information.

24 MR. PALMISANO: Right.

25 MS. BOSTON: We will obtain our information, and 18:44:36

1 then we will know exactly what's going on. Most likely,
2 it's going to match.

3 MR. PALMISANO: Right.

4 MS. BOSTON: So we do train three deep on all of
5 our radiological monitoring teams for the Fire Authority, 18:44:48
6 and we do run drills in those still. So we still have an
7 entire program to be able to respond to anything that
8 occurs at the site. And that's any disaster you can
9 imagine is what we are prepared to respond to.

10 MR. PALMISANO: Right. 18:45:08

11 MR. FARIAS: So I can follow up with that. What
12 about our San Diego County agencies?

13 MR. PALMISANO: Go ahead.

14 MR. FARIAS: There's collaboration there too.

15 MR. PALMISANO: We'll let the expert address it 18:45:13
16 better than I.

17 MS. BOSTON: So when San Onofre was created,
18 there actually was state law that created the
19 Interjurisdictional Planning Committee. And in that
20 planning committee, it's a formal organization that 18:45:25
21 includes the county of San Diego, the county of Orange,
22 the three cities -- San Juan, Dana Point, and San
23 Clemente. And then we also have additional Camp
24 Pendleton, city of Oceanside is involved.

25 And so we're a very cohesive group that meets 18:45:42

1 regularly to make sure that all our plans match, we
2 respond together. We still do decision-maker conference
3 calls. So we have an active plan. We're maintaining
4 that plan, and we're prepared at any time.

5 MR. FARIAS: Thank you. 18:46:02

6 CHAIRMAN DR. VICTOR: And just Donna, on this
7 note, and then we'll go to Steve Swartz. Do the first
8 responders also do non-incident monitoring --
9 radiological monitoring, or is it all incident driven?

10 MS. BOSTON: So no. We would not -- currently, 18:46:15
11 we do not receive any of that information. So we're
12 receiving the same information the community does. We
13 are interested in receiving those NRC reports, but we
14 would be getting it the same way that you would -- the
15 regular monitoring reports. We would receive those the 18:46:27
16 same way that the community would.

17 CHAIRMAN DR. VICTOR: Yeah. I ask the question
18 because Gene Stone's note raised an issue of what
19 information is out there. Let's get as much credible
20 information that's out there regular radiological 18:46:39
21 monitoring and organize it so everybody in the community
22 can see that.

23 Steve Swartz.

24 MR. SWARTZ: Exactly. And on that same
25 conversation right -- right at the backend of it is, will 18:46:48

1 your monitoring, will that be available for the public to
2 review, so we can compare the site monitoring and the
3 independent monitoring to the public, who is able to have
4 access to it.

5 MS. BOSTON: Absolutely. When we respond to an 18:47:03
6 event, our information is a matter of public record;
7 however, we're not going to the site to do monitoring on
8 an ongoing, regular basis. That -- we don't have a
9 mission in that area.

10 We would like to receive the updates because 18:47:17
11 we're interested. But we don't have a monitoring -- a
12 plant monitoring mission. We have an emergency response
13 mission.

14 CHAIRMAN DR. VICTOR: Okay. Last comment Dan
15 and then I want to let -- because I see a couple more 18:47:28
16 hands --

17 MR. STETSON: Donna, you mentioned that the
18 teams are "three deep." I'm sorry. What does that mean?

19 MS. BOSTON: That means that we have redundancy
20 in personnel. And so typically your fire agencies have 18:47:38
21 three shifts, so you have three radiological monitoring
22 teams because we don't think it's okay that people can go
23 off shift, and the community is not protected.

24 So we make sure that we have personnel
25 redundancy to respond in 24/7. 18:47:54

1 CHAIRMAN DR. VICTOR: Tom.

2 MR. PALMISANO: Okay. Let's see. Let's fast
3 forward -- radiation protection.

4 We talked about a lot of this already. We have
5 extensive capability in radiation protection for routine 18:48:07
6 monitoring, as well as should an event occur.

7 And especially during the transfers. These
8 transfers are heavily monitored to make sure as we move
9 the canister, there's no, you know, hazards created.

10 Let's see if there was a security. Oh, I should 18:48:25
11 mention security at the bottom. One thing I wanted to
12 clarify, one of the last two meetings I was asked about
13 security officers, and I wanted to check in our city
14 rules. A public comment was made that there's one
15 security officer. 18:48:35

16 Somebody had misread the Defueled Emergency
17 Plan. There's one position and that's fuel Rad security
18 officer. There's over 150 people in SONGS security. So
19 it is a large security force, much like you say three
20 deep for emergency responders. Multiple security 18:48:48
21 officers, multiple depth there.

22 Okay. I'm going to play you a video showing you
23 the actual loading and moving of a canister. You've seen
24 some of the dry runs before.

25 Can we -- do you think we can get the audio for 18:49:03

1 this?

2 TECHNICIAN: Yes.

3 MR. PALMISANO: Okay. I'm off the hook for 10
4 seconds. Please play --

5 (Video played.) 18:49:12

6 MR. PALMISANO: Pause the video for a second.

7 Okay. So what you've seen, that's an actual
8 fuel assembly -- spent fuel assembly loaded into one of
9 the actual canisters that we've loaded. So if you see
10 again, done under water for radiation shielding. 18:50:47

11 So go ahead and restart now.

12 (Video playing.)

13 MR. PALMISANO: Okay. Thank you.

14 Questions on the video before I go onto the next
15 couple slides? 18:52:51

16 CHAIRMAN DR. VICTOR: There's going to be an
17 acronym test at the end of this. Ted Quinn.

18 MR. QUINN: Tom, you've moved four, and can you
19 describe any lessons learned from the first four that
20 apply to the rest? Any key points? 18:52:59

21 MR. PALMISANO: Yeah. And we're completing the
22 fifth this week, just for clarity.

23 Probably the major lessons are just getting the
24 proficiencies of the crews who do this. This typically
25 takes five to seven days. The first couple took seven to 18:53:13

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1 ten days because we go very slowly and deliberately.

2 So just getting the crews proficient, making
3 sure the welding equipment is all -- you know, we have
4 two welders. If one breaks, we move the other one in
5 place. Getting the equipment to work properly. 18:53:27

6 Probably the biggest lesson is some of the
7 helium drying, you know. You use first heated helium,
8 and then you further dry it with helium. You know, just
9 some of the intricacies of how long you dry it, how you
10 read your temperatures, and moisture levels, et cetera. 18:53:41
11 So lessons learned like that.

12 Lessons learned with maneuvering the equipment
13 around. We've done all this as a dry run, but as you do
14 it one after the another, you learn a few more lessons.
15 So nothing significant in terms of lessons learned on how 18:53:54
16 to operate the equipment, but just proficiency is what I
17 would say.

18 CHAIRMAN DR. VICTOR: Okay. Thanks. I want to
19 make sure you have time to talk about the brief as well.
20 So we can continue on. 18:54:06

21 MR. PALMISANO: Yeah. So real quickly, I was
22 asked about an NRC information notice. I've got an
23 important topic that I do want to take about related to
24 spent fuel, so let me keep this brief.

25 The NRC issued an information notice, 18:54:19

1 IN 2018-01, which talked about a release of noble gas --
2 radioactive gas during the loading or drying a canister.

3 Okay. The title is a bit misleading. What this
4 really talks about is when you dry the fuel -- dry the
5 moisture out of the canister. If you've got a pinhole 18:54:36
6 leak or something in a fuel rod, which occurs
7 occasionally over the years, you might get a puff of
8 radioactive gas.

9 What's important is when we inspect all our
10 fuel, you know -- the fuel goes in the canister. And if 18:54:48
11 you have fuel that you suspect is damaged, you put it in
12 a special container, then you put it in a canister. So
13 this is all about making sure you know the status of
14 their fuel.

15 Some plants over the last five years have been 18:55:03
16 surprised with a leak popping out during the drying
17 process, and had to go back and rethink, you know,
18 because the canister is welded, did they get the fuel
19 selected right.

20 We've -- we're well aware of that. We've 18:55:13
21 already inspected all the fuel, the most sophisticated
22 methods. So we're not going to be subject to the
23 problems of that information notice. But I think you had
24 asked me to address that briefly.

25 CHAIRMAN DR. VICTOR: Yeah. And this -- 18:55:23

1 MR. PALMISANO: And I run through that quickly.

2 CHAIRMAN DR. VICTOR: But I just want to ask
3 you, so this puff. If this were to happen -- and you've
4 taken all these measures to make sure this doesn't
5 happen -- 18:55:29

6 MR. PALMISANO: Right.

7 CHAIRMAN DR. VICTOR: -- but if this happens at
8 other places, this puff of radioactive gas is happening
9 in an enclosed environment and so --

10 MR. PALMISANO: It's happening in an enclosed 18:55:35
11 fuel building. All the workers are monitored. There's a
12 stack monitor that would monitor anything going out the
13 ventilation system. This is truly just a trace of amount
14 radioactivity. It really is not a hazard to the public
15 or the workers, but it's important to be aware of if it 18:55:48
16 did happen.

17 CHAIRMAN DR. VICTOR: Okay. So we're not
18 talking about anything at the boundary of the plant --
19 detectable --

20 MR. PALMISANO: No. No. We're talking about 18:55:55
21 something that, you know, would be detectible in a room
22 that folks are working in.

23 CHAIRMAN DR. VICTOR: Okay. Other comments on
24 this? Okay. Why don't you move on?

25 MR. PALMISANO: Okay. So I've got an important 18:56:02

1 issue to talk about here. This is an emerging technical
2 issue that has affected some of our canisters and
3 canisters in some other plants.

4 So our principles of safety, stewardship, and
5 engagement. I want to be very clear with you about what 18:56:15
6 this is, how significant it is, what we've done it about.
7 Okay. So I'm going to walk through this. A couple
8 slides that are not in the deck.

9 So I'm going to talk about inside the baskets,
10 what are called shims. These don't hold fuel themselves, 18:56:28
11 but they're on the periphery. So let me show you a
12 couple pictures, and I'm going to start with one first
13 here.

14 In the video, you saw an open basket. This is
15 the basket we put the fuel in. You may not have seen it, 18:56:41
16 but, you know, this is basically a rectangular device in
17 a circular canister. So to complete building that out as
18 a circle, we have aluminum shims on the periphery that
19 are installed around the edges of the basket. And the
20 shims are generally hollow. 18:56:59

21 They serve two purposes. One, they provide
22 lateral support for the basket. There's no fuel in the
23 shims, but they provide lateral support. And when the
24 fuel is in there and the basket heats up several hundred
25 degrees, they tighten up against the shell. And then 18:57:10

1 it's a flow path for helium that comes out of the top of
2 the fuel assemblies and goes down through the shims.

3 So let me go back to my -- this is my little
4 cartoon cutaway of a canister. So this is the sealed
5 canister, showing you a cutaway where the fuel is. And 18:57:27
6 basically, there's two ways that heat's removed from the
7 fuel. One is by convection with the helium. The other
8 is by just radiative heat transfer from the fuel, through
9 the basket, to the shell.

10 CHAIRMAN DR. VICTOR: Just to clarify because 18:57:41
11 the term "radiative heat transfer" has a special meaning
12 in -- in physics. But it doesn't mean transferring
13 radiation --

14 MR. PALMISANO: No. No. Heat --

15 CHAIRMAN DR. VICTOR: -- in the sense that 18:57:52
16 radioactive radiation.

17 MR. PALMISANO: -- being transferred. Yeah.

18 CHAIRMAN DR. VICTOR: It means -- it's like the
19 outside of a pot when it's boiling feels hot because it's
20 radiating heat out. 18:57:58

21 MR. PALMISANO: Right. Or if you've got an
22 electric space heater, you put your hand a little
23 distance away, you feel the heat radiating out. That's
24 what I'm talking about. It's a not a radioactive
25 phenomenon. Thank you. 18:58:08

1 So anyway -- and then the helium would flow up
2 from the bottom, through the fuel assemblies, and down
3 through these hollow shims. So that's the other heat
4 transfer mechanism.

5 What -- what has been found -- Holtec and a 18:58:17
6 family of canisters, including ours, use two types of
7 these aluminum shims, and particularly at the bottom. So
8 I've shown you the top of the shim. For perspective,
9 this canister's about 20-foot tall, and the shim's about
10 18-foot long. 18:58:33

11 So we're looking at the very top. So if I go to
12 the bottom of the shim -- that graphic isn't as clear as
13 I would like -- there are two designs that -- for these
14 shims that Holtec use. The basic shim is the same either
15 way. It's a hollow aluminum tube. 18:58:46

16 But at the bottom on the older design, which 30
17 of our canisters have, there are cutouts there that just
18 are outlets for the helium to flow out. Okay. There's a
19 newer design they've used for several years, they've used
20 for many of their customers that have these pins in the 18:59:01
21 bottom. Serves the same function. Shims stand in place,
22 and helium flows out the bottom.

23 So what the issue that has been found is, we
24 have found a broken pin in an empty canister before it
25 was loaded. Okay. And we -- Holtec actually found this 18:59:17

1 as part of their receipt inspection. So that when a
2 broken pin was found in a canister at SONGS, and Holtec
3 has now surveyed their other customers, and they're
4 understanding, do they have other problems with these
5 pins. 18:59:33

6 To give you some numbers, 30 of our canisters
7 have the older design. 43 have the newer design. Okay.
8 So when we became aware of this, it's important to know
9 that we found this out after we loaded the first four
10 canisters, and they have the newer design. Okay. 18:59:47

11 So I want to characterize this for you. The
12 first four canisters, when they were inspected from the
13 top, we saw no broken parts, no broken shims. Everything
14 was at the right height. All the dimensions told us the
15 shims were in proper place, the pins were there. Nothing 19:00:02
16 was observed.

17 And as we loaded fuel in them, and put the lid
18 on, everything is properly stacked up. So we've got good
19 anecdotal information that the canisters are acceptable.
20 And I'll talk about the safety significance in a minute. 19:00:16

21 So once we found this in a canister that Holtec
22 was inspecting, I put the remainder of those 43 canisters
23 on hold. So there are 39 left. I put them on hold.
24 Some on our site, some back in the factory in Pittsburg.
25 We have 30 canisters of the old design, so we stopped 19:00:34

1 loading for about a week, did a thorough review of this,
2 and had a third-party review this. And we concluded that
3 the older design was acceptable, not subject to this pin
4 breakage.

5 So we've loaded the fifth canister, which is the 19:00:47
6 older design. And we will continue to load the canisters
7 with the older design because it's not susceptible to
8 this problem. The 39 canisters, we've segregated. They
9 will be sent back to the factory, and Holtec will replace
10 this design with the older design. 19:01:02

11 Since the canisters haven't been used, they're
12 not contaminated. It's fairly simple for them to take
13 the shims -- the shims are removable. They'll take them
14 out. They'll put the older design in, which has been
15 used for a number of years at a number of Utilities, and 19:01:14
16 no problems have been noted.

