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Community Engagement Panel Public Meeting

Transcript of Proceedings

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

TRANSCRIPT OF PROCEEDINGS
OCEANSIDE, CALIFORNIA
THURSDAY, AUGUST 28, 2014

REPORTED BY:
JANETT JIMENEZ
CSR NO. 13215

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

Transcript of proceedings, taken at 1938
Avenida Del Oro, Da Vinci Room, Oceanside, California
92056, commencing the hour of 6:14 p.m., Thursday,
August 28, 2014, before JANETT JIMENEZ, CSR NO.13215.

1 PANEL APPEARANCES :

2 DAVID G. VICTOR
3 CHAIRMAN

4 CEP MEMBERS :

5 DR. WILLIAM PARKER
6 UNIVERSITY OF CALIFORNIA, IRVINE

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

9 JEROME M. "JERRY" KERN
10 OCEANSIDE CITY COUNSEL MEMBER

11 GENE STONE
12 RESIDENTS ORGANIZED FOR A SAFE ENVIRONMENT

13 SUPERVISOR PAT BATES
14 ORANGE COUNTY

15 LARRY KRAMER
16 ALTERNATE FOR MAYOR SAM ALLEVATO

17 MAYOR TIM BROWN
18 SAN CLEMENTE

19 DAN STETSON
20 OCEAN INSTITUTE

21 GERRY BROWN
22 ORANGE COUNTY COASTKEEPER

23 VALENTINE "VAL" MACEDO
24 LABORERS INTERNATIONAL UNION OF NORTH AMERICA

25 DONNA BOSTON
ORANGE COUNTY SHERIFF'S DEPARTMENT

ALSO FROM SOUTHERN CALIFORNIA EDISON :

TOM PALMISANO

CHRIS THOMPSON

1 THURSDAY, AUGUST 28, 2014, OCEANSIDE, CALIFORNIA
 2 6:18 P.M.
 3 * * *
 4
 5 CHAIRMAN VICTOR: Good evening to everyone.
 6 The traffic tonight, as all of you know, unless you've
 7 been camped out here since our last meeting, is
 8 horrific. I also want to thank SDGE for opening many of
 9 the roads so we can see inside tonight. So we decided
 10 to start the meeting a little bit later, and now I think
 11 we should begin, and some of the folks I'm sure will
 12 trickle in as the meeting gets underway. My name is
 13 David Victor. I'm chairman of the community engagement
 14 panel. Welcome to everyone to the third official
 15 meeting of this panel. Tonight -- you'll hear more
 16 about our agenda in just a moment. Tonight we're going
 17 to be focusing on the decommissioning plan, the
 18 decommissioning cost estimate, the environmental
 19 assessment and the so-called post shutdown
 20 decommissioning activities report, PSDAR. A lot of
 21 acronyms in this business that give us a strategic sense
 22 of what's going to happen at this site over the coming
 23 decade and beyond. And I know there are a lot of other
 24 issues people are interested in talking about. Those
 25 are the central points for tonight's -- tonight's

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1 meeting. Let me thank the people of Oceanside for
 2 hosting us here tonight and also the police department
 3 for providing us with police and security tonight.
 4 Thank you very much for your service. A reminder to
 5 everyone that should we have an emergency and you need
 6 to leave the room or you just don't like what's going on
 7 in here, you can leave through the exit that you came in
 8 or out through that exit that's marked exit that is open
 9 to the side there. Just a couple of opening remarks
 10 from me, and then I'll ask Tim Brown, vice chairman of
 11 the CEP, for his opening remarks before we begin the
 12 rest of the meeting. I just want to remind everybody
 13 there is a website -- terrific website,
 14 www.songscommunity.com, that has on it all the materials
 15 related to the CEP, the transcripts of prior meetings,
 16 live streaming is archived. Tonight we are live
 17 streaming. This will be archived as well. Welcome to
 18 the millions of viewers around the world who are
 19 watching us tonight. You can also send a message to the
 20 CEP. And I'll say a little bit more about that process
 21 in just a moment, but there is a section on the website
 22 where you can do that. You can read every single
 23 document that is circulated to the CEP. We have been
 24 very aggressive about making sure that everything we do
 25 here is very transparent. We post every document that

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1 is circulated before and after these meetings. You can
 2 request a speaker to come to an event. No birthday
 3 parties and thing like that, but come to an event to
 4 talk about what's going on at the plant. We had one of
 5 those events last night. Dan Stetson at the Ocean
 6 Institute hosted an event to help bring in some
 7 communities that have not been as actively participating
 8 in this process. That by all account was a terrific
 9 event. I'm sure Dan will say more about it later. Very
 10 soon you're going to be able to register for a walking
 11 tour of the San Onofre plant, and you can get updates on
 12 meeting notices and other kinds of material. Tonight we
 13 have, I believe, 12 out of the 18 members of the
 14 Community Engagement Panel, depending exactly what goes
 15 on with the traffic. So tonight we will in addition to
 16 the normal practice of identifying issues that are
 17 raised to follow up on, we're also going to identify a
 18 handful of issues where we can particularly make sure
 19 that Edison and I as chairman of the CEP follow up with
 20 the members who are not here. These issues are very
 21 important. And I'm also quite mindful that it is a
 22 Thursday night before a long weekend and people have a
 23 lot of other things going on, and so our attendance is a
 24 little bit lower than usual. And I also want to thank
 25 those of you who are physically here because we very

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1 much appreciate your services and your interest. When
 2 we get to the public comment period and during the back
 3 and forth involving the panel, please identify yourself
 4 so that the live stream will accurately know who is
 5 speaking and we can keep all that information in order.
 6 And if you have not done so already, there will be a
 7 public comment period at this meeting, as is the norm
 8 for all of our meetings of this panel, the official
 9 meetings of this panel. And so if you would like to
 10 make a public comment, each of them is three minutes
 11 long. And if you haven't done so already, go head to
 12 the back of the room, there is a signup list. Put your
 13 name down on the list, and we'll work our way down the
 14 -- down the list. I wanted to say one last thing in
 15 terms of opening remarks which concerns the role of the
 16 Community Engagement Panel. Tim Brown and I since our
 17 last meeting have done a survey of every member of the
 18 Community Engagement Panel just to ask how it's going,
 19 what's working, what's not working? The results of that
 20 survey we circulated earlier today. We've also posted
 21 them. I believe they're already posted on the San On --
 22 the songscommunity.com website. And the -- the -- one
 23 of the results from the survey -- the central result of
 24 the survey is people are comfortable with how the -- the
 25 CEP is working. Most folks would like us to make sure

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1 that we cover a wide range of issues in addition to the
 2 time that we spent already on spent fuel. There are a
 3 number of other issue, including at our next meeting on
 4 the 6th of October we will be focusing on emergency
 5 preparedness. Extremely important topic for this plan
 6 as the footprint shrinks and as the owners and operators
 7 of the plant figure out what the right emergency plan is
 8 going forward. That will be the subject of our next
 9 meeting. And people urged us to make sure we have a
 10 balance in the topics that the CEP spends its time on.
 11 Many people said that they continue to see confusion as
 12 to what the exact role of the CEP is. So I want to just
 13 remind everyone, remind our panel, and we're going to
 14 begin every meeting with a comment along these lines,
 15 the essence of which is, this is not a decision-making
 16 body. This was explicitly designed not to be a
 17 decision-making body. There are lots of decision-making
 18 bodies that are addressing various aspects of this
 19 plant. And the moment you make a body like this a
 20 decision-making body, then the character of the body
 21 changes. Instead it was designed to provide a two-way
 22 conduit for information between the owners of the plant
 23 and Edison in particular, which is operating the plant,
 24 and the community about a whole range of really
 25 important issues, like the issues we're discussing

1 with. So I think that we still have engaged, and if
 2 there are folks that are still, you know, they're not
 3 here, they're still staying up on the material, and next
 4 meeting they'll be ready to pick up right where they
 5 left off.
 6 CHAIRMAN VICTOR: Great. Thank you very
 7 much. Let me move to the next part of our opening
 8 section meeting, which is on decommissioning core
 9 principles and values and the role of the CEP in
 10 providing feedback not only tonight, but also written
 11 feedback to Edison on these various regulatory filings.
 12 Let me just remind everyone that today's meeting
 13 benefited from a workshop that we held in July to look
 14 at drafts of the summaries of all of the documents that
 15 we'll be looking at tonight, and these documents have
 16 been provided to the panel and provided to the public
 17 several weeks ago. People have had a lot of time to
 18 look at them. And then over the next week we're going
 19 to be collecting, in addition to comments tonight, we're
 20 going to be collecting any written comments that the
 21 panel has on this so that Edison can incorporate those
 22 in its regulatory filings before it submits its final
 23 versions. One of our important roles here has been to
 24 help Edison engage in regulatory filings that are coming
 25 very, very quickly as the plant goes into

1 tonight that concern the decommissioning process. And I
 2 think equally important is the conduit from the public
 3 back to Edison about what does the public care about,
 4 how does it view some issues, how does it view the kinds
 5 of questions that we'll be talking about tonight. And
 6 the idea is to make sure this conduit flows well in both
 7 directions. So comments that you have about how we can
 8 make that conduit work better and what needs to be in
 9 the conduit are of exceptional importance, but I just
 10 want to remind everyone that this is not -- by design is
 11 not a decision-making body. And we will remind
 12 everybody of that in the beginning of each of the
 13 meetings because I think we want to make sure we have
 14 the right kind of tone and character of the work that is
 15 in front of us. Let me pause for just a moment and ask
 16 Vice Chairman Tim Brown if he has any opening remarks
 17 before we get moved to the rest of our agenda. Tim.
 18 TIM BROWN: You know, nothing really to add.
 19 I do acknowledge that with all the Labor Day plans and
 20 processes, I had a chance to speak with some of the
 21 members who aren't going to be here. They send their
 22 apologies, but work demands and other activities are
 23 important. But everyone conveyed that they will take
 24 very seriously that they've read the material and
 25 they'll be prepared for the next meeting that I spoke

1 decommissioning and eventually into deconstruction and
 2 removal. Chris Thompson, the floor is yours.
 3 CHRIS THOMPSON: Thank you, David. Good
 4 evening. My name is Chris Thompson. I'm vice president
 5 of decommissioning at Southern California Edison, and I
 6 just wanted to as we start this meeting remind everyone
 7 of the core principles that are guiding us and the other
 8 co-owners through this decommissioning process. At the
 9 outset of all of this we issued three core principles
 10 that we're going to follow. Those are safety, storage
 11 ship and engagement. Safety to us means the safety of
 12 the workers who are doing the work of decommissioning,
 13 the safety of the communities that surround the facility
 14 and the safety of the natural environment. Storage
 15 ship, including the storage ship of the -- the wise
 16 storage ship of the trust funds that have been
 17 contributed to over the life of the plan by our rate
 18 payers. And engagement, which you see tonight and we
 19 also take very seriously. As David said, we intend for
 20 the Community Engagement Panel to be a two-way conduit
 21 for information, and we will soon be filing a couple of
 22 major regulatory filings. The panel has had those for
 23 about four week, and Dan Stetson as the secretary of the
 24 panel will be aggregating the feedback that we receive.
 25 We've already gotten feedback from a handful of members,

1 and we will incorporate some of that feedback, take it
 2 under consideration and let the panel know its
 3 disposition, what changes were made in response to the
 4 feedback, and if changes weren't made, what the reason
 5 why is. But that is, as David alluded to, this is one
 6 avenue of engagement. We're beginning a number of other
 7 things, including the public tours. And a lot of people
 8 request a speaker to have somebody come out to their
 9 group and talk about decommissioning. So thank you for
 10 being here and participating in this.

11 CHAIRMAN VICTOR: Great. Thank you very
 12 much, Chris. I just want to see if there are any other
 13 opening remarks from the panel. I know, Gene Stone, you
 14 wanted to make a comment. Do you want to make that
 15 comment now, or would you prefer to do it after we work
 16 through the core of the meeting today, which is about
 17 the environmental assessment and the cost estimate of
 18 the PSDAR?

19 GENE STONE: I think now.

20 CHAIRMAN VICTOR: Okay. Gene.

21 GENE STONE: So I just wanted to give an
 22 update on our trip to see Ken Alex on August the 14th.
 23 So we went to speak with Ken a couple of days after the
 24 senate committee, and we spoke to him on several items,
 25 one of which was the dry cask to make sure that we make

1 the right choice here at San Onofre and elicit his help
 2 to do that. So he suggested that we talk with the State
 3 Energy Committee, the California Energy Commission and
 4 the PUC, which we did. We saw five senators that were
 5 on that Energy Committee. We shared testimony from our
 6 point of view. And I should say, it's Donna Gilmore and
 7 I went up there. So then we received an invitation to
 8 the next senate hearing sometime next year. I don't
 9 believe the date has been set yet. So now we have
 10 ongoing meetings and talks with all of these agencies.

11 Because in this committee we've had discussion about a
 12 California consolidation plan. I brought that up to
 13 him, and his first reaction was he laughed. He just
 14 said he didn't know anyone that would take on an effort
 15 like that because it would take, in his mind, 50 or 60
 16 years to make that happen. So he didn't see Governor
 17 Brown taking on that issue and thought it was a very
 18 uphill battle for all of us to consider. So -- and my
 19 -- the last thing I wanted to say was that I have been
 20 talking with different members of the CEP here, and I
 21 believe that many members of the CEP and many members of
 22 the public that are sitting here tonight want what we
 23 are trying to say to California Edison that this process
 24 should be slowed down to ensure the best possible choice
 25 of dry cask canisters is made, and that the money is

1 spent wisely only once to avert any type of seen
 2 generator disaster and debacle that we had earlier for
 3 the future safety of all of California. And I hope that
 4 many of my fellow CEP members will join me and the
 5 others to encourage California Edison to consider this
 6 point of view. Thank you very much.

7 CHAIRMAN VICTOR: Thank you very much, Gene.
 8 I just want to remind the public that at our last
 9 meeting we agreed that there were a large number of
 10 important technical issues surrounding the choice of dry
 11 casks and the kind of vendor and the kind of materials
 12 involved, and these ultimately are -- involved tradeoffs
 13 and they also involve a huge amount of technical
 14 information. And the agreement that we made on this
 15 panel was that I would work with a handful of members of
 16 the panel who were interested in this topic, including
 17 members of the public, and identify key technical
 18 questions, and we would work on providing answers to
 19 those questions. And there are seven questions. We
 20 have circulated that material around. I am very close
 21 to having finished a draft of the lit review around
 22 these seven technical questions so then we can figure
 23 out what we do, what we do next. It's taken a bit
 24 longer. It's taken me now about 50 hours of continuous
 25 work to just get through the literature. It's a huge

1 amount of literature in this area, but I'm very close,
 2 and I look forward in the matter of the next few days to
 3 circulating that draft and also the summary of that
 4 draft, which I think makes it pretty clear what's going
 5 on inside the nuclear regulatory commission, what's
 6 going on in terms of the choice of the casks and things
 7 like that. And so I thank all of you for your
 8 indulgence, everyone for their patience and a very large
 9 number of people for their time and input as we work
 10 through this technical material.