17 So -- so that -- that's important. Okay. We
18 stopped, we took time to understand it. We communicate
19 with the NRC, so they're well aware of it, both in the
20 region and headquarters. And we communicated to the 19:01:26
21 other Utilities who used a similar family of canisters.

22 Now, the four canisters are important. So we
23 have four canisters loaded with this design where we have
24 found a broken pin. And Holtec is doing a broader
25 evaluation and causal analysis. Okay. So we aren't 19:01:42

1 going to use any more of that design.

2 But the important thing is, what's the safety of
3 the four canisters. So -- and -- you know, that's our
4 job, to make sure they're safe and to make sure we're
5 accountable to you, to the NRC, to the public, to the 19:01:55
6 Panel.

7 The four canisters have been reviewed. Again,
8 based on our inspections that were done -- and the
9 inspections, you can't see every pin, but nothing was
10 noted that was wrong. Nothing was noted broken, laying 19:02:08
11 in the wrong place. All the dimensions were proper.

12 We're very confident the canisters are fully
13 capable of performing their safety function in storage.
14 We have reviewed that. Holtec has reviewed that. I've
15 had a third-party review that, and we've reviewed that 19:02:22
16 with the NRC. So we're satisfied the four canisters are
17 safe to perform all their safety functions in storage.
18 No limitation.

19 The other thing, these -- these designs are
20 robust, and there's a lot of margin. Those canisters are 19:02:35
21 licensed to load -- and I'll give you a technical term --
22 to put enough fuel in there that you could have 35
23 kilowatts of heat. We only loaded them to 28. So we've
24 got a lot of margin -- okay -- in the thermal analysis.

25 So, again, as I look at this, I say okay. I -- 19:02:53

1 you know, I have every indication they're acceptable.

2 There's no issue, but what if I missed something?

3 So then I look, okay. What if some of the
4 helium flow is restricted? Well, radiative heat transfer
5 is sufficient at the lower heat loads. I don't even need 19:03:04
6 the helium circulation. In fact, when these are shipped
7 someday, they're horizontal. There is no helium
8 circulation. So there's a lot of robustness and margin
9 in the design.

10 So we've concluded, with Holtec, with our 19:03:18
11 review, a third-party review, that the canisters are safe
12 in storage. We'll continue the review to make sure
13 they're safe for transport because that's important. We
14 want transportable gas, and by God, they'll be
15 transportable. 19:03:31

16 I've looked initially at the HI-STAR 190
17 licensing. There's plenty of margin there. So these
18 canisters, we'll deal with over time, and we'll keep the
19 Panel and the public informed. But we are satisfied that
20 they are safe today. 19:03:43

21 CHAIRMAN DR. VICTOR: I'm sure people are going
22 to want to read more --

23 MR. PALMISANO: Right.

24 CHAIRMAN DR. VICTOR: -- about this and also get
25 an update at the next meeting and beyond as to how 19:03:47

1 exactly the fault analysis is done.

2 MR. PALMISANO: Right.

3 CHAIRMAN DR. VICTOR: Because, I mean, there's
4 redundancies build in these systems, but people also want
5 to know how we're confident the redundancy is the right 19:03:54
6 redundancy.

7 MR. PALMISANO: Right.

8 CHAIRMAN DR. VICTOR: Ted Quinn.

9 MR. PALMISANO: And because this is emerging,
10 there will be more information coming out over time from 19:04:01
11 Holtec as well as us --

12 CHAIRMAN DR. VICTOR: I appreciate -- I
13 appreciate you sharing this with us, because this has
14 been -- I've seen some coverage of it over the last few
15 days. And I think it's really important that whenever 19:04:13
16 something is emerging, that we know --

17 MR. PALMISANO: Right.

18 CHAIRMAN DR. VICTOR: -- everybody knows about
19 it as quickly as possible.

20 MR. PALMISANO: Yeah. And I elected to the 19:04:18
21 meeting coming right up, that this was the best way to
22 talk about it.

23 CHAIRMAN DR. VICTOR: Ted Quinn.

24 MR. QUINN: Yeah. I share David's position
25 on -- on hearing more about it as ISFSI position. 19:04:25

1 But first, does the shim have only a vertical
2 component to -- to spacing on the side of the cask, or
3 does it also have a bottom-spacing role, horizontal?

4 MR. PALMISANO: Well, first of all, you know,
5 the shim itself, as I mentioned, looking at my diagram -- 19:04:42

6 MR. QUINN: This --

7 MR. PALMISANO: -- here, completes the
8 circumstance of the internal assembly, provides lateral
9 support --

10 MR. QUINN: Yeah. 19:04:51

11 MR. PALMISANO: -- and then provides the flow
12 channel for helium. So what's important at the bottom
13 from the shim is either -- the helium, is either the
14 cutout of the older design or the stand -- or the pins
15 that stand it off about four inches in the new design. 19:05:02

16 MR. QUINN: Okay. And the second question is
17 really important, is have Holtec take responsibility;
18 right?

19 MR. PALMISANO: Yes.

20 MR. QUINN: Like by you -- 19:05:12

21 MR. PALMISANO: They are taking responsibility.
22 This is all their responsibility. They have stepped up,
23 quite frankly, as well as I could have expected, to say
24 we own this. This is our responsibility.

25 When I put these remaining 39 on hold, I told 19:05:21

1 them you need to tell me how you're going to remediate
2 this, and they came back and said we want to go back to
3 the older design.

4 CHAIRMAN DR. VICTOR: People are going to want
5 to know about these four canisters. Why not take eight 19:05:32
6 or ten days and move them back into the pool, and unload
7 them and reload them? Help us understand. I know, it's
8 early days.

9 MR. PALMISANO: Sure.

10 CHAIRMAN DR. VICTOR: Help us understand what 19:05:45
11 the logic process is going to be there.

12 MR. PALMISANO: Yeah. And let me just --
13 because I faced this issue back in the mid '90s at the
14 Palisades Nuclear Plant with a loaded canister that had a
15 potential weld defect and got into this very discussion. 19:05:58

16 So nobody has unloaded a commercial canister,
17 either a bolted cask or a welded cask or canister. Okay.
18 It is possible. What you would do is basically have a
19 mechanism, either to do it in a fuel pool or do it in a
20 dry transfer facility. It's possible either way. 19:06:15

21 You would take the canister back in. And the
22 first thing you would do is reconnect the valves and find
23 a way to purge the helium and refill its hole with water.
24 Okay.

25 The biggest technical issue that we've looked at 19:06:29

1 in the industry over the many years -- not just related
2 to SONGS -- is the thermal transient to actually
3 reintroduce water into a -- let's say a canister with hot
4 fuel, 200-300 degrees C. And the thermal transient that
5 you put the fuel through. Okay. 19:06:44

6 So once you get it reflooded, cooled down, you
7 would then put that similar machine on, grind out the
8 weld, take the lid off. That's just the mechanics.
9 That's certainly doable.

10 The real challenge as we would understand it 19:06:54
11 today, and nobody has had to do it yet, is the reflood.
12 Certainly, technically possible. What I would tell you
13 is just I was back in Washington with the NRC last week,
14 if you were just to brainstorm, this would probably be a
15 two- to three-year project to develop the techniques, 19:07:09
16 pile up the techniques. The NRC would want to have
17 explicit approval on this because of the radiological
18 hazards.

19 CHAIRMAN DR. VICTOR: To the workers?

20 MR. PALMISANO: Well, to the workers, yeah. 19:07:20

21 So when you think about this, you have a
22 canister that has intact fuel rods inside of a sealed
23 canister. This pin problem doesn't affect the canister
24 itself. Okay. So you've got that condition.

25 You've got to weigh that condition -- if this 19:07:34

1 pin were to have any effect, which it doesn't in storage
2 and likely won't in transportation, is it worth the risk
3 then of damaging the fuel rods in an unloading process?

4 CHAIRMAN DR. VICTOR: So I see Martha and Steve
5 Swartz have questions on that. 19:07:47

6 MR. PALMISANO: Yeah.

7 CHAIRMAN DR. VICTOR: And I want to make sure
8 that, even though we're a little over time, I want to
9 make sure that we have time to at least give a survey of
10 where we are on the reef. 19:07:53

11 MR. PALMISANO: Yeah. Thank you.

12 MS. MCNICHOLAS: Martha McNicholas of Capistrano
13 Unified.

14 From what I can see on the design, you've had --
15 you have one pin break. And it looks like each corner, 19:08:01
16 looks like it has, maybe, five pins?

17 MR. PALMISANO: No. They either have two or
18 three.

19 MS. MCNICHOLAS: Okay. On the new design I'm
20 looking at, there's two -- two tubes, and they each 19:08:12
21 have --

22 MR. PALMISANO: Yeah. So basically, if you look
23 at the top of the design, those are two shims next to
24 each other.

25 MS. MCNICHOLAS: Right. 19:08:24

1 MR. PALMISANO: And each would have three pins.
2 The graphic doesn't show it very well.

3 MS. MCNICHOLAS: Okay. But --

4 MR. PALMISANO: If you look at the photo down
5 below, you see three pins. 19:08:29

6 MS. MCNICHOLAS: Okay. So you've got six pins
7 on there, and those -- there's four of those around to
8 make up your circumference.

9 MR. PALMISANO: There's 32 shims around the
10 circumference. 19:08:38

11 MS. MCNICHOLAS: Okay. So there's 32 times 6,
12 roughly 180 pins.

13 MR. PALMISANO: So let me get -- there's
14 actually 88 pins. Let me give you some confusing
15 numbers. 19:08:45

16 MS. MCNICHOLAS: Okay.

17 MR. PALMISANO: Some of the shims are solid;
18 some are hollow. The solid ones have two pins; the
19 hollow ones have three.

20 MS. MCNICHOLAS: Okay. I'm just thinking 19:08:50
21 numbers of pins --

22 MR. PALMISANO: Right.

23 MS. MCNICHOLAS: -- and you have one broken one
24 and --

25 MR. PALMISANO: We've found one broken one. 19:08:55

1 MS. MCNICHOLAS: Okay. So to have any comprise
2 of the helium ventilation, it really would take a lot
3 more than one broken pin.

4 MR. PALMISANO: Yeah. Now, Holtec is doing
5 inspections back in the factory and onsite with a very 19:09:09
6 sophisticated camera on a 20-foot-long device, that has a
7 right angle. And they're finding some bent pins. Okay.

8 MS. MCNICHOLAS: Okay.

9 MR. PALMISANO: So this is where the evaluation
10 will continue. This is why I segregated these 39, and 19:09:20
11 we're not going to use them.

12 MS. MCNICHOLAS: Right. Understood.

13 MR. PALMISANO: So that's --

14 MS. MCNICHOLAS: I'm just thinking from a
15 failure analysis point of view -- 19:09:28

16 MR. PALMISANO: Yeah. From a failure
17 analysis -- so again --

18 MS. MCNICHOLAS: -- what happens if -- yeah.

19 MR. PALMISANO: So you've got to say if one shim
20 were to be fully ceded where it blocks helium flow, 19:09:33
21 you've got many other shims. And again, in the worst
22 case, I could turn off all the helium flow. The canister
23 still radiates enough heat that it cools the fuel
24 effectively.

25 MS. MCNICHOLAS: Right. 19:09:46

1 MR. PALMISANO: This is where our lower heat
2 load comes in to play.

3 MS. MCNICHOLAS: Right.

4 CHAIRMAN DR. VICTOR: Can I just -- go ahead.

5 MS. MCNICHOLAS: You still have 87 other 19:09:51
6 shims --

7 MR. PALMISANO: Right. Yeah.

8 MS. MCNICHOLAS: -- to do that job, even if
9 one --

10 MR. PALMISANO: Depending on what you want to 19:09:56
11 assume.

12 MS. MCNICHOLAS: Yeah. Okay. All right. It's
13 just -- I'm trying to figure out what --

14 MR. PALMISANO: Yeah.

15 MS. MCNICHOLAS: -- would happen. Thank you. 19:10:02

16 CHAIRMAN DR. VICTOR: Can I just say that one of
17 the things that would be helpful for the
18 technically-oriented folks is to understand, if there
19 were damage or -- or breakage on one or more pins, what
20 would be detectable in terms of the change of temperature 19:10:15
21 profile in the canister? Because then that would be a
22 way to monitor the canister.

23 So I don't propose we answer that right now.
24 But just part -- it's part of the ongoing stewardship of
25 this issue. People are going to want to understand how 19:10:27

1 we know what the conditions --

2 MR. PALMISANO: Right.

3 CHAIRMAN DR. VICTOR: -- are on the inside. And
4 one of the ways to know is the thermal profile.

5 MR. PALMISANO: And what I propose, Holtec has 19:10:34
6 some work to do to gather the full picture and understand
7 the cause and the effect. We have to review their work
8 and have a third party -- I'll be glad to talk about that
9 in some depth -- and if we want to hold a special
10 session. 19:10:47

11 CHAIRMAN DR. VICTOR: Yeah. I think so. And --
12 because, I mean, the thermal load from the fuel assembly
13 is very well characterized.

14 MR. PALMISANO: Right.

15 CHAIRMAN DR. VICTOR: Okay. Steve Swartz is the 19:10:54
16 last comment on this. And I -- we can't let the
17 environment keep getting pushed aside.

18 MR. PALMISANO: Thank you. Yeah.

19 CHAIRMAN DR. VICTOR: And we're going to talk
20 about the reef before we have a break. 19:10:59

21 MR. SWARTZ: So I heard you say a number of
22 times, that you're figuring about what to do with the
23 four canisters -- four canisters that are full.

24 MR. PALMISANO: Well, we concluded that they're
25 safe in storage. 19:11:10

1 (Simultaneous talking.)

2 MR. SWARTZ: -- trying to figure out what to
3 do -- why is it your problem? Why isn't it Holtec's
4 problem? I would think it would be their problem to deal
5 with those -- those four units where we have the 19:11:19
6 defectable new design, and that they have to come up with
7 the solution of how to correct it.

8 MR. PALMISANO: So commercially, it is Holtec's
9 responsibility; however, I'm not going to stand up and
10 tell you it's Holtec's problem. It is our problem. 19:11:30
11 Okay. We're the licensee. It's our spent fuel. We're
12 responsible for it. So ultimately, we're responsible for
13 it.

14 Just to be clear, these four canisters have been
15 reviewed. They are acceptable in storage. They've 19:11:41
16 performed all their safety functions. Okay. And even
17 assuming pins are damaged, okay, there's plenty of margin
18 in here. And I'll be glad to elaborate on that further.

19 Holtec owes us some answers on transportation.
20 I'm personally confident that will work out. But 19:11:57
21 ultimately, if there's anything to be done with these
22 four, Holtec is responsible. But we're the ones you
23 should look to for that responsibility.

24 CHAIRMAN DR. VICTOR: Okay. Thank you very much
25 for that. I think we have a nomination for which 19:12:08

1 canisters are the first to go when the Holtec facility --

2 MR. PALMISANO: So --

3 CHAIRMAN DR. VICTOR: -- opens in New Mexico.

4 MR. PALMISANO: So we'll go onto the reef. Just

5 let me recap. So we have four canisters of this design 19:12:17

6 that are loaded. No more of this design will be loaded.

7 The fifth one being completed this week is of the

8 original design. All the remaining will be of the

9 original design.

10 CHAIRMAN DR. VICTOR: Okay. Thank you. Let's 19:12:29

11 talk about -- let's get an update on the reef --

12 MR. PALMISANO: So real quickly, we've agreed to

13 expand --

14 CHAIRMAN DR. VICTOR: Excuse me. Excuse me,

15 Gary. 19:12:36

16 MR. HEADRICK: Just --

17 CHAIRMAN DR. VICTOR: No.

18 MR. HEADRICK: -- respectfully, I'm just asking

19 if we postpone this, so we have enough public comments?

20 CHAIRMAN DR. VICTOR: We're going to have -- we 19:12:41

21 will make sure there's enough public comments. We always

22 do, and --

23 MR. HEADRICK: No. We run out of time

24 sometimes.

25 CHAIRMAN DR. VICTOR: No. We've never, 19:12:47

1 actually, run out of time. We've always --

2 MR. HEADRICK: 18 people didn't speak at one
3 meeting.

4 CHAIRMAN DR. VICTOR: We spent more than an hour
5 on the schedule. Okay, Gary? We're -- a lot of people 19:12:55
6 care about the reef, and so they want to get a little bit
7 of an update about the reef. So could we let Tom have
8 the floor --

9 MR. STETSON: Okay. I'll keep this very brief.

10 MR. HEADRICK: It's just a request. 19:13:04

11 MR. PALMISANO: Thank you. I'll keep this very
12 brief.

13 So the reef, we've agreed to expand the reef. I
14 won't go over all the dates, that's in the slide deck.
15 It's going to basically double the size. The red is the 19:13:13
16 existing reef. This is the part that's being expanded.
17 This project is underway.

18 I'm just showing you some still shots here.
19 This was -- you know, rock again. It's largely from
20 Catalina Island. An underwater shot of the rock after 19:13:28
21 it's initially been placed. You can see some shots a
22 diver around some of the kelp that has grown up on the
23 reef.

24 Real quickly, this is a view of the top of the
25 existing reef, where you can see the kelp bed. And I've 19:13:40

1 got a video, but in the interest of time -- it's about 90
2 seconds, but I can skip that.

3 CHAIRMAN DR. VICTOR: Let's just see if there
4 are questions about the reef. And I just want to put one
5 to you which is, when we -- a year or two ago -- had an 19:13:52
6 update on how well the artificial reef was performing,
7 there were real questions about whether the artificial
8 reef was generating enough biodiversity and biomass.

9 Is the thinking that now you're -- because
10 you're filling in more of the reef with more artificial 19:14:06
11 reef, it's going to perform better ecologically?

12 MR. PALMISANO: Yeah. I didn't bring in all the
13 data tables. It met most performance standards. There
14 were a couple it did not meet, which is why we agreed to
15 expand it. 19:14:18

16 CHAIRMAN DR. VICTOR: Okay.

17 MR. PALMISANO: So, again, I can bring all that
18 data back in a future meeting, but I did not bring that
19 to this one.

20 CHAIRMAN DR. VICTOR: Okay. Great. Excellent. 19:14:24
21 Thank you very much. Any other comments? Garry Brown.

22 MR. BROWN: David, I would like to have a more
23 discussion on the reef at some point in time. But you
24 know, from -- we've been doing this now for, like, four
25 years. And the first year or so, we got into several -- 19:14:37

1 several meetings on defense in depth.

2 CHAIRMAN DR. VICTOR: Right.

3 MR. BROWN: And you know, everything at that
4 point in time was hypothetical. And that was the plan.

5 We're going to do this. A lot of progress has been made, 19:14:51
6 a lot more is going to be done in the next 12 months.

7 Maybe -- and I would like to see -- is having a
8 whole 'nother meeting devoted to revisiting defense in
9 depth. And we had a discussion several years ago
10 about -- from Donna Boston about different law 19:15:11
11 enforcement and different people, if there's a problem or
12 issue here.

13 But you know, I'm sure a lot of that's been
14 forgotten. Times have changed. There's new
15 technologies. Our plans have changed now. Maybe we 19:15:29
16 should revisit defense in depth.

17 CHAIRMAN DR. VICTOR: Yeah. I think that's a
18 good idea. And I think -- we've said to Edison and the
19 community, we're going to do this, roughly, every year,
20 have a fresh look at this. We need to do this again. So 19:15:42
21 let's make sure that happens.

22 And I think, just to underscore something I
23 don't know if everybody agrees with -- we've got to have
24 the defense of depth conversation about it in plain
25 English. Because I think, quite often, all the technical 19:15:51

1 stuff gets very confusing.

2 We need to help us understand, help the public
3 understand what's actually happening, what's real, what
4 are technologies that are still being developed, and put
5 all that together in context. 19:16:04

6 Okay. Thank you very much. Anything else?
7 Thank you, Garry.

8 Okay. We're going to take a 5-minute break, and
9 then we're going to resume with the public comment
10 period. 19:16:13

11 (Break in the proceedings.)

12 CHAIRMAN DR. VICTOR: Okay. Let's get settled.

13 First on the list is Gene Stone. Gene Stone?
14 There you are, Gene. Come on up.

15 Let's get the rest of the Panel up here. 19:21:37

16 Okay. So we have 105 minutes of public comments
17 signed up for already on the list for 60-minute slots.

18 So we're going to figure out how to make that work. But
19 first on the list is Gene Stone, who told me he's been
20 here since 3:00 this afternoon, and is therefore, first 19:22:24
21 on the list.

22 Gene Stone, the floor is yours.

23 MR. STONE: Thank you very much.

24 AS the CEP members know -- most of you, I
25 hope -- I sent you an e-mail. And David probably shared 19:22:34

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1 it out as well.

2 But I'm here to offer and negotiate with
3 California Edison for -- can you bring that up here? The
4 radiation monitor -- to introduce the idea of having
5 realtime radiation monitoring to the public, 24/7, which 19:22:54
6 we're already doing at Sanonofre.com.

7 Now, I've had conversations with a few people,
8 Tom and others, that we've talked about this idea. But
9 Dan Stetson said it the best, why wouldn't we want 24/7
10 radiation monitoring to the public, because it's just so 19:23:17
11 simple? And as you mentioned, defense in depth, I really
12 want to be in part of that conversation.

13 So here, thanks to Darren McClure (phonetic), is
14 this is the safe cask --

15 THE REPORTER: Can you speak up, sir? Sir, you 19:23:45
16 need to speak up. I'm trying to write what you're here
17 for.

18 MEMBER OF THE PUBLIC: We can't hear you.

19 MR. STONE: This is the Safe Cask Monitor. It
20 is solar operating. It has a battery, so it will 19:23:45
21 transmit at night. It transmits 24/7/365. Not only is
22 this a radiation monitor with full spectrum, it's an air
23 quality device as well.

24 This particular model was used by the State of
25 California in the Ventura fires. And we just have to -- 19:24:06

1 Darren just happened to call Safe Cask about getting one
2 of these devices for us. And they said, "Well, if you
3 come up to LA right now, I've got one because I just got
4 back from the fire in Ventura County where this was being
5 used." 19:24:22

6 And he gave us this device. And it's a beta
7 device. It goes out over the telephone system on the
8 wireless device. And it will communicate, and you can
9 see it on Darren's website.

10 The other question that I have by many people 19:24:42
11 tonight was how many places in California are being
12 monitored by Safe Cask? So I don't know if you can see
13 those arrows. But there's several -- several places that
14 are being monitored already by Safe Cask.

15 Safe Cask is recognized by the IAEA, the ENDC -- 19:24:58
16 pardon me, that might be SC -- so another monitoring
17 group in the government.

18 The thing that happened in Fukushima is that no
19 one had any real information. TEPCO was lying. The
20 government was lying. The thing about realtime 19:25:18
21 monitoring is that it gives the power to the public. And
22 the best power that came at Fukushima is the power to
23 people to understand where the radiation was happening.

24 Now, God forbid we ever have a nuclear accident.
25 But the people deserve radiation monitoring. This is the 19:25:41

1 first step in real defense in depth, which we've talked
2 about many of times.

3 If California Edison chooses not to do this, we
4 continue -- several of the environmental groups, we plan
5 to keep doing this ourselves. 19:26:03

6 CHAIRMAN DR. VICTOR: Okay. Thank you.

7 MR. STONE: It is our hope that you will join
8 with us, and the cities themselves and other
9 environmental groups will get involved in this. And I
10 know my time is up. 19:26:13

11 I apologize, but one other thing.

12 CHAIRMAN DR. VICTOR: Briefly.

13 MR. STONE: This is not the time to have a full
14 discussion about this. So I suggest, as we did before
15 when I was on the CEP panel, that we have a meeting -- a 19:26:24
16 special meeting, and we bring Sean Wagner here from Japan
17 to talk about all the technical details of this.

18 Thank you very much.

19 CHAIRMAN DR. VICTOR: Thank you very much.

20 Next is Charlie Sommet and then Charles Langley. 19:26:38
21 Charles Sommet.

22 MR. SOMMER: Sommer.

23 CHAIRMAN DR. VICTOR: Sommer?

24 MR. SOMMER: Yeah. Sommer. Charles Sommer.

25 Thank you. You're a distinguished group. And 19:26:48

1 I -- this is the first meeting I've attended like this.

2 And I appreciate all the energy everybody's put in and to
3 bring the information current. I really appreciate that.

4 Being a long-term resident of San Clemente, when
5 the nuclear energy alarm system goes off as a practice, 19:27:04
6 the joke around San Clemente is the excavation plan is to
7 bend over and kiss your ass goodbye if there's an
8 eruption or leak.

9 For me, it is a joke. But it's living that
10 close to -- the elephant in the room that hasn't been 19:27:27
11 really addressed tonight, is it's an earthquake zone.
12 There's a fault line underneath the area. It's an
13 accident waiting to happen.

14 If the canisters were built in more smaller
15 containers and could quickly be moved from the site, it 19:27:51
16 would be happening a lot better. I'm too late for that
17 issue. But I'm not too late to alarm the public.

18 And I know some of the first alert employees are
19 concerned because they're on a high-alert level because
20 we know a nuclear -- or earthquake is going to happen. 19:28:15
21 And it's coming to sooner than when he may think.

22 Thank you.

23 CHAIRMAN DR. VICTOR: Thank you for your
24 comment.

25 Charles Langley and then Nina Babiarz. 19:28:32

1 MR. LANGLEY: Hi, I'm Charles Langley with
2 Public Watchdogs. And I'd just like to note that once
3 again, County Supervisor Bill Horn is absent from this
4 process. And it would be nice if our representatives
5 from San Diego could -- from San Diego County would be 19:28:54
6 here and attend.

7 I would like to talk a little bit about the
8 budget for decommissioning, which my understanding is, is
9 that there's \$4.2 billion that's been paid over the years
10 in budget to basically decommission San Onofre. 19:29:11

11 And I think one of the most valuable things we
12 could do with a tiny fraction, a minimal amount, would be
13 to accept Gene Stone's offer of independent monitoring of
14 the spent fuel storage installation.

15 It would be great if we saw independent Geiger 19:29:35
16 counters automatically located on the nuclear waste dump
17 at San Onofre, one on every corner.

18 There have been situations in the past where
19 there have been leaks of radiation from San Onofre, and
20 Edison did not publicly acknowledge that there was a leak 19:29:55
21 until long after it happened.

22 And I think it would give the public a great
23 sense of trust and security and bolster our confidence in
24 the safety of this process if we had realtime live
25 radiation monitoring. 19:30:13

1 It's worked around Fukushima. It's been a
2 blessing to the people in Japan. I think it would be a
3 real blessing and a really great of demonstration of
4 Southern California Edison's faith in the safety of their
5 system to deploy live radiation monitoring. 19:30:29

6 The other issue I'd like to talk about is
7 perhaps -- is a potential topic in future Community
8 Engagement Panel meetings, that would be the issue of
9 emergency planning and emergency response.

10 In the event there was an incident, an accident 19:30:44
11 at San Onofre, what is the plan? Can we evacuate? Is
12 there an evacuation plan? How would we deal with it?

13 And I was pleased to hear Donna Boston this
14 evening talking about her community is trained. That
15 they actually have Geiger counters and now how to read 19:31:09
16 them. I think that's critically important, and I was
17 glad to hear it.

18 So thank you very much.

19 CHAIRMAN DR. VICTOR: Thank you.

20 Nina Babiarz and then Vinaya Prema. 19:31:21

21 MS. BABIARZ: Good evening.

22 My name is Nina Babiarz. I'm a board member of
23 Public Watchdogs.

24 Almost immediately following the 2012 abrupt
25 closure of SONGS due to a radiation leak, Tom Palmisano 19:31:36

1 started the Emergency Planning Exemption Application
2 Process, using the mantra throughout the documentation,
3 "The plant is closed. Risk is low."

4 The Emergency Planning Exemptions were granted,
5 and 24 hours later, the Emergency Plan was changed. The 19:31:55
6 Nuclear Regulatory Commission then directed FEMA.
7 Because, of course, the plant is closed, and the risk is
8 low, that "if a radiological incident should occur, then
9 FEMA is to stand down."

10 FEMA then was -- gave that same direction to 19:32:13
11 FEMA Region 9, the Office of Emergency Services, and
12 that's why we've got San Diego and Orange County
13 emergency services dealing with an interjurisdictional
14 plan that Donna Boston is talking about.

15 So, Donna, if that's the case, why are you not 19:32:30
16 bringing that plan to this meeting for the public's
17 awareness and reviewing the details? Because after all,
18 the public has a right to know.

19 Isn't it this CEP the perfect forum for
20 something of that nature? And I would like to ask 19:32:47
21 Mr. Horn, but, you know, Mr. Horn, once again, is not
22 here.

23 I'm not even going to bother to talk about Tom
24 Palmisano accelerating the license amendment of burying
25 the waste from 2018 second quarter to fourth quarter '17. 19:33:08

1 But I would like to know why Edison had to
2 exempt its liability insurance if the risk is so low? If
3 the risk is so low, why would Edison go to such lengths
4 to reduce their own liability before starting the burial
5 process and shifting that liability to the public? 19:33:34

6 So now Edison has an opportunity. And you have
7 an opportunity to do the right thing and responsibility
8 to clean up the mess that you've made here in our
9 community. And it includes independent radiation
10 monitoring. 19:33:50

11 Edison, CEP may not be a decision-making body.
12 But this community is. And we're going to continue to do
13 independent radiation monitoring because history is
14 watching us all.