11 Let me just say one last thing about this,
 12 which is my goal in this is to make this technically
 13 accurate but also understandable to average people,
 14 which turns out to not always be true in our sea and
 15 chemistry documents. So we're trying to get this right,
 16 but also to make this as accessible to the broad public
 17 that wants to read this material and understand how
 18 these choices are made, what we really know about
 19 corrosion and things like that, which are very important
 20 questions for the last-term aging of casks. Okay.

21 Now let's move on to the core part of our
 22 meeting tonight, which is going to revolve around a
 23 briefing from Edison and Tom Palmisano, Chief Nuclear
 24 Officer of Edison, will walk us through the highlights
 25 of these three documents that we have in front of us.

1 There will be opportunities to ask clarifying questions
 2 by the panel along the way, plus opportunities at the
 3 end to ask more questions and have some discussion about
 4 this. So, Tom Palmisano, the floor is yours.
 5 TOM PALMISANO: Okay. Thank you very much.
 6 I'd like to stand up so I can really talk to not only
 7 the panel, but the audience more directly. Excuse me.
 8 So what I'm going to do tonight, I have a heavy duty
 9 laser pointer to see if this can show on the screen. Is
 10 that visible at all? Doesn't look like it. We'll
 11 abandon the laser pointer. So what I'm going to do
 12 tonight, a little different sequence in the agenda. I'm
 13 going to talk about the post shutdown decommissioning
 14 activities report. We've talked about this a bit
 15 previously, and I've showed documents from the Kewaunee
 16 plant to the Crystal River plant with the panel, and I
 17 think we've posted that for the public. This is a
 18 summary level document, typically about 50 pages. The
 19 content requirements are mandated by the NRC, and it
 20 summarizes the overall decommissioning plan, it
 21 summarizes the environmental impact evaluation, and it
 22 summarizes the decommissioning cost estimate, and it's
 23 supported by these other documents. The environmental
 24 impact evaluation we'll talk about. We had the workshop
 25 on this, and we went into a fair amount of depth on what

1 it is. We've provided it to the panel back on August
 2 1st, and it's a voluminous report. This is an
 3 evaluation done under the federal NEPA, National
 4 Environmental Policy Act, and the NRC's implementation
 5 of that to assess decommissioning, and then the
 6 decommissioning cost estimate. As part of moving into
 7 decommissioning, we are required to do a site-specific
 8 decommissioning cost estimate. What we've been required
 9 by the NRC and the California Public Utility Commission
 10 for a number of years is for the Public Utility
 11 Commission every three years to provide a cost estimate
 12 and an update. Annually we update the NRC to assure the
 13 funds are being contributed to and maturing properly.
 14 Now, though, this is the first site-specific analysis of
 15 the decommissioning cost of San Onofre. Again, we went
 16 into this in some depth in the workshop so I'll recap
 17 that and we'll really see what your questions are now
 18 that you've had some time with the detailed documents.
 19 So with that, what I've just given you the overview and
 20 then we'll take CEP comments, questions. The sequence
 21 here as I laid it out, so the post shutdown
 22 decommissioning report, this simple slide tells you the
 23 basis starts with 10CFR, Code of Federal Regulations,
 24 Section 50, Part 82. Then the NRC Regulatory Guide
 25 1.185. Just a lot of background detail for you. We

1 also reviewed recent decommissioning plant submittals to
 2 the NRC from other utilities. What are these other
 3 utilities providing to meet the NRC's expectations, what
 4 is the NRC looking for when they review these. The
 5 content is basically a description of the plant
 6 decommissioning activities, the development of the
 7 schedule for these activities, the expected cost and the
 8 discussion of the environmental impacts. Now, we
 9 decided in June 2013 to permanently cease operation at
 10 or decommissioning. So we all need to think about this
 11 as the initial plan. It certainly will be changed over
 12 time as we do more detailed planning. We're expected to
 13 keep this up to date. So the process from here on out,
 14 and if you were at the NRC informational meeting in
 15 September of 2013, they covered some of this, and in the
 16 workshop Bruce Watson, a branch chief of the NRC, also
 17 talked about this recently with us. So we will submit
 18 the PSDAR to the NRC for review. A copy is sent to the
 19 state of California for information. That's a
 20 requirement. The NRC reviews and confirms that the post
 21 shutdown decommissioning activities report is adequate.
 22 In other words, it meets the regulatory requirement for
 23 content. It has all the required content and the
 24 required level of detail. They also at that point post
 25 the PSDAR publically. Now, we have posted the drafts

1 publically. They will notice it in the federal register
 2 that this is the submittal that's available for public
 3 review and comment. We will also post it on our website
 4 as we submit it. So you'll have multiple ways to access
 5 the final document. The NRC then has a 90-day period,
 6 and during that period they will hold a public meeting
 7 to discuss the PSDAR. We will be at that meeting and we
 8 will explain the PSDAR both to the NRC and to the
 9 public, and then they will talk about their review and
 10 solicit any comments from the public. We are not
 11 allowed to proceed with major decommissioning
 12 activities. Some of you remember -- may remember our
 13 first meeting we talked about three large phases to
 14 decommissioning. We're in the planning phase. Not only
 15 in the first two and a half years we're not authorized
 16 to conduct major decommissioning activities, which are
 17 large radioactive component removal, things like that.
 18 Yes?
 19 WILLIAM PARKER: Question. Bill Parker.
 20 Where will those public hearings be held, in Washington
 21 or in California?
 22 TOM PALMISANO: No, they'll be held locally.
 23 The one we did last fall I think was done in Oceanside.
 24 They are held in the vicinity of the plant to make it
 25 accessible to the locate stakeholders.

1 WILLIAM PARKER: Thank you.
 2 TOM PALMISANO: So, anyway. So during this
 3 90-day period the NRC reviews this, the public has an
 4 opportunity to comment. The NRC, this is not a document
 5 like a license amendment where they formally approve it.
 6 After 90 days if they have questions, we're expected to
 7 respond and amend the report if they feel something is
 8 lacking. But if they have no questions, they accept it,
 9 and at the end of 90 days is we're authorized to move
 10 into phase two of decommissioning. The last line is
 11 particularly important. The PSDAR is a living document.
 12 We are required to keep it up to date. It's not on a
 13 frequency. It's really as our plans change or
 14 conditions change. And, you know, if there is a major
 15 change to a planned activity or a schedule, we want to
 16 use a different process than we've previously described
 17 or a different sequence, we need to update the PSDAR.
 18 The NRC really uses that to outline their inspection
 19 activities if they come and inspect. Now, we also have
 20 virtually weekly contact with the NRC for inspection
 21 planning, so that's somewhat of nominal requirement. We
 22 also submit any updates to the state of California as
 23 well. Recent plants who have entered decommissioning or
 24 proceeded through decommissioning might update a PSDAR
 25 three or four time during the course of a 10- or 15-year
 Page 20

1 period. It's not a frequent thing. It's major changes
 2 and likewise major cost changes need to be reported in
 3 the PSDAR.
 4 CHAIRMAN VICTOR: Can you say a couple
 5 words, Tom, about what other plants have found to be
 6 major things that they have learned along the way that
 7 could not have been anticipated in the original PSDAR.
 8 TOM PALMISANO: Sure. The types of changes
 9 you might see, one would be a cost change, because the
 10 PSDAR summarize the cost estimate and they're separate
 11 reporting, but if you have a major cost change you do
 12 need to update your PSDAR. Let's say you decide you're
 13 going to change your sequence or you decide you're going
 14 to not remove a containment building. You're going to
 15 decontaminate it, release it radiologically but leave it
 16 in place. That would be a major change that would cause
 17 us to do that. Those types of things. If I decide to
 18 use an underwater cutting tool versus a laser cutting
 19 tool, that's not the kind of change they're interested
 20 in. They're really interested in what's the sequence of
 21 planned activities is really what they're interested in,
 22 because that's what they cue that inspections on.
 23 CHAIRMAN VICTOR: Thank you.
 24 TOM PALMISANO: So before I get into the
 25 PSDAR itself, we've done a lot of work in the last six
 Page 21

1 to 12 months to develop the initial decommissioning
 2 plan. As I said earlier, this is an initial plan. It
 3 is still somewhat high level. We have yet to hire a
 4 decommissioning contractor who will come in and do the
 5 more detailed planing underneath this level, and that's
 6 a year away before we do that. So we've seen -- we've
 7 shown you the 20-year time line before. I'm not going
 8 to spend a lot of time. I just want to recap. The top
 9 line is not to scale. The bold vertical line is January
 10 2016. So everything to the left of that is in this
 11 preliminary planning phase. We've talked before about
 12 the various license submittals, about the physical
 13 changes we made to the plan as we retire systems, we
 14 drain acids and caustics out of systems we no longer
 15 need. All of that is part of the preliminary
 16 activities. Those are not major decommissioning
 17 activities. Decisions which we have not made yet on how
 18 to expand the ISFSI, what vendor to select, that's all
 19 in the planning phase. To the right of the bold line
 20 would be the start of phase two once the NRC accepts the
 21 PSDAR and the associated documents. That for us is
 22 basically first quarter 2016 when we really mobilize the
 23 decommissioning contractor, do the more detailed
 24 planning and begin the start of major dismantlement and
 25 decontamination phase. And then to the far right, a
 Page 22

1 little hard to read, you'll see things like license
 2 termination plan, site restoration. License termination
 3 plan we'll talk more about that as we complete the
 4 nuclear radiological piece of decommissioning. We have
 5 to go through the NRC to actually demonstrate we've meet
 6 the cleanup criteria and terminate the NRC license, and
 7 then there are other activities to finish the site for
 8 non radiological cited restoration. Now, with that I'm
 9 going to show you a slide you have not seen before. So
 10 from here on out we're going to talk about three
 11 categories of activities and three categories of cost.
 12 License termination -- yes, sir.
 13 TED QUINN: This is Ted Quinn. Is it
 14 possible to get -- for the committee members to get a
 15 large copy of that schedule?
 16 TOM PALMISANO: Yes.
 17 TED QUINN: One that we can read.
 18 TOM PALMISANO: Yeah.
 19 TED QUINN: I can't read this.
 20 TOM PALMISANO: We'll be glad to provide.
 21 And I appreciate that, and I apologize for not having
 22 that.
 23 TED QUINN: Okay. Thanks.
 24 CHAIRMAN VICTOR: Let me just say that I
 25 think the printout that we have of the slides is a
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1 generation old. I think I saw -- it was an earlier
 2 draft of the slides. Oh, no I -- my printout. My
 3 fault. So there is an accurate printout here somewhere.
 4 TOM PALMISANO: Yeah.
 5 CHAIRMAN VICTOR: Oh, that's the source of
 6 the microscopic comment. Yea, let's post those slides
 7 online, if that's possible.
 8 TOM PALMISANO: We will. We always do.
 9 They've all be been posted before.
 10 CHAIRMAN VICTOR: Maybe in the future when
 11 there are things like this that are so important, we can
 12 circulate a copy of the slides that are going to be
 13 particularly hard to read.
 14 TOM PALMISANO: We'll do that. And for
 15 something like a time line, I can bring in a large
 16 11 X 17 and make it available to the public as well as
 17 the panel, so thank you for that. We will do that.
 18 CHAIRMAN VICTOR: Thank you. Well, let me
 19 just say that the world's trees are already trembling
 20 from the people who've printed out the documents in
 21 advance of today's meeting, so don't ask for too much
 22 paper.
 23 TOM PALMISANO: Yeah. And we would
 24 encourage this is all posted online so please download
 25 it, and you can then expand it on a computer. You know,

1 please, we want this to be available to you to take a
 2 look at this.
 3 So the categories license termination is
 4 really what the NRC regulates in terms of the
 5 radiological decommissioning and release of the plant.
 6 Spent fuel management clearly regulated by the NRC, but
 7 a different category of activity and cost. And the
 8 third is site restoration, which is not an NRC activity.
 9 This is the activity that is of interest to the owners,
 10 to the states, to the counties, to the local
 11 communities. This is really removing buildings. For
 12 example, most sites would really do all three and
 13 restore a site, let's say, to a green field condition
 14 such as was done in Main Yankee, Connecticut Yankee, Big
 15 Rock Point, et cetera. But if you were to go to the
 16 Trojan Plant in Oregon, when they originally
 17 decommissioned they left the containment building
 18 initially. If you go to Rancho Seco near Sacramento, I
 19 believe their containment building is still there.
 20 They've completed the license termination and
 21 radiological decommissioning, which means they've
 22 cleaned all the radioactivity and satisfied the NRC.
 23 The building is released. Then it's a non NRC licensed
 24 facility from that standpoint. That's not our intent,
 25 but that's what's in site restoration is completing the

1 removal of facilities on the site as we complete the
 2 decommissioning. With that -- going a little too fast.
 3 Okay. This is a slide you have not seen before. And,
 4 again, we'll get you a bigger copy. I've color coded
 5 the activities, though. The top line is the license
 6 termination activities, the center section in yellow is
 7 the spent fuel management activities, and the red at the
 8 bottom is the site restoration period. This is a level
 9 of detail that I'm going to show you in a minute, and
 10 I'm going to take us back to this slide. So before I go
 11 over this slide, on the next table this is out of the
 12 PSDAR and the decommissioning cost estimate. This is
 13 the level of detail we touched on a bit in the workshop,
 14 but really now we've finalized the initial plan. So
 15 these time periods on the left you can see June 13th --
 16 June of 2013 to December 2013. You see period two,
 17 which we're in now, January 2014 to June 2015 on down.
 18 These define in the PSDAR and the cost estimate the six
 19 periods for the NRC license termination. And I'm not
 20 going to read every line, but I'll narrate the major
 21 activities. In the description column are activities
 22 like, you know, vendor mobilization, system
 23 decontamination, reactor internals removal preparation.
 24 So this is the level of detail now we've developed to
 25 inform the NRC and the public and develop our cost

1 estimate as to what's going to be going on in that time
 2 period. Likewise there are periods for spent fuel
 3 management, and there is actually two major periods
 4 here. The first one, June 2013 all the way to December
 5 2049, this is the period where we transfer the fuel from
 6 wet storage to dry storage and the dry storage facility,
 7 the independent spent fuel storage facility exists. And
 8 then after the Department of Energy steps up and
 9 performs, the fuel's removed from the site. Current
 10 dates from the Department of Energy put that in the 2049
 11 time period. We will then demolish the ISFSI and remove
 12 that facility as part of the license termination plan.
 13 CHAIRMAN VICTOR: Can I just -- can you
 14 update us as to the status of the integrated fuel
 15 management program. There was some comments in advance
 16 of the meeting about where we stand with that. We
 17 looked already at a draft. Where are we with that
 18 process and where are we --
 19 TOM PALMISANO: That document is drafted.
 20 Comments have been incorporated. We had the workshop,
 21 the fuels workshop, and then the CEP meeting in May was
 22 devoted to the radiated fuel management plan. So that
 23 document has been reviewed and commented on by the panel
 24 members. If we've gotta close the loop with comment
 25 disposition, we'll include that, as Chris said in the

1 earlier comment. But that basically is pending final
 2 approval by the owners and then submittal to the NRC.
 3 CHAIRMAN VICTOR: Okay. So that's still
 4 with the owners right now.
 5 TOM PALMISANO: Yeah, that is still with us
 6 at this point, yeah. And that would be my intent is to
 7 submit that along with the post shutdown decommissioning
 8 activities report, the decommissioning cost estimate at
 9 the same time in the latter part of September. Yes,
 10 sir.
 11 WILLIAM PARKER: As we've talked about
 12 before, Tom, these documents and time periods are within
 13 the NRC context. So you're talking about transferring
 14 the fuel to the federal government by 2049?
 15 TOM PALMISANO: 2049, yeah.
 16 WILLIAM PARKER: And that's the guidance you
 17 have from the NRC. Those are the documents you have to
 18 submit to the NRC. But at some point can you share with
 19 this panel what Southern California Edison would do in
 20 the event that the federal government doesn't meet its
 21 requirements and what your internal planning is for that
 22 possibility. I understand these are the NRC
 23 requirements, but I would hope you would be looking
 24 beyond the regulatory requirements to the likely
 25 possibility that these materials will be on site well

1 WILLIAM PARKER: Exactly.
 2 TOM PALMISANO: We all share the skepticism,
 3 but I needed something to base a cost estimate and a
 4 schedule on, so that's the best I have to date. We're
 5 not naive. So we'll be glad to discuss that at an
 6 upcoming --
 7 CHAIRMAN VICTOR: There has been a lot of
 8 discussion about devoting a meeting early in 2015,
 9 perhaps the first quarter of 2015, to refresh on where
 10 we stand. I think at that point we come back, we have
 11 began this very interesting conversation about what, if
 12 anything, we can do in Southern California to help put
 13 pressure on the federal government. All these jokes
 14 begin when the DOE does its job. And then you
 15 continually express the joke after that. So we need --
 16 we're going to visit all that in 2015, but I think for
 17 the purposes of this, we need to stay focused on these
 18 regulatory filings because they're coming up and we want
 19 to make our input time.
 20 TOM PALMISANO: Right. I appreciate that.
 21 GENE STONE: In addition, one last thing on
 22 that. When you give us those alternative plans that you
 23 might have, will that include the cost and how the money
 24 is going to be spent after that?
 25 TOM PALMISANO: So, Gene, I think we'll come

1 beyond --
 2 TOM PALMISANO: And we certainly are. And I
 3 think we --
 4 CHAIRMAN VICTOR: Please. Please. As is
 5 the norm in these meetings, let's just allow the
 6 exchange to happen. People --
 7 TOM PALMISANO: We certainly are, and I
 8 think we're planning on another event on spent fuel
 9 early next year, and I think we'll be able to talk about
 10 what the longer term plans look like.
 11 WILLIAM PARKER: To fully understand, there
 12 are certain things you have to do for the NRC which are
 13 mandated and you obviously have to go through it, but
 14 there is another set of issues that you might share with
 15 us independent of the NRC.
 16 TOM PALMISANO: What's the contingency plan?
 17 WILLIAM PARKER: Exactly.
 18 TOM PALMISANO: Just to clarify, the
 19 assumption on spent fuel really comes from the
 20 Department of Energy.
 21 WILLIAM PARKER: Understood.
 22 TOM PALMISANO: Yeah, they're responsible.
 23 The dates are they going to perform for the industry in
 24 2024 and complete San Onofre by 2049? Those are the
 25 best dates they've given us.

1 in and talk about what the contingency will be if the
 2 DOE can't perform, and we'll talk wholistic. So I'll be
 3 glad to put that on there, okay.
 4 So now that I've shown you a table, I really
 5 want to take you back to the diagram here. So the panel
 6 members have, I guess, a reduced copy of the slides. So
 7 I want to give you a feel looking at the green -- the
 8 green lines at the top. The long bar, the first of the
 9 long bars would be decommissioning period three. Let me
 10 give you a feel for that. So that's scheduled July 2015
 11 to June of 2019. At that point we've entered the major
 12 decommissioning phase. We're mobilizing a vendor, we're
 13 decontaminating the radioactive systems that are
 14 generally in the containment building or the auxiliary
 15 building, the fuel-handling building, and we're
 16 preparing and starting the early process of removing the
 17 highly radioactive internals of the reactor. So we're
 18 early in the process of the radiological decommissioning
 19 at that point, preparing to take those system, the
 20 decontaminating, cut them out, cut them up into pieces,
 21 prepare them for shipment offsite. As you then work
 22 through the sequence, the fourth bar from the left, the
 23 fourth green bar we're in the large plant systems and
 24 large component removal. So we've done the planning.
 25 We've started to deal with the highly radioactive

1 components. We're now continuing to work to remove the
 2 primary and auxiliary systems, typically the nuclear or
 3 radiological systems in the plant during that time
 4 period. The shorter block we've largely at that point
 5 we're 2022 to 2024. At that point on this schedule we
 6 would envision having the radioactive systems removed
 7 from the buildings. We're now into decontaminating the
 8 remaining material of the buildings at that time for the
 9 nuclear part of the plant or the radiological part of
 10 the plant. Then the long green line, July of 2024 to
 11 December 2032, there is a couple activities.
 12 Fundamentally we're completing removing the radiological
 13 buildings and we're entering the license termination
 14 process. And the way the NRC rules, we're two years
 15 before the end I submit a license termination plan, and
 16 that's a detailed plan that really documents the
 17 radiological cleanup, the surveys that have been done to
 18 demonstrate we've achieved the NRC's criteria for
 19 radiological cleanup and allows them to come in to
 20 independently review and sample to confirm that. And
 21 that is a license amendment process with the typical
 22 public notice and hearing opportunities, et cetera. So
 23 the way the license is terminated is through a license
 24 termination process. So that would complete the
 25 radiological or license termination by 2032. Basically

1 Understand, it's an assumption. We'll talk about that
 2 in the future. Followed on the last two yellow blocks
 3 on the lower right there are actually the demolition of
 4 the ISFSI and the license termination process for the
 5 ISFSI and all the fuel removed from the site. Then the
 6 site restoration periods, that, as I said, is really the
 7 non radiological decommissioning. And as you can see,
 8 all this proceeds in parallel. The radiological
 9 decommissioning starts first. The -- the -- the first
 10 block is really transitioning, planning, which we're in.
 11 The second block, June of 2015 to July of 2017, we're
 12 starting to dismantle some of the exterior buildings not
 13 directly associated with producing power, some of the
 14 makeup water systems, some of the storage buildings on
 15 the west side of I-5. Think about the north and south
 16 end of the sites where we remove the non radiological
 17 buildings. And then you get into what would be the
 18 third and the fourth blocks. We're starting into some
 19 greater non radiological building demolition, removing
 20 structures down to a certain depth, and really the
 21 process of removing all the structures to turn the site
 22 back into a green field condition. So that's what the
 23 big picture looks like. This is what is now summarized
 24 in the PSDAR and the decommissioning cost estimate. And
 25 this is really the first time we've showed this level of

1 our 20-year plan, the end of 2032.
 2 The center section is spent fuel. So if you
 3 look at -- let's take the second bar from the left,
 4 which is the long bar. This is July 2014 to June of
 5 2019. This is the period during which we would be
 6 selecting a vendor, which we're in the process of
 7 evaluating, deciding how to expand the independent
 8 storage facility pad, depending on which vendor we
 9 select, and actually expanding the pad, fabricating and
 10 delivering the casks, and then offloading both fuel
 11 pools into the casks. Our plan is by June of 2019, I
 12 think end of 2019, to have the two fuel pools offloaded
 13 and all the fuel in dry fuel store casks on the pad at
 14 San Onofre. So we've decided to do that early in the
 15 sequence, and I appreciate some of the comments about
 16 timing. You know, everything we've researched would
 17 indicate moving fuel to dry fuel storage probably makes
 18 sense from a safety standpoint as opposed to continuing
 19 at an extended wet storage period when we have a choice.
 20 Then the long period really, the long bars are just
 21 storage. So all the fuel in the ISFSI we're down in
 22 storage, operating the facility, maintaining the
 23 facility, surveilling the facility, aging management
 24 programs. And then that runs all the way out to 2049
 25 when the DOE is finished removing fuel from the site.

1 detail.
 2 CHAIRMAN VICTOR: So let me see if there are
 3 comments and question about this, mindful that there is
 4 a lot of other stuff we want to look at. I asked you to
 5 talk about the PSDAR first, though, because this is in
 6 some sense is the real strategic document and strategic
 7 vision so it's of special importance here. Comments and
 8 questions that people would like to raise. Ten Quinn.
 9 TED QUINN: In the schedule that you have,
 10 at what point does the ocean pipes, piping, no longer
 11 required to carry water in it?
 12 TOM PALMISANO: That's a good question.
 13 We're actually engineering how to remove our dependance
 14 on ocean pooling now. So in the planning phase, again,
 15 that's not major decommissioning. I have about 20 to 22
 16 what are called effluent streams. I use saltwater
 17 cooling that continues to cool the fuel cool systems,
 18 for example. So I'm engineering a modification to put
 19 in an alternate cooling system that is truer an air
 20 cooler so that I can remove that saltwater. And we've
 21 got a septic system for, you know, some of the office
 22 buildings. We're looking at how to eliminate the need
 23 for that. That is diluted and discharged. We've got
 24 sumps to collect rainwater so they're systematically
 25 going through all the effluence. My estimate is we'll

1 probably have most of them eliminated by early 2016. A
 2 few of the more challenging ones will go a little bit
 3 beyond that. That's a level of detail we haven't worked
 4 out yet. We've identified the 20 to 22 sources of
 5 discharge. Now we're systematically seeing what it
 6 takes to eliminate them. And this is the kind of detail
 7 that will evolve over the next several years, you know.
 8 As we develop that detail, we can give you more precise
 9 answers.
 10 CHAIRMAN VICTOR: Any other comments or
 11 question?
 12 WILLIAM PARKER: I assume that the red bar
 13 to the far right is restoring the pads once the --
 14 TOM PALMISANO: Yeah. The combination of
 15 the two yellow boxes and the red bar, that's once the
 16 ISFSI is demolished and the license terminated, that's
 17 the final site restoration where the ISFSI is.
 18 WILLIAM PARKER: And at that point the
 19 entire site is back to a green field --
 20 TOM PALMISANO: The entire site is, yeah.
 21 That is correct.
 22 CHAIRMAN VICTOR: Are you going to talk more
 23 when we get to the cost estimate about what the Navy has
 24 actually asked for, because the cost estimate is based
 25 on a three-foot below grade removal, I think? And is

1 that what they've asked for in regards to a bore?
 2 What's going on with the Navy?
 3 TOM PALMISANO: So let me give an update on
 4 that. Actually, the cost estimate is based on a much
 5 more conservative assumption. The power plant itself is
 6 on an easement that was granted by the Department of the
 7 Navy that dates to the early 60s. An in it it's got a
 8 couple of sentences of relatively non specific language
 9 that obligates us to remove all improvements made to the
 10 property. And I'm probably not phrasing that exactly to
 11 the language, but we're obligated to remove all
 12 improvements or to a condition otherwise specified by
 13 the Navy, the landlord. So we've entered into the early
 14 discussions to start to define what they will expect and
 15 what is acceptable to them. Historically, commercial
 16 power reactors decommissioning in a country have never
 17 excavated down 60 or 90 feet to get all the non
 18 radiological compacted material, base mat and pilings
 19 out that you build under any facility, whether it's a
 20 tall office building or a power plant. Typically they
 21 found environmentally it is smarter to excavate it down
 22 to a certain level, meet the radiological
 23 decontamination criteria, and after that, backfill the
 24 deeper structures and abandon them. From an
 25 environmental standpoint that has potentially less

1 impact. So we're in the early discussions with the
 2 Navy. Whatever we do has got to be to their
 3 satisfaction. We'll have that discussion with them, and
 4 then from a cost estimate standpoint to be conservative
 5 today, until I have an agreement that's different, I'll
 6 estimate that I've gotta remove it all. So that's what
 7 the cost estimate's based on.
 8 CHAIRMAN VICTOR: We should probably let you
 9 go on to the environmental -- Garry Brown and then Gene.
 10 GARRY BROWN: I have a question on -- you
 11 said this is a living document.
 12 TOM PALMISANO: Right. It's fluid.
 13 GARRY BROWN: How fluid? I guess what if
 14 down the road you find that a major cost component, a
 15 major thing like you have to take out the conduits is
 16 basically mandated? That radically changes virtually
 17 everything.
 18 TOM PALMISANO: Sure. That would cause an
 19 update.
 20 GARRY BROWN: And so the NRC and everybody
 21 understands that issues like that may totally alter what
 22 you're submitting at this point --
 23 TOM PALMISANO: Absolutely.
 24 GARRY BROWN: And it won't come back and
 25 say, well, no, you have a deadline --

1 TOM PALMISANO: No. They expect us to keep
 2 it updated. They expect communication with them. And,
 3 you know, a good example might be the discussion on
 4 spent fuel storage. Let's say in three years I have a
 5 different assumption that changes the timing with the
 6 Department of Energy. I will have to revise the radio
 7 fuel management plan, the cost estimate, PSDAR and
 8 resubmit all those.
 9 GARRY BROWN: So nothing is cast in
 10 concrete.
 11 TOM PALMISANO: Yeah. These are the initial
 12 plans. When you talk a 20-year decommissioning or
 13 longer for spent fuel, everybody expects there may be
 14 changes. Like I said, recent decommissioning plants
 15 might revise this four times in 10, 15 years when major
 16 assumptions change, major conditions.
 17 CHAIRMAN VICTOR: Gene.
 18 GENE STONE: When do you submit your
 19 decommissioning plan to the PEC?
 20 TOM PALMISANO: You're talking about the
 21 rate filing for the access of decommissioning trust
 22 fund, Gene?
 23 GENE STONE: Right.
 24 TOM PALMISANO: We intend -- Chris, you
 25 might have more specific information.