15 And I do have a postscript for you, 19:34:07
16 Mr. Palmisano, and that is that the vast beauty of the
17 ocean was not created to hide your engineering blunders
18 and greed.

19 CHAIRMAN DR. VICTOR: Vinaya Prema and then Ayla
20 Breezy. 19:34:29

21 MS. PREMA: Hello, my name is Viraja Prema. I'm
22 a --

23 CHAIRMAN DR. VICTOR: I'm very sorry. I miss --
24 I misread your beautiful handwriting here.

25 MS. PREMA: That's okay. No problem. 19:34:43

1 I'm a mother and a concerned citizen. I'm very
2 much questioning the safety of this plan.

3 The transportable casks is a thing that many of
4 the people in the public are questioning with it been
5 five-eighths of an inch thick. And how that could be 19:35:00
6 potentially in the ground here for an undisclosed amount
7 of time, and then be viable for transportation.

8 The monitoring of the constant radioactivity
9 level is something that I think we all would benefit
10 from, but in particular, the first responders as well. 19:35:20

11 The incident in Fukushima where the responders
12 were acting accordingly to what would be normal in an
13 earthquake or tsunami, and then they were halted because
14 of the radiation issues. They weren't able to respond
15 and many died as a result. 19:35:38

16 In Belgium they are currently issuing iodine
17 pills to all of their citizens, 11 million, in proactive
18 care of their citizens in case there's an event in their
19 dilapidating nuclear site.

20 I'm curious, what are we doing for the children 19:36:02
21 here in these counties with radioactive nuclear fuel
22 being put on a fault line and a tsunami zone, in the
23 middle of 8.5 million people on the ocean? What are you
24 going to do proactively? What could be done?

25 The main thing seems so be halting the current 19:36:16

1 plans until it could be moved to a place with more
2 safety. I even heard Tom Palmisano this evening say that
3 after the decommissioning of the structures is done, that
4 the waste will stay there onsite after 2020. When will
5 it be moved? I guess we don't know because we're waiting 19:36:41
6 for legislation and various things to happen.

7 I don't know what the safest thing is, but with
8 the current plan, there's so many questions. I mean, my
9 children are at stake, our ocean is at stake.

10 What about the seawall? It's the dilapidating. 19:36:57
11 It's becoming dilapidated. And I know that eventually
12 returning it back to its original condition is the
13 intent, but what about currently when the waste is stored
14 there?

15 What about if a tsunami happens? It's not an 19:37:11
16 acceptable height to even withstand a normal tsunami zone
17 safety level. I believe it's like 35 feet or something,
18 and it's currently 25 feet. I might be mistaken.

19 What about constructing a safer seawall if it
20 can be a continuation of the fuel being onsite? 19:37:32

21 CHAIRMAN DR. VICTOR: Great. Thank you very
22 much for your comments.

23 Ayla Breezy and Raina -- I think it's De Far.

24 And just while Ayla Breezy is coming up, we're
25 collecting comments. There's going to be responses at 19:37:48

1 the end. There are going to be some areas where we've
2 covered some topics at other meetings, and so we're going
3 to put some pointers to that. So those of you who are
4 new to this process, that's why we're not responding to
5 each comment each time. 19:37:58

6 The floor is yours.

7 MS. BREEZY: All right. Thank you, Chairman and
8 the Panel.

9 I just wanted to thank you so much for hosting
10 these, and I realize you've done a lot of work these last 19:38:04
11 four years. And I appreciate your transparency and
12 looking to get to the bottom of the issue and asking
13 tough questions.

14 And I am like Viraja, in that I'm a mother of
15 two young kids. And I have been looking into this matter 19:38:20
16 for a while. And I recently hosted an event on the 7th
17 anniversary of Fukushima, where the public came together
18 to see the similarities between what we're experiencing
19 here, and what happened there, and how can we learn from
20 what happened, and what can we do? 19:38:37

21 And like Viraja said, I'm wondering about the
22 seawall. Can we make it larger? It seems like if water
23 got into the casks, that there would be an issue with the
24 venting. Or if it hit the electrical system, would it
25 take down the grid for electricity to San Diego and LA? 19:38:53

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1 I support the live radiation monitoring system,
2 and I support the HELMS petition moving into the
3 different casks that are thicker. And what Nina said
4 about FEMA and the Emergency Plan being changed, that
5 FEMA is no longer required to review, monitor, and report 19:39:13
6 activity associated with offsite radiological emergency
7 planning and preparedness, and that concerns me.

8 So I'm just wondering if you could address that?

9 CHAIRMAN DR. VICTOR: Thank you very much.

10 Raina De Lear, help me with your last name -- 19:39:27
11 and then Rich Van Every.

12 MS. DE LEAR: It's actually Raina De Lear.

13 CHAIRMAN DR. VICTOR: Raina De Lear. That's the
14 worst performance I've done so far, so my apologies.

15 MS. DE LEAR: No worries. 19:39:42

16 So this is my first meeting, and I put my name
17 on the list because I know that everyone here is so
18 deeply concerned about how do we clean up a mess that
19 started many years ago?

20 And then how do we have the eyes that can look 19:40:02
21 into the future and see what does our civilization look
22 like many years from now?

23 Ten thousand years ago, there were these big
24 elephants walking around. By the time this plutonium and
25 this uranium, the half-life, decays, what kind of an 19:40:22

1 environment are we going to have?

2 So what I'm understanding is that everyone here
3 is under a tremendous pressure to look forward as they're
4 making these decisions. So somehow, some way I want to
5 acknowledge that there's something greater that holds us 19:40:44
6 all, as we're in this.

7 And I just wanted to offer my deep appreciation
8 for all of the work that the Panel is doing, that the
9 public is doing, that the Utilities are doing -- that
10 everyone is doing to solve this challenge. 19:41:04

11 Thank you.

12 CHAIRMAN DR. VICTOR: Thank you very much for
13 your comment.

14 Rich Van Every and then Ray Lutz.

15 MR. VAN EVERY: Hello, everyone. 19:41:19

16 My name is Rich Van Every. I'm a native of
17 North County San Diego, and I'm an active surfer,
18 mountain biker, and I just love nature. So I'm here
19 because I'm concerned about the safety for the most part.
20 And as a filmmaker, I'm really interested in the future 19:41:34
21 of energy, and the pros and cons of all the different
22 energy sources we're facing today.

23 So as part of my research and inquiry, I'm just
24 seeing this amazing opportunity for Edison to stand up
25 and come forward as, I believe, you all are asking them 19:41:49

1 to do, into full transparency and authenticity about all
2 these issues. And to really just take that into a place
3 where they're setting a new standard to represent how
4 corporations can be held accountable, and really think
5 about what forward-benefit business model really means, 19:42:07
6 as far as always considering unintended consequences, you
7 know, effects on the environment, that's sort of thing.

8 I wanted to state my support for the HELMS
9 proposal. I also feel the seawall improvement is a great
10 idea. The emergency-readiness aspect of this is very 19:42:30
11 concerning to me. I'd like to see a lot more specific
12 measures done in that regard.

13 And I also feel that it's important that there's
14 some kind of spent fuel facility remaining on the
15 property, or a hot cell of some sort, while there's even 19:42:48
16 spent fuel on the property at all times. There should
17 always be some sort of safety backup plan. Apparently,
18 that's true in the functioning of a nuclear power plant.
19 There's always like a three or four system backup, and it
20 doesn't seem like there's really much of any backup 19:43:05
21 established at this point.

22 So thank you so much.

23 CHAIRMAN DR. VICTOR: Thank you very much for
24 your comment.

25 Ray Lutz and then Madge Torres. 19:43:13

1 MR. LUTZ: Hi. Good evening.

2 I'm Ray Lutz with Citizens Oversight. Thanks
3 for everybody coming and spending your time.

4 I've been -- got some news about the HELMS
5 proposal. This was accepted by the NRC on the 16th and 19:43:26
6 got past the first hurdle. And now it's been in the
7 federal register, I understand, as of today. So they're
8 going to have to wrestle with this in some fashion, which
9 I think is a good thing. Because it brings up a lot of
10 questions. 19:43:44

11 The key question is, we have canisters that have
12 a design life of 40 years, and yet the waste confidence
13 report -- the one they recently put out -- says that
14 these will remain onsite indefinitely, and that's okay.

15 Indefinitely is not 40 years. I hate to bust 19:43:58
16 the news to you. But indefinitely is a very long time.
17 And 40 years is relatively short compared to the life of
18 this stuff.

19 So HELMS is a criteria for evaluating systems.
20 It does include a recommendation for dual-wall canister 19:44:14
21 system. So that the next stage, it doesn't actually
22 affect San Onofre at this stage. But if we're unable to
23 move it, and we may want to think about employing
24 something like this. But this would affect the CIS --
25 Consolidated Interim Storage -- that we're hoping to 19:44:32

1 affect. Such that they will have the capability of
2 having a dual-wall canister.

3 We want it to be hardened, that the H, against
4 any kind of explosive attacks. Most of these are not --
5 if you have any kind of decent explosive, it would really 19:44:48
6 rip them apart.

7 We want the extended life. We're shooting for
8 1,000 years of with-maintenance and 300 years at no
9 maintenance. So if we have a technological dark age, we
10 would maybe be able to get back on our feet after 300 19:45:02
11 years, and then take care of this stuff again.

12 Local -- L is local, for move it away from the
13 water. We really don't want to have them sitting like we
14 have at San Onofre, so close to the water, and all these
15 nuclear plants are close to water. Except for Palos 19:45:21
16 Verdes, the only one in the world.

17 So local means we don't want to move it across
18 the country if we're just going to leave it on the
19 surface. It turns out the plan for Palos Verdes -- for
20 Yucca Mountain was to cool it actively with big fans for 19:45:32
21 150 years. That means it's left on the service. The air
22 is blowing through it. It doesn't give you any benefit.

23 That's what the S is, surface storage. We're
24 going to be faced with surface storage for the next 150
25 to 200 years, whether we like it or not. The fuel is 19:45:50

1 going to be too hot to put in.

2 And then M has been talked about a lot tonight,
3 monitored. This was brought up in the Blue Ribbon
4 Commission Report. Most of this fuel is not being
5 monitored. Why not have monitoring on every cask? They 19:46:03
6 talk about on the corners, I don't see any reports of
7 radiation coming off of these. We would like to see on
8 it on every canister. That should be 7/24 monitoring,
9 That's the M.

10 So join with us on HELMS. Sign on, you can make 19:46:16
11 comments on the NRC website. And please support it. Who
12 could be against this? I don't know who would.

13 CHAIRMAN DR. VICTOR: Thank you very much for
14 your comments.

15 Madge Torres and then Robert Pope. 19:46:27

16 MS. TORRES: My name is Madge Torres. I'm part
17 of the Citizens Oversight.

18 HELMS to me, I read the proposal, and it took a
19 few hours, but it was well worth it. And you can go on
20 citizenoversight.org, and you can look at it yourself. 19:46:46

21 It's not -- you don't have to be an engineer to
22 read it. But it as was very reassuring to me because I
23 felt that the future generations would have an
24 opportunity to live secure and free of radioactivity if
25 we employed HELMS. And one of the nice features about 19:47:05

1 it, because it does monitor in case there is a radiation
2 leak.

3 The way you can solve it is just to replace the
4 jacket. The jacket would enclose the radiation, and you
5 wouldn't have to damage or open the -- the Holtec 19:47:24
6 canister. You could continue to use the Holtec canister,
7 and just replace the jacket.

8 And you would be able to determine if it were
9 leaking remotely because that capability would be built
10 into it. So to me, that seems like a really good 19:47:48
11 solution to a problem that isn't really being solved with
12 the Holtec canisters all by themselves.

13 The other nice thing that I like about it is
14 that Holtec canisters might be pretty good for a number
15 of years. And I think they've lasted -- or they're 19:48:05
16 thought to last close to 20. So if we could get the
17 Holtec canisters moved in the next 20 years, it would be
18 possible that we could get them moved more easily.

19 If we put it in a larger cask, it would be more
20 difficult to move. But if we could move them as they are 19:48:28
21 with the planned -- I don't know the word, but it's the
22 buffering that would be used -- if you were to use that
23 the way it is planned and move it, and then put it in the
24 HELMS jackets once it got to the location where it would
25 be stored for many hundreds of years, I thought that's a 19:48:50

1 really nice solution to a very ungainly problem of moving
2 extremely heavy and large waste across the country.

3 And finally, I'd like to ask that you maintain
4 the cooling pools, even though some people say it's not
5 necessary, and we won't have a problem. Or we can solve 19:49:14
6 problems other ways. To me, it's very reassuring as a
7 member of the public to know that we could take the whole
8 Holtec canister and put it back in the water if we needed
9 to, until the last Holtec cask is gone.

10 Thank you. 19:49:35

11 CHAIRMAN DR. VICTOR: Thank you very much for
12 your comment.

13 Robert Pope and then Michelle Anderson.

14 MR. POPE: Robert Pope, Board Member, Public
15 Watchdogs. 19:49:42

16 Today I'm giving my time to an 11-year-old who
17 could not be here.

18 My name is Joey. I'm 11 years old. I smell
19 chocolate cake baking as my father lovingly tucks me in
20 bed. 19:49:53

21 As I burrow my head into the soft pillow, my mom
22 is baking in the kitchen, baking a cake to celebrate my
23 four-year-old sister's birthday, and to celebrate her own
24 birthday too.

25 I hear rattling pans as I drift off. In my 19:50:04

1 sleep, I'm beginning to hear something else. I hear a
2 distant roar getting louder. I hear glass break, a
3 shriek, and my bed is shaking.

4 Now, in a terrifying explosion, I'm cold, wet,
5 and flying, and everything -- everything just went dark. 19:50:18

6 All six of us, my family members, were killed in
7 an instant. Our home was pounded by thousands of tons of
8 rock and concrete, in a rush of billions of gallons of
9 water.

10 And the tragedy isn't over. A catastrophic 19:50:36
11 flood is scouring away more than 30 miles of land west of
12 here. Many towns are being destroyed, hundreds of people
13 are being killed. Over 400 people will be confirmed dead
14 by morning, and perhaps 1,000 will be missing forever.