1 CHRIS THOMPSON: Our intention is to file
 2 the decommissioning cost estimate and other associated
 3 documents in the next months, six weeks.
 4 TOM PALMISANO: Right. Basically
 5 simultaneously with the NRC documents.
 6 CHAIRMAN VICTOR: Let me just clarify that
 7 Garry Brown's question, I think it's a living document
 8 that you update, but at the same time everybody knows
 9 that there is an uncertainty in a multi decade
 10 engineering project. And so what you've been asked to
 11 do in terms of costing this out is make a series of
 12 plausible worse case assumptions, things that would cost
 13 money, like removing the conduits. And if it turns out
 14 that you don't remove the conduits or there's some other
 15 deal made or whatever, then that would lower the cost.
 16 But right now for the purposes of the costing, which we
 17 will get to in a little bit, you're making a series of
 18 worse case decisions.
 19 TOM PALMISANO: And I'll point those
 20 assumptions out. Those are exactly the types of things
 21 that would cause us to revise the document.
 22 CHAIRMAN VICTOR: Why don't we continue on
 23 the environmental impact statement you left off at.
 24 TOM PALMISANO: So with that, again, and I
 25 would urge everybody -- the panel members have seen

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1 this. The public, download this from the website.
 2 Please take a look at this. So the environmental impact
 3 evaluation. We discussed this pretty extensively at the
 4 workshop before we gave you the full document. So I'm
 5 going to step through and really summarize what you've
 6 already heard. The basis document, again, this
 7 environmental impact evaluation is designed to satisfy
 8 the NRC requirements under NEPA. Separately we'll start
 9 dealing with the California Environmental Quality Act,
 10 and I'll touch on that briefly. That is really yet to
 11 come. So this is designed to satisfy the NRC
 12 requirements. The content, the way the NRC does this,
 13 they have done a generic environmental impact assessment
 14 of decommissioning activities. And this really starts
 15 with environmental impact assessments were done when the
 16 reactors were sited and first built and have been kept
 17 up to date as the plant has been operated and modified.
 18 We've looked at generic decommissioning activities and
 19 identified the impacts. What we're required to do now
 20 that we have our initial plans developed is look at each
 21 of the factors and conclude are we covered by the
 22 generics impact? We have some site-specific
 23 differences. And we summarize and analyze each of the
 24 factors. So that's what this does. Once we -- you
 25 know, once we complete that, we judge are we covered by

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1 the generic impact and any other impacts small? If so,
 2 we document that in our report. We provide the summary
 3 and the PSDAR to the NRC, and it's available for their
 4 inspection. So that's what the content is. The key
 5 assumptions here, and we talked about this quite a bit
 6 in the workshop, but this is important so I just want to
 7 take a minute. So this one assumes that ocean conduits
 8 will not be removed. You'll see a different assumption
 9 in a minute on a cost estimate. Dan?
 10 DAN STETSON: Thanks, Tom. A couple
 11 questions with reference to the conduits. Our
 12 understanding is that's under the jurisdiction of the
 13 State Lands Commission.
 14 TOM PALMISANO: State Lands Commission.
 15 DAN STETSON: An estimate for the removal of
 16 the conduits is in the 400 million?
 17 TOM PALMISANO: I -- when I talked to you
 18 previously I had a high number. It's about a hundred
 19 million dollars for the conduits.
 20 DAN STETSON: A hundred million dollars.
 21 What's the criteria does State Lands use for that? Do
 22 they do a survey of the environment to determine if
 23 there is endangered species like hill grass? Is there
 24 -- how long does that take for the public hearings? A
 25 little on that process, if you would, please.

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1 TOM PALMISANO: Sure. We went through -- I
 2 should baseline everybody. We are -- have already
 3 partially decommissioned the unit one plant, unit one
 4 reactor and all of the aboveground portion is gone. As
 5 part of that we face the conduit question. Do we remove
 6 them? Do they stay? And we were able to discuss this
 7 with the State Lands Commission and reach agreement to
 8 leave them in place and abandon them. We're in the
 9 process of completing that work. We've removed some
 10 vertical access risers and leave the horizontal portion.
 11 And that for unit one is deemed to be an environmentally
 12 acceptable alternative as opposed to tearing out several
 13 thousand feet of piping on the sea bed. As far as the
 14 process for unit two and three, we have not entered the
 15 discussion with the State Lands Commission yet. Linda,
 16 I see you in the room. Do you know how long unit one
 17 discussions took before we had that approved?
 18 LINDA: I think it took only a couple of
 19 years only because of the CEQA process and preparation
 20 of the EIR in 2005.
 21 CHAIRMAN VICTOR: Just for the record, it
 22 took just a couple of years, just because of the
 23 microphone.
 24 TOM PALMISANO: Yeah. So Linda worked in
 25 our environmental --

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1 CHAIRMAN VICTOR: Just tell us just for the
 2 purpose of record how long --
 3 TOM PALMISANO: So the impression was about
 4 how long that takes. So we start with the State Lands
 5 Commission. They will enter the CEQA process, have to
 6 do an environmental EIR, I think, impact report. And
 7 that process took about two years on unit one. Because
 8 we've already done it for unit one, it may take a
 9 shorter period of time for units two and three. The
 10 other thing for unit one, we had to look at any
 11 radiological contamination and ensure the NRC and State
 12 Lands there was no residual radiological contamination.
 13 DAN STETSON: Underwater surrounding the
 14 conduits?
 15 TOM PALMISANO: In the conduits.
 16 DAN STETSON: Oh, in the conduits.
 17 TOM PALMISANO: In the conduits. Because
 18 there is discharge. Discharges. Radiological
 19 discharges would go through the conduits. So it's a
 20 complicated discussion plan. We intend to enter that
 21 with the State Lands Commission for units two and three.
 22 Those are activities yet to come.
 23 CHAIRMAN VICTOR: But units two and three
 24 are heat transfer, not -- there's no radiological
 25 discharges.

1 there is a much higher level of consciousness today
 2 among the people of California on how important it is to
 3 protect the coast. And certainly I think people view it
 4 as more of a resource. And I just came off of nine
 5 years of trying to change the laws for how do we handle
 6 tearing out the oil platforms and when those are
 7 decommissioned. It was a number of those. But without
 8 getting into it now, there were -- the discussion was
 9 the reefs and so don't take them out, but two and a half
 10 million dollars we spent trying to prove. And some
 11 structures were producing reefs, and the ones in the
 12 shallower depth were not. It was decided that the oil
 13 company wouldn't have to remove one of the structures.
 14 They have to bring in actuaries to determine how much
 15 money they're saving, and a percentage of that savings,
 16 like 60 to 70 percent has got to be paid to the state to
 17 finance coastal restoration projects. So in your area,
 18 just to kind of make the assumption, well, we were
 19 successful then, we will be now. We can abandon it so
 20 we don't really have to do an environmental impact on
 21 impacts of removing them, so, therefore, there is no
 22 negative impacts. I think it's naive. Just in the last
 23 slide we were talking about -- Chairman Victor said, you
 24 know, this document you're working on today plans for
 25 worse case scenario, and you're not planning on a worse

1 TOM PALMISANO: No there has been -- there
 2 has been radiological discharge through the units two
 3 and three conduits as well.
 4 CHAIRMAN VICTOR: I know this issue came up
 5 last night. Let me see if there are other comments.
 6 Garry Brown.
 7 GARRY BROWN: I apologize. I was out of
 8 town at the workshop and so I didn't have benefit. The
 9 one month we had, and I've been out for three so I'm
 10 just getting up to speed. The removal of the conduits
 11 -- and I represent a coastal protection organization and
 12 a network throughout the state -- is very problematic to
 13 us. Basically the owners promised in the lease
 14 agreement when they built it that they would remove
 15 these and take the -- and return it to its natural
 16 state. Now basically there is a desire to renege on
 17 that and abandon them and leave them in. You have
 18 confidence because you won that issue to leave the
 19 conduit in for plant number one. That was somewhere
 20 around 1990.
 21 TOM PALMISANO: Well, plant -- you know, one
 22 shut down I believe '92, but the decommissioning
 23 occurred after 2000, so that's a fairly recent. I mean,
 24 within 10 years, 15 years.
 25 GARRY BROWN: I guess my point is I think

1 case scenario because you should be planning on taking
 2 those out, because that was the commitment.
 3 TOM PALMISANO: I am, and the cost -- go
 4 ahead.
 5 CHRIS THOMPSON: I think the way that the
 6 cost estimate, you know, the conduits was slightly
 7 different. We entered into a lease termination
 8 agreement with the State Lands Commission who is leasing
 9 the land. The terms of the last currently say we will
 10 remove the conduits. As a part of that agreement to
 11 terminate the lease, the State Lands Commission will do
 12 an environmental assessment of us abiding by the terms
 13 of the lease removal. In the case of the unit one
 14 conduits, they came -- they came to the conclusion
 15 through their CEQA analysis it was an environmentally
 16 preferred alternative to not remove them. It wasn't
 17 that we --
 18 GARRY BROWN: I'm just saying, a lot of
 19 science from that time until now.
 20 CHAIRMAN VICTOR: Let me just intervene
 21 because I'm mindful of the time. What I hear from the
 22 comments here and what I heard from last night's meeting
 23 at the Ocean Institute in Dana Point is that this is an
 24 issue that people care a lot about and need to be
 25 attentive to it, and there are also of course larger

1 compliance questions related to Lands Commission and
 2 other environmental assessments. The environmental
 3 assessment that we're looking at tonight is the
 4 environmental assessment required by the NRC as part of
 5 the larger PSDAR filing and so on. So this is not the
 6 only environmental assessment that will be relevant to
 7 this. There will be a variety of others. I think
 8 there's a slide later that will talk about this. So let
 9 me say that I think we as the CEP need to come back and
 10 look at this question and see if it's something useful
 11 we can do in the CEP with Edison and with the key
 12 stakeholders and the various communities, including
 13 several members of this panel, and provide some input
 14 here. My understanding is that it's not material to
 15 what you are filing with the NRC right now, but it is of
 16 course material to the Lands Commission and the other
 17 state environmental departments.

18 CHRIS THOMPSON: A three-second point. We
 19 would like your feedback and input on. That is the CEQA
 20 process is obviously a public process and there is
 21 opportunity for public involvement.

22 TOM PALMISANO: So there is a set of
 23 assumptions here, you see my note. These are different
 24 than some of the decommissioning costs. In the
 25 decommissioning cost estimate I'm assuming they're

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1 removed. So we're budgeting, we're planning the money
 2 to remove them. An assumption here is the State Lands
 3 Commission will conclude in their process it is
 4 advantageous to leave them. If that doesn't -- if that
 5 doesn't happen, we will have to remove them. We'll
 6 update the environmental impact assessment for the NRC.
 7 So this is not a final decision, if you will. It's a
 8 planning basis. The final decisions will be made really
 9 under the CEQA process.

10 CHAIRMAN VICTOR: We need to let you
 11 continue on, Tom, because we still have the PEC and much
 12 of the environment --

13 TOM PALMISANO: Well, I'll just hit these
 14 quickly. No blasting during decommission. Some plants
 15 use explosive to take major concrete buildings down. We
 16 will not. It's too sensitive of an area. Maintain
 17 existing land use zoning designations. Limit
 18 dewatering. The site is dewatered in a considerable
 19 radius during construction. We will much more severally
 20 limit that during deconstruction to minimize the
 21 environmental impact. We know there is no drinking
 22 wells, and you can see the rest. Limit excavation to
 23 area previously disturbed. We won't go outside what has
 24 already been excavated when the plant was built.

25 TED QUINN: Very quickly, Tom. Is there any

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1 differences in these assumptions then were unit one
 2 assumptions?

3 TOM PALMISANO: I wasn't involved in the
 4 unit one decommissioning, Ted. I think fundamentally
 5 they're the same, but I would have to check. Again,
 6 that was done, you know, initially a number of years
 7 ago. So we'll take an action to compare those.

8 TED QUINN: Okay.

9 TOM PALMISANO: Yes, Pat.

10 PAT BATES: Are these environmental
 11 evaluations the same process? Are they vulnerable to
 12 legal challenges by the public? Are they certified by
 13 any --

14 TOM PALMISANO: This is done under the NRC's
 15 NEPA process, so the NRC already has the generic
 16 environmental impact evaluation that has been subject to
 17 public scrutiny, and I basically compare our plans to
 18 that. So whether this could be challenged, the NRC does
 19 not have a hearing process for this. They certainly
 20 will take comments. The CEQA process I think is going
 21 to be the more publically transparent process initially.
 22 The NRC's process will pick up with an actual
 23 environment assessment as part of license termination
 24 when we're done.

25 PAT BATES: Okay.

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1 TOM PALMISANO: You've seen this before, a
 2 summary with all those assumptions and the analysis we
 3 did. All of the impacts are judged to be small, which
 4 basically says that we are covered by the generic
 5 assessment and our site-specific assessment. So the
 6 next steps, so this work is designed to comply with the
 7 NEPA Act. We will also adhere as to the California
 8 Environmental Quality Act, which we have not started
 9 into yet. Things like the State Lands Commission
 10 looking at the disposition of the conduits will be
 11 subject to the CEQA process and our environmental impact
 12 report. So we have quite a bit that will start to
 13 happen in the future on environmental reviews with the
 14 state process. And you can see a summary of the -- just
 15 a short list of the agencies CEQA that are involved
 16 starting with the NRC, Department of the Navy on down
 17 through State Lands, Coastal Commission, State Regional
 18 Water Board, et cetera.

19 CHAIRMAN VICTOR: Let me see if there are
 20 other questions. Let me just quickly ask on the CEQA,
 21 California Environmental Quality Act, presumably that
 22 process needs to have run its course before you begin
 23 major decommissioning activities or removal activities
 24 or whatever the right term of art is. When do you plan
 25 to begin the CEQA process, and what's your expectations

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1 for how that's going to unfold?
 2 TOM PALMISANO: We have scheduled several I
 3 think in the 4th quarter at the latest we'll start the
 4 dialog with the State Lands about the conduit. I think
 5 that will be the early topic that starts the CEQA
 6 process.
 7 CHAIRMAN VICTOR: I think it would be very
 8 helpful if there is a role the CEP can playing. There
 9 are lots of other people that are enthusiastic about
 10 playing roles, I'm sure. If there is a role the CEP can
 11 play, it would be helpful for us with the CEP to begin
 12 to make a list of the elements of this where there would
 13 be useful public input so that we've got an
 14 environmental review that's not only compliant with the
 15 law, but also is kind of strategic as to how the
 16 decommissioning process might affect the environment,
 17 things --
 18 TOM PALMISANO: We can certainly take an
 19 action as we firm up our schedule to start the
 20 discussions with State Lands or the Costal Commissions,
 21 the CEQA process, to brief you on the schedule and see
 22 what level, what timing works for the CEP.
 23 CHAIRMAN VICTOR: Let's make sure as the
 24 follow-on to this meeting that we report back to the
 25 members that weren't here tonight. That we give them a

1 Onofre and San Onofre communities, because we're moving
 2 ahead, but NRC is looking at us and asking what's
 3 working, what's not working. Because basically they
 4 don't have a strategy for the overall decommissioning
 5 process and the regulations around it. So I think it
 6 would be very helpful to get some input in time on
 7 whether the GEIS is actually kind of a good way of
 8 thinking about the environment.
 9 TOM PALMISANO: Sure. Might I suggest, and
 10 when the NRC schedules the public meeting on the PSDAR,
 11 that is actually -- decommission is under the Federal
 12 State Materials and Environmental division of the NRC,
 13 so we've got the right group who will be able to talk to
 14 us.
 15 CHAIRMAN VICTOR: Great.
 16 TOM PALMISANO: So decommissioning cost
 17 estimate. Similar format. You see the basis. I guess
 18 my thumb is faster than the slide.
 19 GENE STONE: Tom, while you're there can I
 20 ask you a question?
 21 TOM PALMISANO: Certainly, please.
 22 GENE STONE: The environmental impact
 23 evaluation is very troubling so I would like many of the
 24 CEP members to look closer at it. We talked a bit about
 25 it last night. But it seems very convenient that a