15 My name is Joey. I lived in rural Los Angeles 19:50:55
16 in 1928. The body of my four-year-old little sister was
17 never found. What I didn't know and what my parents
18 didn't know was that the power company inspected the
19 hydroelectric power plant at the St. Frances Dam in the
20 last few weeks. 19:51:12

21 Mr. Mullholland saw water bleeding through the
22 bedrock and heard a deep pop in the mountain, evidence
23 that the St. Frances Dam was failing. Yet the power
24 company took no action to protect us. The power company
25 only took action that they believed provided them profit. 19:51:27

1 Why am I sharing this with you? Because I'm a
2 real voice from history. What do you know about history?
3 You know, history repeats itself; right? Now, I ask you,
4 are you and your family in the same position today as me
5 and my family were back in 1928? 19:51:45

6 Unlike me, you can take action today, and you
7 can change the course of your history. Take a look -- a
8 good look at what your energy companies and your power
9 utilities are doing today. Identify the practices that
10 threaten your health, that threaten your lives. Watch 19:52:02
11 the movie Atomic Homefront, cause a different outcome.

12 Now, I have two questions with my last 30
13 seconds. Secretary Kern, question regarding the geology
14 presentation you hosted at Oceanside City Hall. You were
15 announced on camera that you would allow Edison expert, 19:52:21
16 Dr. Neal Driscoll, to answer questions regarding
17 San Onofre, but then you ended the meeting 20 minutes
18 early, not keeping your word. Why?

19 Dan Stetson, why is it that Edison Executive
20 Emanuel Camargo canceled the Public Watchdogs' test drive 19:52:38
21 of Scripps seismic model that was promised by Dr. Neal
22 Driscoll, a promise which you witnessed.

23 I would like those answers from those two people
24 that I asked to answer the questions.

25 Thank you. 19:52:54

1 CHAIRMAN DR. VICTOR: Thank you for your
2 comment.

3 Michelle Anderson and Ken Berg.

4 MS. ANDERSON: Thank you for taking the time to
5 listen to all of our public comments. I've been coming 19:53:03
6 here for quite some time. And looking at all of your
7 faces and really connecting -- what I feel is connecting
8 with each of you, I'm always looking into your eyes and
9 wondering if you really, truly believe that we're doing
10 the safest thing possible. 19:53:20

11 I echo all of the comments of every person here.
12 Every person who has spoken today has made some very
13 valid points, that I hope you'll really take into
14 consideration when we move forward.

15 I am a co-host on Awakening Code Radio on 19:53:36
16 Laguna's FM radio station KX 93.5, and we've been
17 syndicated coast to coast. I just drove over 1,100 miles
18 to get here from Roswell, New Mexico where I was at a
19 speaking engagement. And I just hypothetically put
20 questions out to people that I came across and came in 19:53:55
21 contact with.

22 And there's, again, not one person that agrees
23 with what all of you on the Panel are posing as a safe
24 solution to this problem. And we all seem to agree that
25 we don't want the waste to be here. Everybody agrees to 19:54:13

1 that.

2 Where we seem to disagree is on the thickness of
3 the canisters that you've chosen. We're also -- we're
4 also in agreement, and I really stand behind what Gene
5 Stone is presenting before all of you -- that we should 19:54:32
6 have 24/7 monitoring of what levels of radioactive
7 radiation is coming about.

8 I really think that that's something we need to
9 support, that the community deserves to know. And I also
10 think it's very important that we know what our emergency 19:54:52
11 evacuation plan looks like. And that the community
12 members be apprised of this, so that we know.

13 We all own homes here. Most of you live in the
14 area, and you know a lot more than most of the rest of
15 the community. It still surprises me how many people 19:55:05
16 don't know what's going on. Even with all of your
17 outreach.

18 So please take that into consideration when
19 you're discussing what you're going to do. I know you've
20 already decided on the thickness of the canisters. 19:55:19

21 And we think that around the world, there --
22 everybody else is using thicker casks. So even though
23 you've already spent the money on these cans, it would
24 seem feasible to me, since you don't have another place
25 to put this, to really revisit that, and put safety 19:55:39

1 before profits.

2 Thank you.

3 CHAIRMAN DR. VICTOR: Thank you for your
4 comments.

5 Ken Berg and then Paul Rossano. 19:55:49

6 MR. BERG: I'm Ken Berg. My wife and I live in
7 Mission Viejo, 20 miles downwind from San Onofre.

8 For the last month and a half or so, I've been
9 concerned with the rulings given by a tribunal in San
10 Francisco, in which they insulted Edison with their 19:56:12
11 findings. And in turn, the costs and risks from that
12 decision will come down to us, the rate payers.

13 I would like to give you a comment on a couple
14 of them. The proposal itself has a non-disclosure shell
15 around it, which prevents access to data that would be -- 19:56:30
16 that will allow an informed vote on its disapproval.

17 They had scheduled meetings for April the 4th to
18 consider the proposed settlement. That meeting, I
19 understand, is being differed. I don't have a new date,
20 but I would urge everyone to watch that and take a chance 19:56:49
21 to disapprove this terrible settlement that the tribunal
22 has forced upon us.

23 Because it will increase cost for our power, it
24 will create a scrapyard of contaminated apparatus --
25 which Mr. Montana (phonetic) will have to look at. And 19:57:13

1 the \$4.4 billion that the rate payers have contributed
2 over the years to a reserve fund should not be used to
3 repair the work following -- from the failures of
4 Mitsubishi to do their job properly.

5 So I say all this -- it may sound a little wild 19:57:32
6 to some of those who haven't looked at what's going on
7 San Francisco.

8 But, Mr. Chairman, I would like to be that
9 somehow we could arrange a small meeting between myself
10 and you or any other members of the committee, leading to 19:57:44
11 a meeting with Edison officials themselves to have a look
12 at the situation and see what might be done to disapprove
13 the settlement, as it's called, and to create something
14 better for the residents and rate payers of this area.

15 Thank you. 19:58:04

16 CHAIRMAN DR. VICTOR: Thank you very much for
17 your comment.

18 Shannon -- I'm sorry. Paul Rossano and then
19 Shannon Garcia.

20 MR. ROSSANO: Good evening. Thank you so much 19:58:15
21 for your time, for your energy, for the work that you're
22 doing to protect the community.

23 It's my first meeting, and I really appreciate
24 what I've experienced here tonight, so my honest and
25 sincere thank you and acknowledgement for the work that 19:58:28

1 you're doing here.

2 Just a few things that I want to share. As a
3 concerned citizen and a resident of San Diego County, I
4 just want to let you know that I'm in full support of Ray
5 Lutz's HELMS proposal and just voice that as well. 19:58:41

6 And I also fully support for Gene Stone's
7 proposal for constant, independent radiation monitoring
8 in and around the facility. And I also want to voice
9 support for augmenting the seawall, thicker casks. You
10 have the money that is currently budgeted for this 19:59:01
11 project, would love to see some of that being used.
12 Especially since, you know, it is now we're not using
13 the -- I believe it was 29 or 39 left of the new
14 canisters -- the new design.

15 So it would be great to revisit that, if we're 19:59:18
16 not using those anyway because of the pins, to instead
17 have thicker canisters, double-wall canisters, that will
18 ultimately meet the standard and be viable for
19 transportation.

20 And also I'd love to just encourage full -- 19:59:31
21 continued full transparency from the Panel, from Edison
22 to the public, so that this way all of the -- all the
23 data, all the statics, all the facts are fully known on
24 an ongoing, realtime basis, including evacuation plans
25 for the public. 19:59:53

1 Thank you so much.

2 CHAIRMAN DR. VICTOR: Thank you very much for
3 your comment.

4 Shannon Garcia and then Ace Hoffman.

5 MS. GARCIA: Good evening. My name is 20:00:05
6 Dr. Shannon Garcia. I'm a Cardiff native, ocean lover,
7 avid body surfer, and swimmer. And I'm a third
8 generation local, and in the back row there are my
9 children, who are fourth generation locals.

10 I was raised on these beaches. My kids are 20:00:19
11 being raised on these beaches. And after learning about
12 Edison's plan for the storage of nuclear waste right next
13 to the beach in containers no thicker than a dime, I did
14 feel the urgent need to come and speak out.

15 This plan is enough to give Erin Brockovich 20:00:32
16 nightmares.

17 San Diegans pride themselves on our green touch
18 and our humble approach to nature, and we do love our
19 ocean. In this day and age, there's no way a nuclear
20 plant like this would ever get built on our beaches. 20:00:43

21 When this plant was launched back in the '50s,
22 nuclear energy was thought to be safe. But then Three
23 Mile Isle -- Island proved just 10 years later, disasters
24 at nuclear power plants are deadly, and they do impact
25 the environment for years. 20:00:57

1 When San Onofre came online, San Diego was not
2 as populated as it is now, and no one knew the dangers.
3 My grandparents had the house on the cliffs of Leucadia,
4 and as a child of the '70s, we surfed our local reefs.

5 There wasn't a whole lot of public knowledge 20:01:10
6 about the dangers of nuclear energy, nor was there any
7 idea about the fault lines that are just off shore. And
8 that information continues to be revealed to us to this
9 day by our local scientists.

10 Our local fault line, the Rose Canyon, has 20:01:23
11 produced at least two quakes in the five- to
12 six-magnitude range in recent centuries. And UCSD
13 Scripps Institute of Oceanography stated that this, along
14 with the Newport-Inglewood fault, is a single system no
15 more than four miles off shore that could produce up to a 20:01:36
16 7.3 quake. This, of course, would cause major damage,
17 but next to nuclear waste in flimsy containers,
18 catastrophic doesn't even cover it.

19 We've been assured that we're not in any danger
20 of a nuclear accident at San Onofre, extensively due to 20:01:50
21 the predictability of earthquakes. But earthquakes are
22 not predictable. The science still does not give us any
23 kind of adequate warning.

24 As the Fukushima disaster so tragically
25 demonstrated in 2011, our science can't give us enough 20:02:02

1 time to escape. Although we have an idea where an
2 earthquake is most likely to hit, we have no idea when it
3 will hit. Building codes do ensure that land structures
4 are built with specifications that can withstand
5 earthquakes. 20:02:16

6 And although Edison is apparently meeting the
7 regulatory specifications on these storage containers
8 housing nuclear waste, we don't agree that blindly
9 following the minimum requirements for the storage of
10 nuclear material is enough. 20:02:27

11 As it stands, Edison is not meeting global
12 standards for proper storage, monitoring, and
13 transportation of nuclear waste. If I'm wrong, please
14 prove me wrong.

15 With the added variable with the major fault 20:02:36
16 line a few miles off shore, we're at an increased risk of
17 major nuclear disaster, and I do believe that more needs
18 to be done. No scientist in their right mind can assure
19 the public that there's no danger of another Fukushima
20 right here at San Onofre. 20:02:50

21 Edison should be making it a public safety
22 priority to move this waste to a safer location and
23 better storage containers. The statistics and
24 probabilities are not on your side. Our lives, our
25 beaches, our children, and our ocean are not worth the 20:03:01

1 gamble.

2 Thank you.

3 CHAIRMAN DR. VICTOR: Thank you for your
4 comment.

5 Ace Hoffman and then Sharon Hoffman. 20:03:09

6 MR. HOFFMAN: It's written. You're all
7 volunteers. So the first minute, I'm going to give you a
8 history lesson about volunteers, and then I'm going to
9 apply that lesson in the second minute, maybe minute and
10 a half. 20:03:22

11 In the February 1862 battle at Fort Donelson,
12 things were going poorly when Ulysses S. Grant asked his
13 former mentor at West Point, Charles Ferguson Smith, now
14 working under Grant, to attack the Fort.

15 Once Smith's men were ready, he rode along in 20:03:36
16 front of them and said, "Second Iowa, you must take that
17 fort. Fix bayonets. I will support you." Leading
18 Second Iowa and four other regiments, Smith advanced up
19 the hill, saber held high.

20 Looking back, he saw some soldiers hesitating 20:03:49
21 and said, "Damn you, gentlemen. I see skulkers. I'll
22 have none here. Come on, you volunteers, come on. This
23 is your chance. You volunteered to be killed for love of
24 your country, and now you can be. You're only damned
25 volunteers. I'm only a soldier. I don't want to be 20:04:05

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1 killed. But you came to be killed, and now you can be."

2 Under fire, Smith rode into the Rebel trenches.

3 His men went with him, and the day was won. General

4 Smith survived the battle, but he did not survive the

5 war. 20:04:22

6 Now, here's my version of his little speech.

7 Damn you, ladies and gentlemen of the CEP. I see

8 skulkers. We need none of that here. Come on, you CEP

9 volunteers, come on. This is your chance.

10 You volunteered to 'solve the nuclear waste 20:04:34

11 problem' for love of nuclear power, and now you can. You

12 are all volunteers. I'm only a citizen, and I don't want

13 to be killed in a in a nuclear holocaust.

14 Nothing is more carcinogenic than this waste

15 stored in thin-walled cans. I've had cancer, bladder, 20:04:49

16 and so has my wife, breast. But you came to eat, drink,

17 and breathe nuclear waste, so the rest of us don't have

18 to, or solve the problem in some other way, and now you

19 can.

20 But sending the waste to somebody else doesn't 20:05:03

21 solve the problem. It only foists the waste on other

22 citizens, who gained nothing from its production, who

23 don't want it, and who did not volunteer to eat, drink,

24 and breathe the waste.

25 You won't let an expert come talk to you about 20:05:17

1 neutralization, even though it's a patented process. It
2 got the patent in 2017. You won't send a message to
3 Diablo Canyon and all the other nuclear waste generating
4 facilities in the world and tell them that, try as you
5 might, you can't solve the nuclear waste problem. 20:05:29

6 For what have you accomplished? Nothing. Four
7 years and more than a dozen meetings, nothing; millions
8 of dollars spent here; nothing. But you won't admit
9 failure. Instead you want to cause grief to some other
10 community, burden them with our problems, and then 20:05:46
11 congratulate yourselves on a job well done if it
12 succeeds, which it won't.

13 But even if you move the waste, it's not a job
14 well done. The waste will still exist. I see skulkers.
15 We'll need something other than that here. 20:06:01

16 And I have 9 seconds, so I wanted to mention
17 that the pins that are holding up those four casks are
18 probably putting pressure on the lower plate, and that
19 might be a cause for concern.

20 Thank you very much. 20:06:15

21 CHAIRMAN DR. VICTOR: Thank you for your
22 comment, Ace.

23 Sharon Hoffman and then Daryl Gale.

24 MS. HOFFMAN: Good evening. I -- I really can't
25 believe we're here again, talking about these same 20:06:26

1 things. I heard a couple of things this evening that I
2 find really disturbing.

3 So we -- we have these brand-new casks, with a
4 new design, and the pins are breaking. Is San Onofre the
5 first nuclear power plant to use that particular design? 20:06:48
6 Does anybody think about how to test in advance before
7 there was nuclear spent fuel in those casks that makes it
8 difficult, if not impossible, to unload the casks?

9 And I say "difficult, if not impossible" because
10 nobody has ever done it, as Mr. Palmisano told us. And 20:07:12
11 nobody's ever done it because they're afraid to do, and
12 with good reason. They're afraid for good reason. I'm
13 afraid for good reason about the danger of nuclear waste.

14 We had a number of people here tonight who are
15 here for the first time. I was intending to see team 20:07:31
16 meetings since the beginning. I've been attending
17 meetings about San Onofre for probably, approximately, 20
18 years, and I keep hearing the same problems over and
19 over.

20 So let us acknowledge that we do not have good 20:07:48
21 solutions, and let's get some answers. About a year ago
22 in a CEP meeting, there were some folks, and they came in
23 and talked about some work that was just starting to
24 determine what would happen to a cask over time and if
25 the fuel deteriorates and could we open that cask. 20:08:09

1 I would like to see the CEP ask for an update on
2 that research. Of course, we're looking at something
3 that's going to take some period of time. But still, it
4 seems like there was the word "tests" in place to
5 accelerate that aging and determine what would happen. 20:08:30
6 And we have not heard anything about that.

7 So I would very much like to hear that. Heard a
8 couple of people talk about emergency evacuations this
9 evening. 15 years or so ago, FEMA had an answer to that.
10 When we asked them, what would happen if you had to 20:08:50
11 evacuate San Onofre and San Clemente on a Friday evening
12 before a holiday weekend.

13 They told us that wasn't a fair question. I
14 think it's an extremely fair question. And I think a lot
15 of questions you've been asked this evening, and every 20:09:07
16 evening are fair. And that it is the CEP's
17 responsibility to voice the -- to share the voice of the
18 citizens. Not to have an agenda of let's get it out of
19 here, but to actually look at the problem.

20 Thank you very much. 20:09:25

21 CHAIRMAN DR. VICTOR: Thank you for your
22 comment.

23 Daryl Gale and then Pantera Michel.

24 MS. GALE: Hi, I'm Daryl Gale. I've come down
25 here from Los Angeles by Amtrak. I'll be getting home at 20:09:37

1 1:00 a.m., but these are proceedings are very, very
2 important to me. And that's why I keep on coming.

3 I was really thinking about how this nuclear
4 waste situation is very much like Russian roulette, with
5 our Southern California coast, and then also with our 20:09:55
6 central, northern coast with Diablo Canyon. All we need
7 is like a medium-sized -- think Rose Canyon fault
8 earthquake that causes one thin canister to crack or
9 fall, just one.

10 Or another tsunami. Or a really bad El Nino 20:10:14
11 season in the Pacific, bringing us a big, fresh overflow
12 of plutonium and cesium from Fukushima, which still
13 hasn't, you know, stopped it yet. But maybe -- maybe
14 it's just plain, old glacier ice melt. According to Noah
15 and CalePA, the arctic and the Antarctic are melting way 20:10:37
16 faster than predicted.

17 And I can even quote Diane Kane from climate
18 research at Scripps, "melting in Antarctica puts the
19 California coast essentially in the bullseye of the
20 magnified sea level rise." 20:10:55

21 So what roars me is, like, you know, we're
22 talking about climate change. We're talking about ice
23 melt, but we don't really have a solution because we
24 don't know when it's going to happen. It could happen
25 very soon. And you know, all this stuff could be 20:11:10

1 underwater. And that is very, very concerning.

2 And we don't know what we're going to do with
3 all this stuff if it is underwater. So I was trying to
4 think of some kind of light-hearted way to reframe this
5 situation, and I think about our current administration 20:11:28
6 talking about building a wall to keep out undocumented
7 people, why don't we just start building walls around
8 these 103 reactors?

9 Let's use American steel. Let's use American
10 steel workers. And let's grab some coal workers too, and 20:11:42
11 let's make these reactors safer from water encroachment.
12 And then we've got the added bonus of terrorism. And
13 then give a bunch of people with obsolete jobs, some
14 really nice jobs building some walls. That will maybe
15 buy us some time 'til we figure out how to move this 20:12:00
16 stuff safely, where to put it.

17 Like just coming here tonight, my Lyft driver --
18 I told him where I was going, and he says, "oh, yeah,
19 well, they moved all that stuff to Yucca Mountain, and
20 it's closed." And I go, "No, they didn't. There's no 20:12:14
21 Yucca Mountain. We don't have a place to move it."

22 And it's surprising that the general public
23 seems to think that's it's all gone, bye-bye, and
24 everything's okay. I mean, I wish it was. I wish I
25 could, you know, sleep better, and I don't even live 20:12:28

1 here. So that's my thoughts.

2 Thanks.

3 CHAIRMAN DR. VICTOR: Thank you very much for
4 your comment.

5 Pantera Michel and then Donna Gilmore. 20:12:35

6 MS. MICHEL: Hello, thank you very much. I'm
7 just going to get to it here.

8 I found this all to be pretty much a nightmare.
9 Mr. Palmisano, I appreciate what you said; however,
10 coming here, I already had my concerns. But I have to be 20:12:51
11 honest with you. After seeing that presentation, I am a
12 lot more unnerved with the plan that is in set. And I
13 represent a lot of people.

14 You are saying you've had -- or there's been 30
15 years of experience in this industry. That may be 20:13:05
16 something in your mind, in the office, et cetera;
17 however, we're talking about a substance that is going to
18 last beyond our comprehension of time.

19 So I'm not sure if you know, if you think we
20 know what we're dealing with, with this substance. But 20:13:22
21 we do. And we understand the extreme concern and the
22 issue that we're dealing with here.

23 I have to say as well that your disgusting,
24 sophisticated equipment -- well, those canisters -- and I
25 don't think anything -- the words "nuclear waste" and 20:13:40

1 "storage" and "canisters" or "cans" should ever be put
2 together.

3 We need to be not at the bottom of standard of
4 how this is being handled and addressed in the world, but
5 at the top, considering where we are. Those walls are 20:13:54
6 way too thin -- way too thin considering where they're
7 being put in, the beach and the ocean -- which is the --
8 water is the fastest way for anything toxic to spread in
9 the world. We already know that.

10 Plus, as we know, we have top plus geologists 20:14:08
11 who are warning us for a long time that this is extremely
12 dangerous, and that it is in a fault zone. So already,
13 that does not make sense. How this has been allowed to
14 get as far as it is. But regardless.

15 I also heard you use the word "acceptable" many 20:14:24
16 times. "Acceptable" is okay in a lot of situations, but
17 not in this situation. We're dealing with something that
18 can change the life of the surface of this planet, in
19 this area, forever. Not to mention what it could do to
20 our generations of children. 20:14:39

21 I don't know if anyone has ever seen flowers
22 around Chernobyl or Fukushima. They look very nice if
23 you like abstract art. But it's not very nice when it
24 comes to generations of families or children, plus our
25 water. 20:14:51

1 So "acceptable," this is not acceptable to us.
2 And if you really mean what you say -- if Edison really
3 means what they say, that they want to provide a solution
4 that we, the public, are happy with, well, I'm letting
5 you know right now: We're not happy with this. This is 20:15:03
6 not okay. And most people do not know about this.

7 I live in San Clemente, and I've canvassed
8 almost every business in that town, and most people don't
9 even have a clue this is happening, nor do they want this
10 to happen. 20:15:16

11 So let me just say, as well, Mr. Victor --
12 Dr. Victor, I took the Public Watchdogs' team, Nina and
13 Charles, we met with Heather Hutt who represents Kamala
14 Harris, and she has been informed. We had an hour and a
15 half meeting with her about 10 days ago, update on that. 20:15:30

16 And also, can we get this stopped until we're
17 all happy? Until we get a better solution? Because I
18 can tell you, a lot of people in Los Angeles who don't
19 know about this will not be happy, nor the world. And
20 let's discuss private investors for better asks for 20:15:40
21 these things.

22 Thank you.

23 CHAIRMAN DR. VICTOR: Thank you for your
24 comment.

25 Donna Gilmore and then Torgan Johnson. 20:15:49

1 MS. GILMORE: Thank you. I want to -- I have --
2 Donna, I could relate to you when you were
3 talking about three shift. I used to do Mission Critical
4 Systems, had to manage 'em, design 'em, implement 'em,
5 and run 'em. So I had to eat what I made, so to speak. 20:16:05
6 So I can relate to your multiple shifts.

7 And one of the No. 1 things I had learned in
8 emergency planning, the best thing you can do is
9 prevention. Okay? Right? Especially, when we're
10 talking about this. 20:16:21

11 We have 51 canisters already there. The oldest
12 is going to 15 years old. The NRC says, once a crack
13 starts in these canisters, it grow through the wall in 16
14 years. Edison has no plan for that, no approved plan for
15 that, what they're going to do. 20:16:43

16 So -- okay. So we have a leak. Now, what's
17 going to happen if we have a leak? I have documentation
18 from Holtec and from the NRC that if we have a
19 through-wall crack and water gets in that crack -- not
20 the pool water, other water gets in the crack, it will go 20:16:58
21 critical. Not may go critical. It will go critical.

22 I e-mailed Tom Palmisano. In this e-mail
23 stream, he has yet to respond to that. In addition,
24 because there using higher burnup fuel, that damages the
25 cladding and damages the uranium pellets. It even 20:17:22

1 damages the basket. It creates hydrates.

2 And what that means is if we get a through-wall
3 crack, and we get air inside the canisters --
4 five-percent air in that helium, it will explode. Each
5 canister has roughly a Chernobyl disaster. You've got a 20:17:42
6 Chernobyl disaster in each can.

7 So this idea that leaving it in the pool is
8 going to save us -- we're looking at permanent
9 evaluation, we have a few years left. What does the NRC
10 say? Oh, well, we don't think you'll have a crack 20:17:58
11 because you don't have enough humidity in your air at
12 San Onofre.

13 Did you hear what I just said?

14 The Nuclear Regulatory Commission says that we
15 don't have enough humidity in our air by San Onofre for 20:18:08
16 moisture to dissolve salts on the canister.

17 We cannot trust the NRC. We cannot trust
18 Edison. We don't have a lot of time left. You have no
19 authority, I totally appreciate that. But you have a
20 voice. And we can have some leadership. We need our 20:18:29
21 cities to represent us to state and federal elected
22 officials.

23 They do not know about it. I've spoken to three
24 NRC commissioners, two former chairmen. They did not
25 know about this cracking issue. That information was 20:18:43

1 kept from them. There's lot of information with good
2 intended experts on this issue.

3 And I'm more than willing -- I'm offering to
4 provide information to anybody that wants it. I have
5 handouts. I have a website, sanonofresafety.org. You 20:18:58
6 know, please learn more. But we're at crisis mode
7 already.

8 Thank you.

9 CHAIRMAN DR. VICTOR: Thank you very much for
10 your comment. 20:19:08

11 Torgan Johnson and then Gary Headrick.

12 Torgan Johnson?

13 Okay. Gary Headrick and then Laurie Headrick.

14 MR. HEADRICK: Thank you. Good evening.

15 I wish I could stand here and congratulate 20:19:20

16 Edison on successfully moving their first canister,
17 because I know it's risky business, and we're relying a
18 lot on the employees. And it's unfortunate that tonight
19 we have to hear about the already unexpected surprise, as
20 often happens in life, where things don't go as planned. 20:19:39

21 And we have a serious issue that is being
22 addressed as best as possible. I'm sure you don't want
23 to accident any more than we do. But we're only getting
24 one side of the story here. And according to everything
25 that I've heard, things have to go exactly as planned in 20:20:00

1 order for this plan to function properly.

2 And I know a lot of contradicting evidence is
3 out there, which points to we need other solutions in
4 case things don't go as planned, whether it's the pins in
5 the canisters or an earthquake that's stronger than we 20:20:21
6 expected or this evidence that these thin canisters can
7 crack.

8 You know, I'm really concerned how experimental
9 this is, and how quickly we're moving forward without an
10 alternate plan that makes sense. And I think I heard Tom 20:20:36
11 Palmisano mention tonight that it would take two to three
12 years to develop the technology to actually unweld a
13 canister if there were a problem.

14 And I think it makes sense that we want to have
15 that answer before we start moving canisters. Two to 20:20:52
16 three years is a long time to wait to solve a leaking
17 canister.

18 I just came back from a summit in Chicago. It
19 was about nuclear waste it was grassroots organizations
20 from 22 states and Canada and a lot of nuclear experts 20:21:10
21 that also were present.

22 And I've got to tell you that there's a lot more
23 concern and resistance to the idea that we're going to
24 move canisters that we know are temporarily for use
25 that's not going to be, you know, like the thick 20:21:32

1 canisters or thick casks.

2 And everyone where -- that's on the receiving
3 end is aware of this, and we have to come up with a
4 better plan than that, to expect people to receive this
5 waste. 20:21:50

6 It's not realistic to just pretend that
7 everybody wants this stuff here and ignore the resistance
8 that's building out there. This is not a realistic
9 presentation here.

10 You're just hearing the glossy version, the 20:22:00
11 overly optimistic thing with no plan if something doesn't
12 go right. So I'm wondering what happens if things don't
13 go as planned, after all the -- all the materials and
14 buildings have been removed, and we only have spent waste
15 here, what happens to those thin, temporary canisters if 20:22:20
16 there's nowhere to take them? Are we just going to be
17 stuck with stranded waste -- oh, sorry.

18 Anyway --

19 CHAIRMAN DR. VICTOR: But the next speak you
20 know, so -- 20:22:35

21 MR. HEADRICK: Oh, okay.

22 CHAIRMAN DR. VICTOR: We don't -- we don't trade
23 time because --

24 MR. HEADRICK: Yeah. Well, there's just one
25 thing. I can't read my own writing because my eye 20:22:37

1 operation.

2 But anyway, in the news tonight, we heard that
3 cybersecurity is going to be discontinued. And I know
4 you like to quote Union of Concerned Scientists. They
5 say that it's another example of you putting cost ahead 20:22:51
6 of public safety. That's from Lyman.

7 CHAIRMAN DR. VICTOR: Thank you very much.

8 MRS. HEADRICK: I won't need my time.

9 CHAIRMAN DR. VICTOR: Okay. Thank you, Gary.
10 Thank you, Laurie. 20:23:03

11 Bert Moldow and then Christa Gostenhofer.

12 MR. MOLDOW: Good evening. I'm a director of
13 6100 homes at Laguna Woods Village, and I'm here on
14 behalf of a number of residents there.

15 Over 70 years ago, James Conant, then President 20:23:27
16 of Harvard, and a PhD in chemistry, who played a part in
17 the Manhattan Project, expressed strong opposition to the
18 development of the nuclear power, surprisingly. And he
19 said, "Until there was a positive development in the
20 disposal of waste, I will continue to oppose nuclear 20:23:44
21 power." Obviously, the fact that we're here today
22 demonstrates that his warning was totally ignored.