1 little bit of update as to this discussion. Dan --
 2 DAN STETSON: Just that, Tom, it would be
 3 great to know which of these agencies are responsible
 4 for what activities.
 5 TOM PALMISANO: And we can do that. As we
 6 start the dialogue with the agencies, you know, the
 7 conduit, State Lands, you know, Onshore Coastal
 8 Commission, you know, California Coastal Commission for
 9 the ISFSI expansion. So, yeah, we'll be able to
 10 identify which agencies are principally interested in
 11 what topic.
 12 DAN STETSON: Great. Thank you.
 13 TOM PALMISANO: Okay. I'm going to move on.
 14 Just to close it, we recognize this is a very important
 15 topic. That's why we want to bring these assumptions
 16 and conclusions back in and make sure you know where we
 17 are in the process and what you have to come. So we
 18 appreciate the dialogue.
 19 CHAIRMAN VICTOR: So I would like -- during
 20 our workshop there was discussions of general
 21 environmental impact statements, and I understand
 22 procedurally why you compare yourself to the GEIS, as
 23 it's known. But it would be helpful when we look back
 24 on this process for us to think about whether the GEIS
 25 is working or not. Not because it affects us and San

1 majority of the environmental effects are small, which I
 2 question the use of the word small in the first place.
 3 I think I've done it one other time. But I think it's
 4 something we need to comment on, as David said, by the
 5 public and more strictly by the CEP members.
 6 CHAIRMAN VICTOR: Thank you. I guess, as
 7 Quinn would say, it depends what you mean by the word
 8 small. But I -- actually, I wasn't surprise that the
 9 environmental impacts of an existing site that have
 10 already been massively engineered are small. You know,
 11 I'm upset by the comparison of the noise level of the
 12 noise of the surf, because somehow I think the removing
 13 of a piece of concrete is different than listening to
 14 the surf, but that's maybe a matter of cosmetics. But I
 15 guess I wasn't surprised just the first blush that it
 16 seemed small because we're working with a site that's
 17 already massively disturbed, and the key thing is for
 18 Edison, as they've done, to commit not to go beyond the
 19 site. So I -- I guess I was not surprised.
 20 TOM PALMISANO: And that is the context. If
 21 you look at all the NRC as applied, NEPA notes it starts
 22 with the decision to build the plant and the permitting
 23 to built the plant at a federal level, and the
 24 environmental assessments there were done there and kept
 25 up to date through plant operation, and you assess are

1 there any plant decommissioning activities going to
 2 essentially take you beyond the bounds of what's being
 3 already assessed. And that's where you judge small,
 4 moderate or large. So, again, the NRC people can
 5 probably explain how they've designed that process
 6 better than I can.
 7 CHAIRMAN VICTOR: Okay. I know there is
 8 going to be questions about this process so please do --
 9 TOM PALMISANO: Yeah. So decommissioning
 10 cost estimate, the structure is pretty well specified by
 11 the NRC. We've discussed the decommissioning plan,
 12 we've talked about assurance of adequate funding,
 13 provide the total cost by period, the periods that I
 14 outlined on that bar chart is what it's talking about.
 15 Summarizes the cost of services, undistributed costs and
 16 some accounting terms in terms of how costs are
 17 accounted for. But really then outlines the cost for
 18 license termination of the radiological decommissioning,
 19 spent fuel management through the expected time period
 20 and then final site restoration. This slide is
 21 mislabeled, and I apologize. This should read
 22 decommissioning cost estimate assumptions. So we
 23 duplicated a slide. We didn't catch that, so I
 24 apologize.
 25 CHAIRMAN VICTOR: That's never happened to

1 anybody else, duplicating slides.
 2 TOM PALMISANO: I know. My typing skills, I
 3 guess. So these estimates and this is where you'll see
 4 some differences. So this is a conservative estimate.
 5 So, for example, I assume we're going to remove the
 6 ocean conduits. Until we have an agreement with State
 7 Lands that would tell me differently, I need to estimate
 8 that cost. I assume all sub structures are removed.
 9 Until we reach resolution with the Navy, it's only
 10 prudent for me to estimate that cost. And should that
 11 change, then we'll change the cost estimate, which would
 12 trigger a PSDAR update, for example. So you can see the
 13 key assumptions are the spent fuel pools are empty by
 14 June of 2019, the DOE performance start date of an
 15 industry level at 2024, substructures removal. That's a
 16 conservative estimate. That will remove everything
 17 that's been installed on the site during construction.
 18 The duration of the decon and dismantlement ending is 10
 19 years. The ocean conduits are removed and start of
 20 decon and dismantlement 2016. That is really the start
 21 of the second phase. That isn't necessarily a physical
 22 activity. But those are the assumption behind the cost
 23 estimate that result in it being a 4.4 billion dollar
 24 estimate. Again, we've tried to be conservative. Yes,
 25 sir.

1 WILLIAM PARKER: What assumptions do you
 2 make about the availability of low level radiological
 3 waste disposal?
 4 TOM PALMISANO: Well, they're embedded in a
 5 couple of these. Really look at the bottom line, low
 6 level waste burial cost escalation as we look at a D&D
 7 period.
 8 WILLIAM PARKER: And my question really
 9 relates to the reliability of the disposal sites being
 10 available. And WIPP, for example, is out of service for
 11 an indefinite period.
 12 TOM PALMISANO: Well, WIPP is one of your --
 13 WILLIAM PARKER: No, WIPP is not --
 14 CHAIRMAN VICTOR: You are very dependent on
 15 Clive, Utah.
 16 TOM PALMISANO: Yeah, Clive Utah, and there
 17 is a facility in Texas. So I have two facilities I can
 18 ship my Class A, B and C waste to. We've already
 19 discussed with them -- we actually already have a life
 20 of (Inaudible) contract with Clive, Utah. So I've got
 21 some certainty on availability and cost. Now, that is
 22 absent a change in the political environment or a
 23 technical issue that closes the site, like occurred at
 24 WIPP. WIPP is a government -- it's a DOE site. I'm not
 25 authorized to ship any waste there; they're not

1 authorized to take it. So the sites where we are
 2 planning on shipping waste, we've talked to both of
 3 them. We have availability, again, short of something
 4 totally unexpected. If that were to occur, I've gotta
 5 stop, change the plan, update my PSDAR.
 6 WILLIAM PARKER: Okay. So this plan assumes
 7 that those sites will meet their contractual
 8 obligations.
 9 TOM PALMISANO: It assumes the sites and is
 10 also based on the contractual talks we've had with them
 11 to give us some guarantee of that. Yes, sir.
 12 TED QUINN: Are the reactive vessels greater
 13 than Class C or Class C, and where are they going?
 14 TOM PALMISANO: We haven't determined where
 15 the reactor vessels are going. So the reactor vessels
 16 themselves, the internals would be greater than Class C.
 17 There is some internal components highly radioactive.
 18 We will cut up, remove them. They will be stored in dry
 19 storage casks, not fuel casks, but similar, that stores
 20 greater than Class C. After that we will likely cut up
 21 the reactor vessels because of their size and ship them
 22 for disposal. I was involved in decommissioning a small
 23 plant like Humboldt Bay in Michigan. We shipped that
 24 reactor vessel to South Carolina in about 2003. Smaller
 25 situation. And we also have unit one vessel from the

1 unit one partial decommission that we'll deal with as
 2 well. So there are disposal options once we remove the
 3 greater than Class C highly radioactive waste from the
 4 reactor vessels.
 5 So anyway. So these are the key assumptions
 6 for the decommissioning cost estimate. We have been
 7 conservative where there is some doubt or we don't yet
 8 have clarity with the Navy or the State Lands
 9 Commission. And then as we get that clarity over the
 10 next several years, we will revise this list. The key
 11 thing here is we want to make sure we have a
 12 conservative estimate so we can ensure we have adequate
 13 funding. This pie chart shows you the breakdown. So
 14 you see at the top the 4.4 billion dollars, that's in
 15 2014 dollars as if I can do it all this year. We say a
 16 hundred percent numbers because there are actually
 17 several co-owners of San Onofre so I'm representing the
 18 hundred percent value. And you see the breakdown, 2.1
 19 billion and change is license termination, radiological
 20 decommissioning. 1.276 billion is spent fuel management
 21 all through that 2052 time frame. And 1.023 billion is
 22 the site restoration principally at the end of the 20
 23 years and sum dollars at the end of the ISFSI removal
 24 and demolition. Some notes under there they really just
 25 say, you know, explain a little more about what that is.

1 TOM PALMISANO: Probably the best answer,
 2 and back to the assumptions page, overall there is a 25
 3 percent contingency. So if we look at a four billion
 4 dollar estimate, 25 percent of that is contingency.
 5 Now, we expect that contingency to go down. We're at
 6 the point, you know, we have an initial plan, and it's a
 7 reasonable plan, but it's not a detailed plan yet. And
 8 that detail will come over the next couple of years. So
 9 as we select a decommissioning contractor, they build
 10 more detailed estimates, and I expect we will slowly
 11 reduce that contingency as I have better information.
 12 Typically the way you would manage a contingency.
 13 CHAIRMAN VICTOR: Why don't we just on these
 14 issues defer until we hear from Chris Thompson, because
 15 some of this relates to -- the purpose of this as I
 16 understand it is to make sure there is enough money in
 17 the fund to satisfy NRC's requirements. Then there is
 18 variety of other issues that will arise about the
 19 oversight of the trust fund as actual receipts for
 20 buying stuff come in. Some of those are going to be big
 21 receipts.
 22 TOM PALMISANO: So at this point we had a
 23 question previously about are we fully funded, and Chris
 24 is going to pick up here and cover that.
 25 CHRIS THOMPSON: Thank you, Tom. So the

1 We really already covered that in the end. Turn it over
 2 to Chris here in a minute. Yes, sir.
 3 WILLIAM PARKER: I remember at our last
 4 meeting the details of the cost estimate are proprietary
 5 so all we see are the output estimates from your
 6 contractor.
 7 TOM PALMISANO: Yeah, I think they're saying
 8 -- the model is proprietary. You're seeing the output,
 9 though, correct.
 10 WILLIAM PARKER: So we're not in a position
 11 to raise questions about the details of the cost
 12 estimate. It's proprietary.
 13 TOM PALMISANO: Yeah. The details of their
 14 model, how they take, you know, X amount of concrete, X
 15 amount of reinforcement and roll that into, you know
 16 removal cost and hours, etcetera, I believe that's the
 17 proprietary part.
 18 WILLIAM PARKER: Having looked at other
 19 large construction projects, contingencies and can build
 20 upon contingencies, and as much as 25 percent of the
 21 cost estimate could be in the form of contingencies and
 22 allowances for unknowns. Do you have any estimate what
 23 fraction of this 4.2 billion is the result of a specific
 24 cost projection and what fraction are the contingencies
 25 and so on that tend to compile in these cost estimates?

1 table here, and there's a couple of different values, as
 2 Tom said. We are one of the co-owners, and for the
 3 purposes of decommissioning about 75 percent. The green
 4 bar there on the left shows the total cost estimate 4.4
 5 billion dollars in 2014 dollars, as Tom mentioned, as if
 6 we could execute the entire project this year. And to
 7 give you an idea of the fund adequacy as it relates to
 8 SCE are the following three gold bars. So SCE's share
 9 of the cost estimate is 3.3 billion dollars in 2014
 10 dollars. The next bar shows escalating those costs to
 11 the year of expenditure. So there is an escalation rate
 12 that we use that's provided by IHS Global Insight, their
 13 weighted average of labor and non-labor.
 14 CHAIRMAN VICTOR: Which I looked at and
 15 seems completely reasonable.
 16 CHRIS THOMPSON: So if you escalate those
 17 into the year of expenditure, you arrive at a 4.1
 18 billion dollar SCE share. Then we convert that to the
 19 present value of 4.1 billion dollars, and I can explain
 20 present value if you want me to. The present value of
 21 the 4.1 billion of expenditure is 2.9 billion now. The
 22 liquidation value of our trust funds, SCE's trust funds,
 23 is 3.1 billion dollars. We have 3.4, but they're
 24 subject to taxation, so if we liquidate them we would
 25 have 3.1 billion dollars. Let me just explain the

1 present value, the jump to present value. So if I need
 2 to spend a dollar -- and this is going to be simplistic.
 3 If I need to spend a dollar in 2016, what do I need to
 4 have now in order to spend that dollar? If I'm going to
 5 just lock -- if I have a dollar in my pocket and I just
 6 lock it up in a safe and I have zero rate of return,
 7 then the discount rate that moved from 4.1 to 2.9, as an
 8 example, would be zero. The discount rate that is
 9 applied to the year of expenditure cost is the rate of
 10 return of our -- the projected rate of return of our
 11 trust, 3.37 percent after tax. If I was going to invest
 12 -- if I needed that dollar in 2016 and I was going to
 13 invest in a product that yielded three percent, then I
 14 would need roughly 94 cent. The present value of a 2016
 15 dollar is 94 cent. So that's kind of -- and the
 16 discount rate would be 3 percent.
 17 CHAIRMAN VICTOR: So you're showing us SCE's
 18 part of this?
 19 CHRIS THOMPSON: Correct.
 20 CHAIRMAN VICTOR: There are other players.
 21 When you add up -- I want to say two things. First of
 22 all, when you add up the other players' contributions,
 23 they add up to sufficient funds? That's a question.
 24 And second is a statement, which is there are a lots of
 25 other organizations that are providing detailed

1 oversight of the trust fund, the investment strategy,
 2 the expenditure strategy.
 3 CHRIS THOMPSON: Correct.
 4 CHAIRMAN VICTOR: The release of the funds,
 5 including the POC, as Gene Stone mentioned earlier. So
 6 we made a decision early on. We had a couple comments
 7 suggesting we revisit that, but no -- I've heard
 8 basically nothing from the CEP that we revisit that, and
 9 we would not be qualified to revisit this so we're not
 10 going to engage in that kind of detailed financial
 11 oversight of this. But since you raised the question,
 12 it would be helpful for all of us to know that there is
 13 enough money sitting someplace to cover the costs as
 14 they've been estimated.
 15 CHRIS THOMPSON: Do you want me to --
 16 CHAIRMAN VICTOR: Yeah.
 17 CHRIS THOMPSON: So, yes, is the answer.
 18 CHAIRMAN VICTOR: Okay. That's awesome.
 19 It's not often you ask a question that has a binary
 20 answer.
 21 TIM BROWN: The question I have is it's
 22 become very clear to all that there may not be a finite
 23 end date that we can all count on, and without that
 24 there is going to be a maintenance obligation to oversee
 25 the ISFSI. There is going to be all these elements that

1 we can't plan on. And the question is is there a point
 2 where the shareholders and the decommissioning fund
 3 stops and the maintenance obligation transfers over to
 4 anybody else? Is this going to be a mount Helen that
 5 will continue to pay for that maintenance cost? Will it
 6 diminish over time? I guess is there an end date in
 7 your calculations where decommission is over, we just
 8 have a pad that has the waste on it and, you know, it's
 9 somebody else's obligation? How does that work when
 10 you're contemplating these cost estimates?
 11 CHRIS THOMPSON: So as Tom mention, there is
 12 25 percent contingency. We are confidence that we are
 13 not going to use that entire 25 percent contingency so
 14 there will be some funds remaining at the end of the
 15 project when it goes (Inaudible) basically for the deal
 16 to pick up the fuel. Additionally there is another
 17 revenue stream, which is reimbursement from the DOE for
 18 their failure to perform their contractual obligation.
 19 TIM BROWN: So the DOE is on the hook for
 20 their failure to perform, and they would fund the
 21 maintenance of the site?
 22 CHRIS THOMPSON: Just the -- they are on the
 23 hook for our need to store spent fuel on the site.
 24 TIM BROWN: Yes. Okay. Interesting. Okay.
 25 GENE STONE: Is that a hundred percent or 10