23 Today we mentioned interim storage. Which
24 compared to what was -- or is currently being done, by
25 the way, in the country of Finland is an absolute joke. 20:24:05

1 I don't know if any of you are aware of Onkalo, which is
2 what Finland is doing to bury their nuclear waste.

3 But let me just give you a brief rundown. They
4 put their nuclear waste in 10-inch-thick cask cylinders.
5 Then they wrap it in another cylinder, copper, two inches 20:24:20
6 thick. They are building, in the process, in fact, along
7 the way in an island just off their coastline, a shaft
8 that is approximately 1500 feet deep down to bedrock.

9 They are then building tunnels off of that, and
10 they will be moving these cast iron cylinders, with the 20:24:43
11 copper sleeves, into these tunnels, and packing them with
12 clay, but of the type that is water-resistant.

13 And they expect them to not mark a thing to
14 indicate that there's even nuclear energy -- or nuclear
15 waste in there. Okay. And they expect that this will 20:25:02
16 last for about 10 thousand years.

17 I mean, even if we believe that the waste at San
18 Onofre could find a home, okay, we need to be assured
19 that the storage canisters will be adequate for shipment.
20 And even -- we should be assured that we can ship it. We 20:25:20
21 do not even know today when that waste will be moved.

22 We have no assurance at all. Our government has
23 failed us for 70 years. What private industry is
24 proposing to do over in Nevada and Texas is a joke
25 compared to what I just described, this country of 20:25:42

1 Finland is doing. Okay.

2 We have no solution. I can't believe that you
3 people are unaware of the risk and consequences of the
4 failure to transport or move this waste away. And given
5 that, I think you've got to realize that we've got to 20:25:55
6 solve that problem of long-term storage here in
7 California. That's our only hope for the future.

8 CHAIRMAN DR. VICTOR: Thank you very much for
9 your comments.

10 Next, it's Christa Gostenhofer and then Mandy 20:26:13
11 Sackett.

12 I just want to say we're going to run over a bit
13 because I want to make sure there's some time to at least
14 have some answers to some of the questions and some
15 organization around that. So I apologize to those of 20:26:20
16 you. We're going run over a little bit of time, but we
17 have 106 minutes' worth of comments in principle, and
18 we're going to get through the comments.

19 Christa Gostenhofer.

20 MS. GOSTENHOFER: Hi. I'm also of the opinion 20:26:33
21 that this Holtec ISFSI plan is really dangerous and
22 unacceptable, if you're considering safety, if you're
23 considering the environment, if you're considering public
24 health.

25 I live within 20 miles of the ISFSI, and I've 20:26:48

1 developed this strange curiosity lately of studying NRC
2 documents, and listening to the webcast on storage and
3 transport, and learning things that I really didn't want
4 to have to learn. And quite frankly, the more I learn
5 about it, the more concerned I am. 20:27:10

6 To remove the spent fuel pools and not have any
7 contingency for dealing with the can. How can that be?

8 Dr. Victor, it sounds like you're really feeling
9 pressure to find a place to move it to. I ask you too, a
10 question, who your stakeholders are? Who -- who are you 20:27:36
11 trying to represent?

12 In the NRC meetings, they say, "we'll speak to
13 our stakeholders." And I'm thinking, is that the nuclear
14 industry, or is that the people, and in the environment?

15 I feel like people's priorities are a little bit 20:27:52
16 confused, and that we really need to be looking at the
17 bigger picture and the bigger time frame. Damaged fuel,
18 this is high burnup fuel. I don't understand why, even
19 in the Holtec system, all this -- all these fuel rods are
20 not treated as damaged fuel. Why -- why wouldn't that be 20:28:18
21 a simple thing to do with the Holtec system?

22 In Europe, before they transport, they look at
23 all those assembly rods before they transport them, to
24 make sure there's no damaged fuel.

25 I'm surprised that Edison didn't notify the 20:28:41

1 public. We get a bill every month. Why didn't Edison
2 tell the people of Southern California that this was
3 going in -- that this storage was going in here?

4 It's obviously no -- no plan to -- intact at the
5 moment to move it off the property. I think the whole 20:29:02
6 thing is extremely dangerous, and I believe it should be
7 rethought out. And that the loading the Holtec cans
8 should cease, stop, reevaluate. This is serious.

9 Thank you.

10 CHAIRMAN DR. VICTOR: Thank you for your 20:29:20
11 comment.

12 Mandy Sackett and then Nabil Dajani.

13 MS. SACKETT: Hi. Thanks for your time. Mandy
14 Sackett, Surfrider Foundation.

15 I live in San Clemente. I'm personally invested 20:29:34
16 in the decommissioning and removal of spent fuel at San
17 Onofre. I wanted to just first start off by thanking you
18 for your efforts in D.C.

19 Surfrider is very focused on finding a federal
20 solution. Legislation is needed before we can get spent 20:29:49
21 fuel off the coast, and that's first and foremost on our
22 agenda. We do have significant concerns with the Shimkus
23 bill, and I just wanted to bring those to your attention
24 since it was highlighted today.

25 The effort -- the -- one of our main concerns is 20:30:05

1 Yucca Mountain, and we know it is certain to be tied up
2 in lawsuits for decades if it is restarted, and that
3 could delay removal of our waste for decades.

4 And so I just think it's something we should
5 think really carefully about. And then Surfrider also 20:30:19
6 supports consent-based siting and any solutions for
7 interim or permanent storage should be in consultation
8 with local communities, in which Yucca was not.

9 And we also believe that spent fuel
10 transportation should be -- and storage should be 20:30:37
11 exempt -- should not be exempt from any environmental
12 review. And so I just hope you will consider that when
13 considering supporting any federal legislation.

14 And then I just also wanted to add a quick note
15 on the Wheeler Reef expansion. Surfrider's submitted 20:30:49
16 comments on the notice of preparation, and we do
17 appreciate SCE working to fulfill their mitigation
18 obligations. Thank you.

19 We have some concerns and just hope that
20 additional studies would be taken before the expansion 20:31:04
21 takes place. And so I just wanted to bring those to your
22 attention today.

23 One is we're concerned whether nearby surf
24 breaks could be affected by placement of the rocks --

25 THE REPORTER: Can you speak more into the 20:31:22

1 microphone?

2 MS. SACKETT: Sure. How's that?

3 THE REPORTER: Thank you. Better.

4 MS. SACKETT: Okay. Thanks.

5 -- whether nearby -- nearby surf breaks would be 20:31:23

6 affected by placement of the rocks and whether those

7 impacts would be temporary or long-term. And then we're

8 also concerned whether there might be any coastal access

9 impacts. And finally, interference of marine mammals by

10 placing the rocks. 20:31:35

11 So we're hoping to see onsite spotters, on board

12 spotters, just to make sure no marine mammals are

13 impacted.

14 And so that's all I have for today. Thank you

15 all very much for your time and dedication tonight. 20:31:48

16 CHAIRMAN DR. VICTOR: Thank you very much.

17 Next is Nabil Dajani, and let me just say -- is

18 Nabil Dajani here?

19 No. George Allen is next, and then after George

20 Allen is Jennifer Massey. 20:32:01

21 And let me just say while George Allen is coming

22 up, I see some of you have spoken from notes. If you

23 want to also share those notes or letters with us in

24 addition to your spoken comments, we will have a -- that

25 will help us make sure that all the comments get -- get 20:32:12

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1 tracked and answered. And some of them are long-term
2 issues as well.

3 The floor is yours.

4 MR. ALLEN: Okay. I'm George Allen. I work at
5 San Onofre. I tune up radiation equipment. 20:32:21

6 And with a lot of the goings on -- recently the
7 article in the Wall Street Journal said -- talked about
8 BS detector. And he said -- this Dr. Frankfurt from his
9 book on bull shit, said, "You can know a person's lying
10 because they know the truth and push it aside, when 20:32:41
11 BS'ers don't necessarily care about the truth."

12 So I'm just trying to reset some of the -- maybe
13 exaggerations. And it's also recently passed a law. If
14 you knowingly over -- you know, scare people and enflame
15 people, that's actually harmful. 20:32:59

16 And so I'm here to say that what's going on in
17 San Onofre is not as scary as people are saying. And
18 that's actually detrimental to the people that live here.
19 So if you put out a message that's false and misleading,
20 that's actually against the law. 20:33:14

21 And so one of the things I wanted to go over
22 factually was Fukushima had a terrible accident. Seven
23 years ago they had spent fuel stored and spent fuel in
24 cask and fuel pools. Those fuel pools and casks did
25 their job. None of that got out. The active reactors 20:33:32

1 had the problem.

2 Okay. They did a study on the Daiichi, and they
3 also had two -- they called it inner and outer bolted
4 closures. They had nine casks with 408 assemblies that
5 were in storage. Okay. The building was -- lost power, 20:33:51
6 inundated with sea water, sand, debris -- were all lost,
7 just like you'd expect in the accident.

8 But no casks were damaged or displaced.
9 Inspections of the cask interiors -- is what they said in
10 this article, and this is by the National Center for 20:34:08
11 Biotechnology Enforcement.gov. You can look it up at
12 cask at Fukushima, or whatever.

13 Okay. So the inspection in May 2013 revealed
14 there was no leakage of sea water into or helium out of
15 the canisters. And they also took -- looked at the fuel 20:34:27
16 bundles. There were no damage to the baskets or bundles
17 in the casks. So that was after a 45-foot tsunami. So
18 that was an example of spent fuel and canisters do their
19 job -- or can do their job.

20 Another thing was NRC puts out data on natural 20:34:46
21 background radiation. I want to know, what are these
22 people afraid of? I mean, they're afraid of something.
23 And is it increased cancer? And increased cancer, we're
24 all are exposed to radiation probably 600 millirems per
25 year, basically. The NRC mandates San Onofre to keep it 20:35:05

1 less than 100 millirems above that on the site boundary.

2 So I'm wondering what they're afraid of, really.

3 Ten -- ten rem is the lowest level you'll see any
4 radiation risks.

5 CHAIRMAN DR. VICTOR: Okay. Thank you. 20:35:20

6 MR. ALLEN: So anyway, just wondering.

7 CHAIRMAN DR. VICTOR: Thank you for your
8 comment.

9 Jennifer Massey and then Kelly Speeg.

10 Jennifer Massey. 20:35:33

11 MS. GILMORE: They had thick walls, 10-inches
12 thick.

13 CHAIRMAN DR. VICTOR: Jennifer Massey is not
14 here.

15 Okay. Kelly Speeg and then Roger Johnson. 20:35:40

16 MS. SPEEG: The world is watching, and we are
17 the example. What we do today has consequences for
18 generations to follow. And this is our responsibility.
19 We are the fish in the fish bowl.

20 Our prayers are with all of the workers who go 20:35:55
21 through this process and who are being exposed to this
22 radiation, that this gentleman was talking about.

23 Mr. Palmisano, I would like to address the
24 safety of the four canisters, coming from a sheet metal
25 fabrication background. I'm wondering about the metal 20:36:12

1 which was purchased by Holtec for these canisters. Could
2 you please answer where that was purchased from? I would
3 like to know about its integrity.

4 I'm also very concerned about the basket shims.
5 You say there are comprised pins. Some that are broken; 20:36:28
6 and some that are bent. You said that the materials that
7 you're unwilling to accept, but they're going to still be
8 used for these four canisters. You said there's never
9 been anyone who's ever unburied these canisters, and it's
10 a two- to three-year process. That's alarming. 20:36:49

11 You're also introducing metal with dissimilar
12 metal, which can cause corrosion within these canisters
13 and these casks. That's another concern.

14 Jerry Kern, I would like to talk about the
15 switchyard, which you said is a very important facility 20:37:08
16 at San Onofre. And you said it saved LA. You said --
17 correct?

18 CHAIRMAN DR. VICTOR: Please make the comment.

19 MS. SPEEG: Yes. So let's go ahead and put a
20 Chernobyl -- 73 Chernobyls right next to this very 20:37:23
21 important facility, choosing to use Holtec canisters
22 thinner than the width of a dime.

23 David Victor, what I heard from you today is
24 that there is lack of federal support, is what I heard
25 you saying. And you said I'm sorry to have to give you 20:37:40

1 this bad news about our federal support. So that leads
2 to the question: Who will receive this waste?

3 So if I'm reading between the lines in what I'm
4 hearing you say is that the spent fuel -- this uranium,
5 this plutonium -- possibly could be in privatized hands? 20:38:00
6 That's a concern.

7 I also would like to talk about the backfilling,
8 Mr. Palmisano, that you talked about. And when the shore
9 line erodes -- this backfilling that we're talking
10 about -- and it goes away, what will become of the 20:38:14
11 contaminated material that's not lower than the 10
12 feet -- lower than the 10 feet? That's another issue.

13 As far as tourism goes, I know that people who
14 come here are not going to be wanting to be exposed to
15 this low-level radiation, which you talked about is 20:38:36
16 happening at the top of these canisters. You said that
17 it is happening on a daily basis. And it is at a very
18 low level, but it is still continuing. I believe we need
19 daily monitoring.

20 CHAIRMAN DR. VICTOR: Thank you for your 20:38:51
21 comment.

22 Last is Roger Johnson. And then we're going to
23 have time for a few minutes of responses to some of the
24 comments and then plan going forward.

25 Roger Johnson, the floor is yours, and I've also 20:39:03

1 shared your e-mail thread with the entire panel.

2 MR. JOHNSON: Okay. I have about six more quick
3 comments.

4 First of all, Tom, when you do the CIS study
5 about the location of moving it, what we'd like to see 20:39:16
6 transparent. Can you assure us it's going to be
7 transparent, open meetings, minutes, no secret deals?
8 I'd like to know what the criteria are for choosing a
9 place. That would be interesting.

10 Second of all, I did rough calculation of each 20:39:29
11 dome. You demolish a dome, I figure it's about 20,000
12 truckloads of debris. I would like some guarantee that
13 none of this is going to end up if any landfill in
14 California. I haven't heard anything like that. I don't
15 know where you're going to take it. 20:39:46

16 Clive, Utah is north of Salt Lake City. That's
17 a -- well, let's not get into that.

18 Rad monitoring, once a month is not acceptable.
19 It's got to be realtime. It's got to be publicly
20 available. There's have been 28 major accidents at 20:40:00
21 nuclear power plants. An accident being \$100 million in
22 damages and fatalities. In every instance, they've lied
23 to public. They did it for Fukushima, Chernobyl, Mayak,
24 Santa Susana, Three Mile Island. They lied to the
25 public. We assume they're going to lie this time. So we 20:40:19

1 want realtime, publicly available.

2 On the unloading, I was kind of surprised to
3 hear about that it's not possible to unload a defective
4 canister. It's never been done before, probably for good
5 reason. They don't know how to do it. You told us it 20:40:34
6 would take three years of research to figure it out, and
7 it has to be done underwater. But underwater's not
8 possible because you're going to destroy the fuel.