1 percent?
 2 TIM BROWN: Is that a full obligation or is
 3 it partial? Do you still have to pony up certain
 4 elements of it or --
 5 CHRIS THOMPSON: It's subject -- it's a
 6 court settlement. We have sued them and we have
 7 received a judgement, so I can't forecast what -- we
 8 sued -- we sued them for a period of time.
 9 CHAIRMAN VICTOR: So the utilities
 10 understandably we're not thrilled about paying money to
 11 the DOE to do something that the DOE is no sign of being
 12 able to do. I think when we have some clarity about the
 13 outcome of that, I think it will be helpful -- maybe
 14 it's going to be early next year; probably it's going to
 15 be later -- it would be helpful for the CEP to come back
 16 and have a discussion or put together a memo or
 17 something like that that will give people confidence
 18 that the long-term cost of securing the site and
 19 maintaining it and including contingencies for very
 20 long-term task management and so on, which we have been
 21 talking about in recent weeks, that that's all there and
 22 is set and is linked to a CP fund or something like that
 23 has been charged up with money from the DOE or from the
 24 contingency or whatever it is so that people have
 25 confidence that there is defense in depth of a long-term

1 plan when DOE doesn't do what we expect them not to do.
 2 Other comments? I'm sorry. I thought Bill Parker
 3 wanted the floor.
 4 WILLIAM PARKER: It's a small issue. You
 5 mentioned that you're assuming about a three and a half
 6 percent discount rate.
 7 CHRIS THOMPSON: 3.75.
 8 WILLIAM PARKER: That sounds low.
 9 CHRIS THOMPSON: That's after tax. So the
 10 weighted average of our equity and fixed income.
 11 WILLIAM PARKER: Oh, that's right. Your tax
 12 --
 13 CHRIS THOMPSON: Yeah.
 14 CHAIRMAN VICTOR: We're probably not gonna
 15 give you investment advice, Bill. Gene, investment
 16 advice strategy?
 17 GENE STONE: I think it is prudent to tell
 18 the public that when the decommissioning funds run out,
 19 it's the rate payer that sums up, it's not the citizens.
 20 CHAIRMAN VICTOR: And the funds that are
 21 left over get returned to the rate payer. I think it's
 22 a two-way road. We have -- all of us have a common
 23 interest in this being done safely, securely and also as
 24 efficiently as possible.
 25 CHRIS THOMPSON: And that is obviously one

1 of our principles here, the wise storage ship of the
 2 funds, and they are rate payer funds. You're both
 3 right. But to give some context, since the inception of
 4 trust funds as authorized by the PEC in 1988, the rate
 5 payers have contribute 1.05 billion. The remaining 2.31
 6 billion has been appreciation of assets. So I don't
 7 want to leave you with the impression that the rate
 8 payers contributed 3.4 billion. There has been some
 9 wise storage ship of those funds over the years.
 10 CHAIRMAN VICTOR: Maybe just don't put all
 11 the money in Snap Chat stock. Do we have anymore -- oh,
 12 sorry. Jerry Kern.
 13 JERRY KERN: Thank you, Mr. Chairman. One
 14 thing I'm here as a representative of my constituents in
 15 Oceanside of what's going on in this panel. A lot of
 16 the people were impacted by the shutdown, and a lot of
 17 the workers that worked in San Onofre live within the
 18 surrounding area. I just want to make sure that, you
 19 know, who is going to do this? We talked about the
 20 money, we talked about paying for this. I just want to
 21 make sure that that money stays in this local economy
 22 because we were so impacted by the closure of San
 23 Onofre. I mean, the people working there now -- you
 24 keep talking about a contractor. How does that work?
 25 You go out and -- I'm sure there is not a large number

1 of contractors that tear down nuclear power plants. I
 2 mean, it's probably a very small universe of people, but
 3 you have a lot of talent still there working at the
 4 plant and a lot of veterans working at the plant. Not
 5 only veteran workers, but actually veterans. So I'd
 6 like to keep those people in mind, if possible, so that
 7 the impact to the local economy is probably spread out
 8 over a period of years versus bringing in an outside
 9 contractor who brings in outside workers, they
 10 decommission and then they're gone.
 11 TOM PALMISANO: Let me make a couple
 12 comments. We appreciate that. Quite frankly, one of
 13 the things that we have spent a lot of time on is
 14 helping our workers, because we have reduced from 1500
 15 people in June 2013 to about 460. And there are more
 16 reductions over the next several years as the work
 17 legitimately ramps down for the Southern California
 18 Edison team. You know, it's been proper storage ship of
 19 the funds and making sure we're spending the money we
 20 need to spend staffing the positions we need to staff.
 21 So we're very sensitive, and we've helped a lot of our
 22 worker, some of who want to stay in the nuclear industry
 23 and moved to other utilities. A number wanted to stay
 24 with Southern California Edison and moved to other
 25 positions in the company, our transmission and

1 distribution department, some who are eligible to retire
 2 and chose to retire. So we've been pretty successful
 3 helping the workers. I can't tell you that they all
 4 stayed in the area, but, you know, we've always told
 5 them they need to do what's best for them and their
 6 family, and we will continue. With respect to the
 7 future work force, I talk about bringing in a
 8 decommissioning contractor. This is the (Inaudible),
 9 the Chicago Visionaries, the big contractors who know
 10 how to either build big facilities or take big
 11 facilities apart. But that's a small cosway of
 12 management and supervisory people. The bulk of the
 13 workers would be local trades, people who have supported
 14 us for years, whether they're labors or electricians,
 15 pipefitters, will be brought in by the contractor to do
 16 the physical work. So the bulk of the jobs will be
 17 local, and the bulk of the money on the payroll will be
 18 local.
 19 CHAIRMAN VICTOR: I think it would be
 20 helpful as this process unfolds to periodically update
 21 the CEP about what's happening with workforce issues. I
 22 think the summary you just gave us now is very helpful
 23 to understand what's happened to the workers that have
 24 been affected by the plant closure, including those who
 25 have been able to find work at other plants or stay here

1 with your help and others. Thank you, very much for
 2 that comment.
 3 **TIM BROWN:** I would concur with Gerry on
 4 that. Our town has also been hit particularly hard by
 5 the closure of the plant. We've had a lot of folks who
 6 have had to leave town and are no longer living there.
 7 So it would be of interest that if you look at our local
 8 work force to --
 9 **TOM PALMISANO:** Absolutely. When we deal
 10 with contractors, we make it pretty clear our
 11 expectations there is a lot of talent locally.
 12 **PAT BATES:** I don't know if I'm the only
 13 one, but I didn't have the cost slide in my report from
 14 the presentation, but this is a significant issue to the
 15 public so I'm assuming that would be on the website.
 16 And then, number two, will you be keeping us up to date
 17 on how the expenditures they are keeping track with the
 18 budget you've set?
 19 **CHRIS THOMPSON:** We will. And Tom helpfully
 20 handed off the clicker, which will speak a little bit to
 21 your question, which is the manner in which the trust
 22 funds are overseen but also the manner in which the
 23 expenditures are overseen. I think that's to your
 24 question.
 25 **PAT BATES:** I just think there should be a

1 regular report out in terms of where we are, the time
 2 line and the funds available (Inaudible.)
 3 **CHAIRMAN VICTOR:** Okay. And I think we
 4 should somehow assemble the work of the trust committee
 5 and some of the regulatory oversight into something that
 6 we can digest. We need to move on. Do you have other
 7 slides?
 8 **CHRIS THOMPSON:** I can explain this or we
 9 can move on. It's up to you.
 10 **VAL MACEDO:** Real quick. I just want to
 11 also mention that during the outages SCE took a big step
 12 and made sure that outside people that come to work at
 13 San Onofre -- I'm not sure if you guys were aware of
 14 this, but at the level of the power plant they seek
 15 people that had local -- they seek the local residents
 16 prior to anybody going out. And there was a document
 17 provided that coincided with hiring all procedures for
 18 people to go work out there. And also during this
 19 period that we're facing now, the contractors that have
 20 been on site now getting ready for this process have
 21 been directed to hire local people, and that's been
 22 fantastic for a lot of the Oceanside residents and other
 23 outside communities that work there as well. I'm very
 24 thankful for that.
 25 **CHAIRMAN VICTOR:** Thank you for mentioning

1 that. Did you want to make further comment --
 2 **CHRIS THOMPSON:** Just to -- and this
 3 partially I think speaks to Supervisor Bates' question.
 4 The trust committee is overseen -- the PUC that
 5 authorized establishment of the trust is overseen by a
 6 member body, two of whom are internal to Edison, three
 7 external. They're basic responsibility as mentioned
 8 there is overseeing the management and the trust,
 9 approving the asset allocation. We have a mix of fixed
 10 income and equities as you saw, as I described. Their
 11 returns have been fairly good historically. We're in
 12 the process of de-risking the portfolio since we're
 13 about to start incurring expenditures, hiring investment
 14 advisors. There is a number of firms who place the
 15 investments for us. And then there is regulatory
 16 oversight of the decommissioning trust both by the NRC
 17 and by the PUC. As Tom mentioned, the NRC oversees the
 18 radiological decommissioning and the spent fuel
 19 management largely from a fund adequacy standpoint.
 20 They want to make sure we have enough money to do the
 21 work. The breath and depth of the PUC oversight is much
 22 greater. The PUC regulates all three elements of the
 23 two that the NRC does plus site restoration as well as
 24 their authorization is required for disbursements from
 25 the trust. They then have authority over the manner in

1 which the funds are expended, and on a look-back basis a
 2 reasonableness review of whether or not the expenditures
 3 were reasonable to the cost estimate.
 4 **CHAIRMAN VICTOR:** It is out of the ordinary
 5 for management of a large trust with a series of -- but
 6 I do agree Pat Bates' comment will be helpful for us
 7 periodically in plain English to be able to understand.
 8 Can I just say that if you're going to include the
 9 slide, as I think would be correct, in the public record
 10 of this meeting that showed the different estimates,
 11 that it would be helpful to have also a bar for the non
 12 SCE portions for the estimate, the non SCE portions,
 13 because otherwise the public record gets skewed by only
 14 having the SCE portion. What the public cares about at
 15 the end of the day is that there is enough money, not
 16 that the money has a certain flag on it.
 17 **CHRIS THOMPSON:** And that was a way to add
 18 to the slide back to the online version.
 19 **CHAIRMAN VICTOR:** Can I just remind
 20 everybody since we're going to move on, unless there are
 21 other slides, that the 5th of September is the deadline
 22 for any further written comments from CEP members on the
 23 material we've been reviewing over the last month to
 24 allow Edison time to reflect on that and revise the
 25 filings before late September, early October when they

1 plan to submit the PSDAR. Anything else? Thank you
 2 very much.
 3 We have one other item. Anyone else from
 4 CEP would like to talk about before we have our break?
 5 There is one other item on the agenda for today. Just
 6 to report on other CEP activities. We actually already
 7 discussed a lot of this related to cask management so I
 8 won't say anymore on that front. But I do want to ask
 9 Tim Brown to talk about his testimony at the California
 10 Senate Utilities -- Energy Utilities and Communications
 11 hearing in Sacramento. My guess is Sacramento is going
 12 to pay more and more attention to what's going on here,
 13 and so we will periodically engage with them your
 14 impressions. Tim, I know there are slides that have
 15 been circulated in advance of the meeting so people had
 16 a chance to look at them.
 17 TIM BROWN: Yes. Just to give the context
 18 behind the visit, I didn't feel the particular need to
 19 go hang out in Sacramento for any specific reason.
 20 There was actually a request by the senate hearing
 21 committee to hear from a member of the CEP, and so I was
 22 happy to go and to explain a little bit about how we're
 23 made up and what we do. I won't belabor the item at all
 24 other than to say it was -- if you look at the deck and
 25 be able to walk through it, it was really an opportunity

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1 to explain a little bit about how each of the -- how the
 2 CEP engages with the public, how we apply information.
 3 Reenforce a lot of the key principles and also
 4 reiterated some lessons learned to date, particularly
 5 through the meeting process and the feedback from the
 6 public and also our canvassing. So it was an
 7 opportunity to provide just a little bit more detail
 8 about what the function of the CEP is. About how the
 9 information is being processed, how it's working, and
 10 then also answering questions related to that. And it
 11 was fairly straight forward. You know, Tom spoke about
 12 technical information. Really lulled them to sleep.
 13 And so I just, you know, sneak right through with a
 14 five-minute, you know, presentation. So I thought it
 15 went really well. You know, a coordinated attack. But
 16 the senators were interested. They asked questions.
 17 They were pleased that we had a very diverse makeup of
 18 elected official, of interested parties, environmental
 19 groups, activists, and so they felt as if we had a
 20 strong presentation. And really not much else in
 21 direction. We didn't sit and have tea afterwards and
 22 talk about all of our feelings and thoughts. But the
 23 meeting went well, and I would anticipate that in a year
 24 or two from now they'll probably be asking for members
 25 of the panel to chat with them about progress to date.

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1 CHAIRMAN VICTOR: Thank you very much. Any
 2 other comments before we take a break? Okay. So as is
 3 our custom, we're going to have a 15-minute break, maybe
 4 shorten it a little bit and give a chance to stretch
 5 your legs, test the exits, and then we'll have a public
 6 comment period when we come back in 12 or 15 minutes.
 7 (Interruption in the proceedings.)
 8 CHAIRMAN VICTOR: Thank you. Please get
 9 settled. So we have a public comment period. We have
 10 three minutes for each member of the public who would
 11 like to speak. There are many names on the list right
 12 now. Rochelle Becker, the floor is yours.
 13 ROCHELLE BECKER: Thank you very much.
 14 Hello. I'm Rochelle Becker, and I'm the executive
 15 director for the Alliance for Nuclear Responsibility. I
 16 want to highlight three features of Edison's
 17 decommissioning plan announced this month that deserve
 18 your focused attention. The Alliance intends to raise
 19 these points when Edison files its plan with the
 20 California Public Utilities Commission this fall.
 21 First, Edison needs to clarify just what it meant on
 22 August 1st when it announced that, quote, "San Onofre
 23 decommissioning is now fully funded and no further
 24 customer contributions are required," unquote. Page 18
 25 of the PSDAR makes a similar conclusion about sufficient

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1 funds being projected to be available and cites the
 2 Edison's February 13th, 2014 letter to the NRC, but that
 3 letter contains cash flows which show continuing
 4 customer contributions of 32.3 million dollars a year to
 5 the decommissioning trust fund until 2022. Which is it?
 6 Are they going to keep collecting money from customers
 7 or not? Second, Edison needs to explain why it plans to
 8 shirk its contractual responsibility under the lease
 9 with the Navy for complete removal of all sub surface
 10 structures. They've also announced their intent to duck
 11 their obligation under the lease with the State Lands
 12 Commission for full removal of the ocean intake and
 13 discharge conduits. Page 13 of the PSDAR states that
 14 Edison plans to seek alternatives to these requirements
 15 because they are costly, but cleaning up your mess is
 16 never cost free. And Edison's announcement that
 17 decommissioning is now fully funded explicitly claimed
 18 to have taken these costs into consideration. Finally,
 19 the PSDAR and the cost estimates that accompany it are
 20 premised on the federal government beginning to take
 21 spent nuclear fuel in 2024. Is there anyone on the
 22 panel, is there anyone at Southern California Edison, is
 23 there anyone in this room that expects them to meet the
 24 2024 date? What are the ramifications of wishful
 25 thinking that don't turn out to be accurate? Does it

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1 make sense for Edison to do its financial analysis
 2 through rose-color glasses? Thank you for the
 3 opportunity to address you. These matters need to be
 4 resolved before any decommissioning plan can be called
 5 satisfactory. Thank you.

6 CHAIRMAN VICTOR: Thank you very much for
 7 your comments. And let me just also say that some of
 8 the issues you've raised, we are as a panel going to
 9 revisit early next year, especially related to this
 10 question of long-term funding beyond 2024 and so on.
 11 Next on my list is Chris Johnston and then Rob Howard.

12 CHRIS JOHNSTON: Hi. Thank you so much. I
 13 really appreciate the diversity of this panel and was
 14 fortunate enough to be at the Oceanographic Institute
 15 last night and hear Gerry Brown with the Costal Keepers
 16 and Dan Stetson with the Oceanographic Institute and
 17 hear their input. One of the things that concerns me, I
 18 actually just received the Songs unit two and three
 19 environmental impact evaluation in the mail yesterday,
 20 and so I was very quickly trying to skim the rather
 21 lengthy information here, but the word that kept coming
 22 up -- because I look for repeats in words and so forth
 23 -- was the word how the impact is small. Small. With
 24 potential measurable increase in the concentration of
 25 one or more increased particle overloads. Also I'm very

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1 grateful to Gerry and Dan about, you know, looking at
 2 the potential impacts on some of the macro marine and
 3 how that will impact the decommissioning process. So
 4 I'm glad we have experts looking at that. Also in,
 5 let's see, it's 4.36.2, the potential impacts of
 6 decommissioning activities states that impacts are not
 7 detectible or so minor or small that they neither
 8 destabilize any important attributable, and that they
 9 are considered small. The other thing I was concerned
 10 about was the removal of the sea wall and the pedestrian
 11 walkway. Again, with the potential impact of
 12 earthquakes and tsunamis. Also, are there going to be
 13 radiological releases available to the public during the
 14 decommissioning process? We don't really know if the
 15 casks that are present have any cracks because there has
 16 been no way to evaluate or have equipment that can go in
 17 there and look at whether or not there are any cracks in
 18 the casks, and also you're very, very careful and taking
 19 -- really taking time to make certain that we have the
 20 correct casks instead of the half inch to five-eights
 21 inch steel casks that are subject to salt water
 22 corrosion, and to be able to find the very best possible
 23 casks around the country -- or not the country,
 24 internationally. And I understand that the German casks
 25 that other people will be addressing in more detail

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1 would be less compromising to making sure that there are
 2 less potential cracking and would be safer for us to
 3 have than the proposed casks that appear to be quite
 4 thin and only have the 20-year possibility for sure,
 5 where these other casks can likely last quite a bit
 6 longer and be a safer, much more safe option as we're
 7 looking out for our community. Thank you very much.

8 CHAIRMAN VICTOR: Thank you very much for
 9 your comment. Sounds like we'll hear more on the cask
 10 matter in further comments. Rob Howard next, and then
 11 Ralph Beck.

12 ROB HOWARD: Greetings. Thank you. In the
 13 interest of open disclosure, I am actually an employee,
 14 currently a certified operator at the plant, but today
 15 I'm speaking on behalf or from the position as an
 16 Oceanside resident. My subject is actually having to do
 17 with the consideration of local hiring. Two things.
 18 One, if I am hiring a contractor, I get to decide what I
 19 want that contractor to do, and, therefore, I can
 20 dictate the terms of that contract. My concern is that
 21 we do not wait until after we have already hired
 22 everyone to consider the veterans in the area as well as
 23 the number of diverse groups in the area. There are
 24 some challenges with working through the halls with the
 25 seniority Petes, but I do believe when you're talking

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1 about multiple contracts, multiple jobs that are going
 2 to be done, there are numerous areas where if we choose
 3 to, there are ways to include a number of those groups.
 4 Each of the communities has groups that they can
 5 probably just think off the top of their head that work
 6 with young people, that work with veterans, that work
 7 with people who have been displaced, who have skills and
 8 expertise that they can provide as we work with this
 9 process. It's a long process. It's not a slow process.
 10 Well, it is a slow process and it's a long process so I
 11 would say please give some consideration in that
 12 conversation around what is happening to remembering
 13 that I would prefer to have this conversation ahead of
 14 time and not after all of the decisions have been made,
 15 because then it's a moot point. Thank you.

16 CHAIRMAN VICTOR: Thank you very much,
 17 Mr. Howard. I think also from the earlier comments from
 18 the panel, this message of this issue of hiring local
 19 work force needs to be in the discussion in the
 20 beginning. I think that's a very good comment. Thank
 21 you. Ralph Beck and then Gary Hedreck. Ralph Beck?
 22 Okay. Gary Hedreck and then Donna Gilmore.

23 GARY HEDRECK: Good evening. My name is
 24 Gary Hedreck. I'm representing San Clemente Green, and
 25 I'll keep it brief tonight. I know there is a lot of

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1 people that want to talk. I want to commend you guys.
 2 This process continues to impress me in a lot of ways,
 3 but I want to impress upon you how important your role
 4 is here and how grateful we are that we do have such a
 5 talented panel. I also want to encourage you to think
 6 of this as beyond what Edison is asking you to do,
 7 because there is no decision making power here. We hear
 8 that over and over again, but you have tremendous
 9 influence. Your voices are being listened to in the
 10 community. We're watching everything that goes on here,
 11 and you can make statements outside of this panel, as I
 12 heard last night, and I appreciate the freedom you have
 13 to mix and mingle and present your own ideas. As this
 14 process moves forward, I encourage you to keep that
 15 process going. Because even though we're not making
 16 decisions here, you're having great influence on public
 17 opinion and getting important information where it
 18 belongs to decision makers and people that will have to
 19 live with these decisions well after we're gone. So
 20 thank you. Keep up the good work.
 21 CHAIRMAN VICTOR: Thank you very much for
 22 your support. And, you know, just reminds me that we're
 23 having extensive conversations here, and we're not
 24 always going to agree, but the point is to have these
 25 conversations to help inform Edison and vice versa.

1 based on my research that I think they're inferior.
 2 They're certified only for 20 years. The NRC has not
 3 renewed any of those 20-year licenses. There are two
 4 plants that are actually they're expired for two years.
 5 They haven't renewed them because of a number of issues.
 6 The NRC's technical staff has identified concrete aging
 7 issues, stress corrosion, cracking issues. And the
 8 biggest scariest part is there is no mitigation plan.
 9 If those canisters crack, they have no solution of how
 10 to repair or replace those canisters. And the answer I
 11 got from the NRC when they told me this was, well, we're
 12 sure that if something happens they'll be able to figure
 13 it out. This is what they said. So it's really up to
 14 Edison, you know, to take care of us on this. We can't
 15 count on the NRC to do this. So I urge you to make
 16 those decisions and make sure we have some kind of
 17 mitigation plan. Because whatever we get, it's not
 18 going to last as long as it needs to last. So when
 19 you're evaluating and moving those pools, which
 20 potentially are one mitigation option -- I'm not sure --
 21 we need to have, you know, some kind of a plan. I'd
 22 like to see that in the decommissioning plan. Thank
 23 you.
 24 CHAIRMAN VICTOR: Thank you very much for
 25 your comment. I want to remind -- we need to respect

1 Donna Gilmore and then Tom Rodonte.
 2 DONNA GILMORE: Hi. Of course I'm going to
 3 talk about the canisters, right. I have been speaking
 4 to the NRC, the director over the division of everything
 5 to do with nuclear waste storage, and what was troubling
 6 is they have a belief system that any problem that
 7 exists that whatever it is it will get figured out when
 8 we need to have it figured out, but they could not give
 9 me any basis and fact for that. So I really feel like
 10 we're on our own. They have -- the canisters that
 11 Edison is currently looking at, they have some
 12 potentially serious issues with cracking within the life
 13 span of the canisters. There are other canisters used
 14 internationally that were designed to last longer
 15 because they didn't have a false hope of a permanent
 16 repository, and I urge Edison to allow vendors that have
 17 other technology to come in with their technical staff,
 18 give you a full briefing, maybe even have the CEP here
 19 so we can all feel comfortable that we're getting the
 20 best solution we can. We have a lot of pieces of
 21 information going around and trying to figure out, you
 22 know, who knows what, but until we give them the
 23 opportunity to come in, I don't feel we've done our due
 24 diligence. The canisters that we currently use and that
 25 we would be buying, right now with the current choices

1 the process. There will be opportunity for each member
 2 if they want to comment at the end of that. So why
 3 don't just go through the process, otherwise we may have
 4 a hard time staying to our schedule. So, Ron Rodonte
 5 and Don Mosure.
 6 RON RODONTE: Ron Rodonte from Dana Point.
 7 I'd like to enter into a different aspect than what
 8 we've discussed today. It's a historical aspect of
 9 creation of the nuclear industry and where we're at now.
 10 In the creation of the nuclear industry there was a very
 11 difficult phase of trying to decide what to do with
 12 nuclear waste. That could have stymied the entire
 13 industry from the very beginning. The phrase was said,
 14 we'll depend upon technology for a later cure to this
 15 problem. It's doable. Let's not. And now we're here
 16 on this day talking about the canisters, which are very
 17 seriously in need of discussion at a long-term length
 18 because we're not sure even how to get them transferred
 19 out and into another canister in 30 years. If we're not
 20 even sure of that, what we're doing is taking that same
 21 fallacy that put this technology forward and has wheeled
 22 it along on these square wheels, and we're just thumping
 23 along like the same square-wheeled cart with the theme
 24 of putting everything in a can and kicking it down the
 25 road. Besides that, there is no culpability at all it

1 seems in the framework of American corporate ability to
 2 take responsibility for anything that's designed or the
 3 effects of anything designed. For instance, you have
 4 the medical industry years ago fought tooth and nail to
 5 keep the fact that an ulcer was caused by bacteria, and
 6 it pretty much ruined the pharmaceutical's interests in
 7 profit, and the large amount of medical doctors involved
 8 in internal medicine made millions off of people
 9 suffering and delayed that decision to end their
 10 suffering by curing them with an antibiotic and some
 11 bismuth for many years. Many people died from that.
 12 Well, we're looking at the same thing now. We're
 13 working on a fallacy that promotes a technology that is
 14 unsafe, and we're in it now. We have our feet one foot
 15 in it, and there has to be a time to discuss where we're
 16 at and how we're going to approach these canisters.
 17 This is the only viable solution at this time for the
 18 waste disposal, and they're not even viable in the
 19 amount of information we have now as far as what they're
 20 effecting, how they effect, how they can last for the
 21 amount of time that is expected of them. We have no way
 22 to transfer the contents. So elaborating on Donna's
 23 observation that the spent fuel pools are necessary in
 24 case of a disastrous leak, yes, they are necessary.
 25 Fukushima is now undergoing spent fuel pool number four

1 committee and the effort they're making. In May I
 2 testified before Senator Boxer's committee arguing for a
 3 bill that she's introduced that would have local elected
 4 officials and other interested parties being in a
 5 decision-making body, and that's because the
 6 decommissioning process, as the NRC itself admits, is
 7 very poorly regulated and certainly has a lot of
 8 site-specific challenges. I was impressed by how much
 9 different the plans for Vermont Yankee decommissioning
 10 are and the plans for San Onofre. And what that message
 11 emphasizes is that this is really a site-specific
 12 planning process, and you need a lot of local input and
 13 a lot of local details and a GEIS and a
 14 one-size-fits-all plan, and the minimal regulation
 15 really puts the area at risk and eliminates stakeholders
 16 that should have influence into the process. So, again,
 17 I welcome the input that you have. I think this is a
 18 better process than none at all, but the lack of
 19 decision-making input, particularly by elected officials
 20 in the region, is something that I think needs to be
 21 changed. There is a bill in committee in the senate. I
 22 don't think it's going to get any traction in the
 23 current climate, but it's something I would support in
 24 the future. I'd be happy to discuss these issues with
 25 any of the committee that wants to talk more. Thank you

1 removal, and they depend upon those pools to be there to
 2 keep those frames of the nuclear fuel there cooling.
 3 CHAIRMAN VICTOR: Thank you very much. Don
 4 Mosure and then Marnie Magda.
 5 DON MOSURE: Hi, my name is Don Mosure. I'm
 6 a counsel member from the city of Del Mar. I have two
 7 comments to make. One has to do with the environmental
 8 impact evaluation on Page 27. It says that the risk of
 9 severe accidents involving the spent fuel pool
 10 containment is small. I think that is an error because
 11 when the original plant was built, that risk was
 12 mitigated with an emergency plan, which now is, as I
 13 understand it, deactivated. So there is no mitigation
 14 for that risk in the future planning. Is that
 15 information correct, Tom?
 16 TOM PALMISANO: The full emergency plan is
 17 still in place. We have proposed reduced emergency plan
 18 which is under NRC review which wouldn't be approved
 19 until sometime next year. And it's based on the
 20 reactors not operating.
 21 CHAIRMAN VICTOR: Let's let you continue.
 22 DON MOSURE: Thank you for that
 23 clarification. Then that's a future comment rather than
 24 a current comment. The second comment has to do with
 25 the process. I appreciate the diversity of this

1 very much for your time.
 2 CHAIRMAN VICTOR: Thank you very much for
 3 your comments. Let me just remind everybody that our
 4 6th October meeting will be focused on emergency
 5 planning and preparedness. And the issues that
 6 Mr. Mosure's raised will be discussed there in some
 7 detail. And I don't think you were at our workshop in
 8 the middle of July, but in that workshop I reported out
 9 having testified to the Nuclear Regulatory Commission.
 10 They are seeking our input on what they can do on a
 11 regular basis for -- to streamline the process of
 12 decommissioning, rule making and so on. So I think
 13 there is interest there. Clearly there is a lot of
 14 chaos there as well. Marnie Magda and then Joe
 15 Schortino. And, please, I apologize if I've
 16 mispronounced Mr. Schortino's last name.
 17 MARNIE MAGDA: Thank you so much all of you
 18 for your hard work. I'm particularly glad in the
 19 beginning to be able to see all of the clear pictures of
 20 the overheads. Thank you, Ted. And last night's
 21 meeting, Dan and Garry, fabulous to have more
 22 information for the public. I'd love to see more of
 23 that. And particularly tonight to hear that those
 24 outtake pipes have radiological history that we need to
 25 have a very clear picture look, testing so that we know