9 And finally, what disturbs me is you eliminated
10 from consideration at the CEP meetings the most dangerous 20:40:50
11 scenarios. You've talked only about small accidents and
12 small leaks. You haven't talked about external threats.
13 So a large earthquake splits open the whole facility.
14 They say, well, that's not likely, so we're not going to
15 consider it. 20:41:07

16 Here's another example, for Donna. Suppose a
17 thousand-pound warhead hits -- has a direct hit on the
18 facility. Your emergency responders are going to put on
19 their hazmat suits, get in the car, come out, and what
20 are they going to do? I would like to hear some 20:41:20
21 decisions, some planning of this. And I haven't seen
22 any.

23 There are IRBMs that are designed to fit inside
24 the container of any cargo ship. They have a 250-mile
25 range, hits target in 10 minutes. Any cargo ship out 20:41:37

1 there could have them. There's no defense against this,
2 and it could possibly happen. North Korea could hit any
3 place in the United States any time it wants now. So an
4 answer here --

5 David, we did have a petition of 155 people who 20:41:53
6 want a whole meeting devoted to external threats and
7 major disaster planning. We can't assume it's never
8 going to happen. Let's assume it does happen. What are
9 we going to do? I don't see any planning at all, just
10 minor threats. 20:42:08

11 That all.

12 CHAIRMAN DR. VICTOR: Thank you for your
13 comment.

14 I'm going to talk a little bit about that -- I'm
15 going to talk a little bit about that as part of the 20:42:13
16 discussion here.

17 So maybe I could turn, first, to Dan Stetson.
18 Why don't you tee up? Given the time, a few major
19 questions, and Jerry as well. And then I want to comment
20 a little bit on the process. 20:42:24

21 MR. STETSON: Okay. Sure. So Tom, a few
22 questions for you. One of them initially had to do with
23 the change of the insurance liability. If you might
24 touch on that? Also, quickly on the seawall maintenance,
25 do you plan to keep that up? Do we feel that it's high 20:42:38

1 enough? And if there is flooding, are we prepared for
2 that?

3 MR. PALMISANO: Yeah. First of all, the
4 seawall, we will maintain the seawall. We feel the
5 seawall is high enough, and I can bring in the studies of 20:42:51
6 the tsunami estimates, etc. Both dry cask storage
7 systems, the current one, the new one are all qualified
8 for significant submergence. So, you know, we can bring
9 in some more data to discuss the seawall. But the
10 seawall needs to be maintained until the spent fuel is 20:43:08
11 gone.

12 Okay. The liability insurance, we received
13 exceptions. We haven't made any changes at this point.
14 And I'll come in at the next meeting and explain. The
15 most important thing we need to do is get out of a shared 20:43:23
16 liability pool, where we in Southern California would
17 indemnify other Utilities for an accident of another
18 nuclear plant. We're part as -- we're still insured as
19 if we're an operating plant, and we have a \$12 billion
20 pool to cover anybody in the industry. 20:43:41

21 If a plant in some state on the East Coast had
22 an accident, we're liable for several hundred-million
23 dollars. We don't pose that same level of risk without
24 operating reactors, so we want to exit that pool. That
25 is typically done. We haven't changed any onsite-offsite 20:43:55

1 liability coverage for the local area, and we'll discuss
2 that. So I'll be glad to come in to the next meeting and
3 talk about that in some depth.

4 CHAIRMAN DR. VICTOR: Anything else you want to
5 flag, or do you want to go to Jerry? 20:44:11

6 MR. STETSON: Well, let's switch for now, then
7 I'll come back.

8 CHAIRMAN DR. VICTOR: Jerry.

9 MR. KERN: Well, looking through all the
10 comments, most of them are about one or four categories. 20:44:12
11 One, I don't know if David is going to refer to this. I
12 know we talked about this. Emergency response planning,
13 I think that's something --

14 CHAIRMAN DR. VICTOR: I'm going to talk about
15 that. 20:44:22

16 MR. KERN: We're going to talk about that at a
17 future time. A lot of people talked about that. We'll
18 bring that up. The other -- a lot of people talked about
19 the safe cask monitoring system. I think that's
20 something we probably should talk about in the future 20:44:34
21 time and with Edison and the CEP.

22 Dan brought up the seawalls. And the HELMS
23 canister proposal, I got from the point that they were
24 talking about when the moves to Consolidated Interim
25 Storage, that they would put -- that they want the HELMS 20:44:52

1 project there, and the HELMS process there. So I think
2 that's something we'll talk about.

3 And there was one question directed at me about
4 a presentation that I actually arranged at the city of
5 Oceanside be on our public access channel. That wasn't 20:45:07
6 directed at San Onofre. That was actually directed to
7 the city of Oceanside because we're a coastal city, and
8 Dr. Neal Discroll was actually talking about the threats
9 to the city of Oceanside, and actually talked about fire
10 monitoring too. So that was something that was unrelated 20:45:25
11 to what we do here.

12 CHAIRMAN DR. VICTOR: Do you want to comment on
13 that? One question was directed to you about the same
14 thing?

15 MR. STETSON: Yes. And first of all, I want to 20:45:32
16 put a little bit of context in that Dr. Driscoll from
17 Scripps Institution of Oceanography came, and he did an
18 entire presentation, an entire meeting at the Ocean
19 Institute, where I worked for 23 years, discussing
20 seismic activity and potentials for tsunami, went into 20:45:47
21 things in great depth.

22 And then he followed up with that with another
23 all-day session down at Scripps itself. I was only
24 there -- well, for half of the day, but it was very
25 in-depth meeting. And he did say, "I'd be happy to 20:46:01

1 follow up with some additional information."

2 I haven't been in contact with Dr. Driscoll
3 since that time, but my understanding is that he agreed
4 that he would be willing to go to the individual cities,
5 such as Oceanside, San Clemente, to follow up on that. 20:46:15

6 David --

7 CHAIRMAN DR. VICTOR: All right.

8 MR. STETSON: -- you might have more information
9 on that.

10 CHAIRMAN DR. VICTOR: And I think that's what's 20:46:22
11 been happening. I have spoken with Dr. Driscoll several
12 times. Nobody's canceled a run of the model. The
13 request was made to see the underlying data, and the data
14 I helped organize, to make sure the data would be
15 released to the public. And that data was released to 20:46:34
16 the public.

17 And if people want to reanalyze the data in
18 different ways, that's how science operates. There was a
19 kind of disturbing exchange of messages last year that
20 kind of accused him of scientific fraud, and I wrote a 20:46:45
21 letter back to Mr. Pope on this issue. I was surprised I
22 never got any reply to that letter. So that's, I think,
23 where the issue sets right now.

24 I want to just talk about this issue of -- maybe
25 go to the next slide. I think we have a list of possible 20:47:00

1 upcoming meetings. Garry -- Garry and others mentioned
2 this issue of defense in depth.

3 It's really important that we continue to come
4 back to this. We've got to have a meeting on this topic
5 soon. Maybe it's going to be in the second quarter, and 20:47:17
6 I think we should bring back the emergency planning and
7 response aspects to this. We had a meeting back in 2014.
8 It's on the SONGScommunity.com website. Come back and
9 talk about FEMA's role, interjurisdictional plans, and so
10 on. 20:47:31

11 And to get ready for that, Tom, I know you don't
12 have your new panel set up yet, but I would like to put a
13 question to that new panel about what are the plausible
14 extreme scenarios that people ought to be thinking about?
15 Because there have been a lot of claims about 20:47:43
16 Chernobyl-size explosions, and so on. And I think
17 there's a lot of muddiness in that conversation. And
18 there's some science around it.

19 So let's get from people who study the science,
20 not just the kind of small events, but what are the -- 20:47:59
21 what are the plausible extreme events given the condition
22 of spent fuel being in these canisters. And then let's
23 talk about what that would look like, as opposed to some
24 imaginary scenario.

25 And I think that would go a long way to 20:48:11

1 addressing some of the concerns that Roger Johnson has
2 helpfully put together with his petition. So that would
3 be, I think, very, very important.

4 Dan, is there anything else on your list given
5 the late hour? 20:48:21

6 MR. STETSON: I'll be really quick. There were
7 a couple questions that related to using dissimilar
8 metals within the canisters itself. And, Tom, maybe you
9 could take about that, Number 1.

10 And Number 2, are all the materials that are 20:48:32
11 radioactive on this site going to be dealt with in some
12 manner, either removed or contained?

13 MR. PALMISANO: Yeah. A couple comments real
14 quick, if we could come in and talk more about questions
15 about the source of whole text materials. The canisters 20:48:44
16 are designed and analyzed for the dissimilar metal. It's
17 aluminum and steel. There are in some dissimilar-metal
18 situations corrosion concerns. They don't exist in this
19 canister. And I'll be glad to have Holtec provide the
20 data to discuss that. 20:49:01

21 Excuse me, one thing I do want to clarify. A
22 gentleman said these 39 canisters that won't be used.
23 They will be used. The pins are going to be changed out.
24 So -- so -- just to clarify that point.

25 What was the next part of the question? 20:49:15

1 MR. STETSON: Are there any materials that's
2 radioactive --

3 MR. PALMISANO: Yeah. All materials that are
4 radioactive need to be remediated and removed to satisfy
5 the NRC. So that grading is just an interim state. More 20:49:28
6 material will be removed down the road, but there won't
7 be radioactive material that does -- that is above any
8 NRC standards remaining on the site.

9 CHAIRMAN DR. VICTOR: Okay. Thank you.

10 Mr. Swartz -- 20:49:41

11 (Simultaneous talking.)

12 MR. PALMISANO: And as we go forward through the
13 year and discuss more about the actual dismantlement and
14 that, we'll spend more time on that.

15 MR. SWARTZ: Okay. And I'm just going to try to 20:49:49
16 be real quick because of time constraints. But the two
17 things that came out that I think, really, we can't
18 have -- there's no really strong arguments against, and
19 that would be having 24/7 monitoring set up somehow. And
20 I would love to have Edison come back to us by next 20:50:02
21 meetings, show us, tell us what they've done to it set
22 up.

23 As well -- as well as have an independent
24 inspection of the seawall. So we can have an independent
25 report that the seawall does/is going to perform as 20:50:15

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1 expected, then we can move on from that.

2 So those are the two things that I would like to
3 recommend that we get maybe move, get something actually
4 done on, as I was just talking about.

5 CHAIRMAN DR. VICTOR: Do you want to comment 20:50:26
6 briefly on this continuous --

7 (Simultaneous talking.)

8 CHAIRMAN DR. VICTOR: The first is continuous
9 monitoring -- continuous radiological monitoring.

10 MR. PALMISANO: Yeah. Continuous monitoring. 20:50:35
11 So clearly an important theme. When I talked to Gene
12 Stone last week, I told him we would evaluate that, and I
13 will do that. I understand that. And I managed a site
14 where we had continuous monitoring, so I'm familiar with
15 that. So -- and then the seawall, we'll talk about the 20:50:44
16 seawall.

17 CHAIRMAN DR. VICTOR: I think -- it's a broader
18 about the sea level wall, which is what the program is to
19 make sure that there's an integrity --

20 MR. PALMISANO: Right. 20:50:55

21 CHAIRMAN DR. VICTOR: -- an ongoing integrity --
22 (Simultaneous talking.)

23 MR. PALMISANO: Right. And I do inspections and
24 maintenance, and we can talk about that.

25 CHAIRMAN DR. VICTOR: On this issue of ongoing 20:50:57

1 radiological monitoring, we need to think about whether
2 it's just beta or beyond beta.

3 MR. PALMISANO: Right. Right.

4 CHAIRMAN DR. VICTOR: Sorry. It's late in the
5 day to talk about beta monitoring, but Dan -- 20:51:06

6 MR. STETSON: And then really briefly, Tom, with
7 reference to the reef -- it's -- the construction of it.
8 It's going through an environmental impact report
9 process; is that correct?

10 MR. PALMISANO: Yeah. And I don't have 20:51:16
11 principal responsibility for that, so I will get with
12 people who are managing that reef project. But that's my
13 understanding. It's in the EIR process.

14 CHAIRMAN DR. VICTOR: I think one of the things
15 I -- hopefully, I heard from our colleague from Surf rider 20:51:26
16 is that the normal environmental impact assessment focus
17 on environmental issues. We also want to know what this
18 means for the surf breaks.

19 MR. STETSON: Yes.

20 CHAIRMAN DR. VICTOR: So let's not lose sight of 20:51:36
21 that.

22 Any other comments from the CEP?

23 So I want to say two things to close. One is
24 that Diablo is now in the process of moving into a
25 similar phase. They've reached out -- senior management 20:51:47

1 of CG&E reached out back when they were making the
2 decision to shut the plant. They've reached out again.

3 The expert panel that helps to steward the
4 process at Diablo reached out. And so I'll be sharing
5 some materials about what they want to learn from us, and 20:52:00
6 our experience, and including from the communities that
7 are affected by the decommissioning process, and your
8 views about how well the CEP -- and whether there should
9 be something like the CEP at Diablo is done.

10 Now that we've been -- now that we're four years 20:52:14
11 old, we've been over a lot of topics. And so I urge
12 everybody to take a look at the SONGScommunity.com
13 website and look at our past agendas and help give us
14 some feedback about where you'd like to see more stuff or
15 refresh on topics. There's some topics we're going to 20:52:27
16 coming back to on a regular basis.

17 Many questions tonight were not answered, or
18 answered fully. And so as is our custom, we'll put all
19 those together into a question and response format.

20 And so with that, I just want to say from a 20:52:43
21 safety point of view -- we do a safety moment at the
22 beginning of this, and then everybody just leaves quickly
23 at the end. Do drive safe given the inclement weather.

24 People are upset when I end the meeting on time.
25 People are upset when I end the meeting late. And so 20:52:54

1 hopefully the number of people who are upset on both of
2 those fronts is about equal, and we're striking the right
3 balance.

4 So thank you very much.

5 (Off the record.)

6 (Proceedings concluded at 8:53 p.m.)

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I, KATHERINE MAGNER, CSR NO. 14083, do hereby
certify:

That prior to being examined, the witness name
in the foregoing deposition was by me duly sworn to
testify the truth, the whole truth, and nothing but the
truth.

That said deposition was taken before me at the
time and place therein set forth and was taken down by me
in shorthand and thereafter was transcribed into
typewriting under my direction and supervision, and I
hereby certify the foregoing transcript is a full, true
and correct transcript of my shorthand notes so taken.

I further certify that I am neither counsel for
nor related to any party to said action, nor in any way
interested in the outcome thereof.

IN WITNESS WHEREOF, I have hereunto subscribed
my name this 11th day of April, 2018.



KATHERINE MAGNER, CSR NO. 14083

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