1 whether we're better leaving or taking them out. Is
 2 there an environment there we're saving or are they
 3 radiating and hurting the ocean still. So thank you for
 4 the hard work. I spent a lot of time on this. I don't
 5 know how anybody -- I haven't gotten through the 400
 6 pages, and I have really been trying hard, so I know
 7 that the pressures on you are huge. I'm very concerned
 8 that on Page 18 and that February 13th seeking to change
 9 the funds of the nuclear decommissioning trust to not
 10 just be for radiological decommissioning but to go for
 11 the two other types of decommissioning, which are site
 12 restoration and license termination. And tonight we saw
 13 that's two billion for license termination, one billion
 14 for site restoration and just one billion for the fuel
 15 management. And I want to say to all of you,
 16 particularly Edison, I don't think anybody cares if
 17 those stones would sit there forever, maybe not even the
 18 Navy. But what we care about is that spent fuel is what
 19 is dangerous and must be addressed before anything else
 20 money-wise and place-wise and full focus. And it seems
 21 to me in this report you're doing it backwards. You're
 22 actually pulling railroad tracks before we've gotten the
 23 fuel out. You know, the last thing to go is the ISFSI
 24 pad and the spent fuel, and we will have already gotten
 25 rid of a sea wall, gotten rid of the parking lot, any

1 one of the things that they don't talk about this far,
 2 they haven't explained this far how long this radiation
 3 does last, and it's in the millions of years, and
 4 because it has a half life when it starts to break down.
 5 But also in the constructions there was a lot of
 6 problems, a lot of fears, a lot things Edison didn't
 7 talk about. When they had during an outage one time
 8 there was a failure of unit two steam generator long
 9 before they took the one out with the next failure. I
 10 was there at that time, and I'm the one that was the
 11 foreman to repair it, and these are the photographs of
 12 that job, which was hush-hush, if anybody wishes to see
 13 them. Anyway, the thing is they have to -- wouldn't
 14 rely on Edison, number one, to have anything to do with
 15 this, at least be the one that's the only one keeping
 16 control of this. As far as I was concerned, in all the
 17 years I was there they're very, very poor as far as in
 18 these things. And, anyway, if anybody has any
 19 questions, I can answer them later for you. Thank you.
 20 CHAIRMAN VICTOR: Thank you very much for
 21 your comments. Carl Allenger and Jeff Steinmets.
 22 CARL ALLENGER: Good evening. My name is
 23 Carl Allenger, and I'm a Fallbrook resident. Since the
 24 last panel meeting we have experienced Northern
 25 California's largest earthquake in 25 years. We have

1 building -- even the reactor dome that a plane could
 2 hit. If the inside's gutted and it's not still
 3 radiological, let's leave that where we put a new spent
 4 fuel pool that could be used in case of a dangerous cask
 5 over the next 50 years. I mean, it could be legally by
 6 the Nuclear Regulatory Commission it could be 2073
 7 before we move those casks off of this area. We've got
 8 sea erosion that could be ruining the casks. Please put
 9 a building over them. Have the rails. Really make that
 10 an ISFSI pad. If you can move it further into Camp
 11 Pendleton, talk to them. They don't want to lose a
 12 military base for 200,000 year. Sorry, that's my
 13 exaggeration. At least 10,000. So thank you for your
 14 hard work. Please open up the bidding on those casks to
 15 more people. We've gotta have the best. The Navy has
 16 the best. Let's get the before. Let's spend the money
 17 there.
 18 CHAIRMAN VICTOR: Thank you very much for
 19 your comments. Joe Schortino and then Carl Allenger.
 20 JOE SCHORTINO: Thank you. Name is
 21 Schortino. Anyway. I'm probably the oldest one here as
 22 far as in the nuclear power program in this room. I was
 23 at the Navy is submarine service 1966 and went to all
 24 the nuclear engineering schools. I worked at San Onofre
 25 20 years building the plant and doing the outages. And

1 learned that the Japanese company KEPCO has admitted to
 2 understating the actual leakage of Fukushima leaking
 3 into the Pacific ocean. Now admitting that it was
 4 hundreds of billions becquerels per day until recently,
 5 and continues to leak at eight billion becquerels per
 6 day. We also learned that Mr. -- that Dr. Michael Peck,
 7 the NRC's former senior resident inspector at Diablo
 8 Canyon recommended one year ago that Diablo Canyon be
 9 shut down because its seismic risk is operating, quote,
 10 "outside the bounds of the existing design basis and
 11 safety analysis." The NRC chose not to address his
 12 concerns during that year that followed, nor did they
 13 disclose his concerns to the public. My understanding
 14 is he essentially fell back to whistleblower status to
 15 get this word out, and our United States senator is now
 16 calling for hearings on this cover up. These factors,
 17 while not directly impacting the plan here today, must
 18 be ever present in our decision making, and enormous
 19 changes in the NRC transparency is needed if we are to
 20 ever trust them to act as our protecting and regulating
 21 agency. I also do not think it is prudent to try to
 22 entomb the canisters in a way that will prevent careful
 23 inspection of each canister on a regular basis. Having
 24 a representative cask to predict the health of others is
 25 not a comprehensive plan. We do not need the nuclear

1 paradox of Schrodinger's cask. As before, I remain
 2 impressed by Mr. Palmisano's work, and I want to thank
 3 all of you for keeping us informed and involved in San
 4 Onofre's progress and decommissioning. Thank you.
 5 CHAIRMAN VICTOR: Thank you very much for
 6 your comments. Jeff Steinmets and then Ace Hoffman.
 7 JEFF STEINMETS: First, I'd like to thank
 8 the panel for reading all the content and trying to come
 9 up to speed. I know from personal experience that it's
 10 also difficult to sit there and actually read the
 11 documents over and over again. I myself am not a
 12 nuclear engineer. It's not been my choice of field, so
 13 I do appreciate the work that you've done sincerely.
 14 With that said, there is one thing that we're all very
 15 aware of, and that is that Yucca Mountain is never going
 16 to happen. I'll say it again. Yucca Mountain is not
 17 going to happen. So why are we actually acting in terms
 18 of the casks that it is? We're going to depend on a
 19 cask that was designed that Yucca Mountain was going to
 20 come and take all the waste away? That's not going to
 21 happen. You need to change the way you're thinking
 22 about that. Those casks that are being seriously
 23 considered today are not going to be taken away in a
 24 timely fashion. The 2024 date is fantasy as well.
 25 That's not going to happen. So it's important when

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1 you're considering where you're going to put this highly
 2 toxic waste for hundreds of years, you can't sit there
 3 and assume that it's going to be gone in 20 years. And
 4 when you choose casks that were designed under the
 5 premise that Yucca Mountain was going to take it away,
 6 that's exactly what you're doing, and it needs to stop.
 7 Thank you.
 8 CHAIRMAN VICTOR: Thank you very much for
 9 your comment. Just to clarify the record here, we have
 10 been asked as a panel to look at a series of regulatory
 11 filings that are required to use these dates, but nobody
 12 believes that they're going to take the fuel away on
 13 that timetable. So just to clarify the record, the
 14 panel is very, very focused, as is Edison, on the longer
 15 term game plan. And, in fact, that was a central theme
 16 in the workshop we held on this topic. So I want to
 17 thank you very much for your comments. I just want to
 18 make sure we're all clear about this. We all know that
 19 the DOE time plan is a fantasy. Ace Hoffman. After
 20 Mr. Hoffman is Patricia Borschman.
 21 ACE HOFFMAN: I'm not sure where to begin
 22 here. 50 hours you said you spent on this slide paper
 23 that you're working on. I probably spend that on one
 24 newsletter. I want to talk about defense in depth.
 25 This is a core concept of the Atomic Energy Act of 1954

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1 as amended that there be multiple layers of defense. In
 2 1976 -- I was attending one of the NRC hearings this
 3 morning on San Onofre, and afterwards I gathered up some
 4 documentation that I have. And in 1976 the New York
 5 Times Magazine did a front page of the magazine article
 6 on the defense in depth, and they had a picture of a
 7 nuclear reactor surrounded by sort of looks like a
 8 containment dome and another containment dome around
 9 that and another one around that, and there were like 10
 10 or 12 of them. And so I went through the list, and I
 11 compared, well, how much defense in depth are we going
 12 to have with these dry casks as compared to what they've
 13 -- the nuclear industry has been saying all along is
 14 what we actually have for a reactor. The spent fuel,
 15 it's not just as dangerous, but it's very, very danger.
 16 It needs defense in depth. And so what do we have? We
 17 have a five-eighths inch thick piece of stainless steel
 18 and that's it. There is no other line of defense. A
 19 couple of guys with pop guns. That's about it. That
 20 doesn't count. That wasn't even listed in the New York
 21 Times Magazine's image in that photograph. The security
 22 around the plant, it's not even included in the defense
 23 in depth. Because if there's people attacking that
 24 plant of the type of terrorists we have in the world
 25 today, we're in trouble. We're in big trouble. Now,

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1 the Nuclear Regulatory Commission, who are conspicuously
 2 not here as usually, they always turn to us and say TSA
 3 is going to handle an airplane strike. They're going to
 4 prevent it by, you know, preventing a highjacking. That
 5 would be nice if it's going to happen. An F-15 fighter
 6 jet crashed into a mountain in Virginia today and killed
 7 a pilot. Anybody can -- we had a tank that was stolen
 8 here about 20 years ago. Lots of things can go wrong.
 9 We're going to need defense in depth. I'm hoping that
 10 15 inches of steel on a cask per cask is going to be
 11 good enough. But in addition I think we need a
 12 building. I think we need earth-in berms. I think we
 13 need to move the waste further away from the coast,
 14 further away from international waters. There is just
 15 so many things we need to do. As for the money, if you
 16 guys are already suing the DOE for not taking the waste,
 17 sue them for the price of the cask or casks while you're
 18 at it, and then we don't have to worry about the money.
 19 I'd like to talk about a lot of other issues, but I did
 20 ask Gene to send the later that I sent to the NRC
 21 regarding this morning's meeting out to all of you, and
 22 I hope that you got it and will read it.
 23 CHAIRMAN VICTOR: We received it. Thank you
 24 very much for your comments. Patricia Borschman,
 25 please, and then next is Roger Johnson.

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1 PATRICIA BORSCHMAN: My name is Pat
 2 Borschman. I'm a resident in Escondido, and I've been
 3 concerned about the nuclear reactor at San Onofre for a
 4 very, very long time. I was born in Southern
 5 California, and I'm older than all of you, so it's been
 6 a really long time since it was built, and the
 7 assumptions that were made then are, I think, outdated.
 8 So I think that a lot of assumptions that you're
 9 building into your cost estimate are very unrealistic.
 10 And I'm very disturbed to hear that your decommissioning
 11 plan is relying on assumptions that are, for instance,
 12 that unit one vessel, you know, is not a problem, and
 13 the unit two and three won't be either because you've
 14 already assessed that from the unit one a long time ago.
 15 I think that's a good example of the type of
 16 oversimplification in your type of analysis in the
 17 process. Not yours. I appreciate the CEP panel. I'm
 18 saying Edison's analysis. So, please, I didn't mean to
 19 direct the criticism to the CEP, because I very much
 20 appreciate your existence and Edison's change to involve
 21 citizens in the process at all. I appreciate all of you
 22 travelling as far as you do and coming here. One of the
 23 other things that was really disturbing to me about
 24 these budgets are the worse case assumptions that
 25 Edison's built into the decommissioning plan, 4.4

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1 million. But that's another example of an unrealistic
 2 assumption. So say, for instance, you're assuming that
 3 the cask designs that Edison proposes are going to be
 4 good enough. And you already heard, you know, very
 5 technical expertise from people way more qualified than
 6 I am to more fully describe what those deficiencies and
 7 shortcomings are and what the extent of consequences
 8 are. This isn't pretend. This isn't a game. This is
 9 real life. Edison has a duty. You have a duty. We all
 10 have a duty. I'm trying to do my duty as a public
 11 citizen in Southern California to warn -- to give people
 12 the best picture about Edison's plans is not credible
 13 for a safe decommissioning plan and the plan they're
 14 proposing for the type of casks. And there is better
 15 cask designs internationally that were described very
 16 well by Donna Gilmore. And I think it's ridiculous that
 17 Edison expects Southern California citizens to accept
 18 those or expect that those will be good enough. They're
 19 not. And I was also disturbed that someone mentioned
 20 earlier that there is such a large different between the
 21 type of decommissioning plans that are going on here in
 22 San Onofre and those at like -- forgot the name of it.
 23 CHAIRMAN VICTOR: Thank you. Thank you very
 24 much for your comments. Roger Johnson and Ray Lutz.
 25 ROGER JOHNSON: Thank you. Good evening. I

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1 have a short statement and then a question. Last
 2 February the nation's only repository, deep radiological
 3 repository failed. There were fires, explosions and
 4 radiation leaks, and it's now closed. This was a
 5 flagship program of the Department of Energy and it
 6 failed. It claimed that there was -- the risks were
 7 small. Risk analysis calculated that an accident here
 8 would happen once out of every 200,000 years. And what
 9 happened in 15 years, it failed twice in 10 days. So
 10 what are the chances of having a permanent national
 11 solution like this? The chances are small. As been
 12 said tonight, it's probably not going to happen. Last
 13 week the New York Times analyzing this said that experts
 14 are very skeptical there ever will be such a program.
 15 But yet what we have here is Edison's entire plan rests
 16 on removing -- having the government step in and save
 17 everything in 2049 and take it all away. Professor
 18 Parker mentioned at the beginning of the program here,
 19 he asked what are some contingency plans when this
 20 doesn't happen, and then he was asked not to answer the
 21 question, and we'll wait until next year to find out the
 22 answer. I would like to hear, Tom, if there is time
 23 tonight, tell us a few minutes about Edison's plan. You
 24 said that Edison's thought about it. They could have a
 25 plan. I would like to know what the plan is. It sounds

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1 to me like the plan is to keep nuclear waste in this
 2 area forever and these 20-year casks that are going to
 3 last for 20 years, and I'd like to hear what's going to
 4 happen after this. So there really is no plan at all.
 5 It's a plan for disaster. So it depends upon having a
 6 nuclear waste repository and the waste taken away. I
 7 think we need to think seriously about another plans,
 8 because this plan isn't going to work. So if there is
 9 time, I hope that you can address this question so we
 10 don't have to wait until 2015. Thank you.
 11 CHAIRMAN VICTOR: Okay. Thank you very much
 12 for your comments, and if there is time, I'll ask Tom if
 13 he wants to make remarks in this regard. Last speaker
 14 in the public comment period is Ray Lutz, and then I'm
 15 going to open it to panel if there are any further
 16 comments from the panel before we close.
 17 RAY LUTZ: Hello. My name is Ray Lutz. I'm
 18 with Citizens Oversight. My background is in
 19 engineering. I am represented party at the CPUC at some
 20 of their hearings. I did submit written questions to
 21 the panel, but before I get into that, I'd like to bring
 22 up a point. Oil tankers used to be one thickness of
 23 steel. Guess what they learned? If it gets a leak, the
 24 oil leaks out into the ocean. Now they're required to
 25 have two thicknesses. So if it gets a hole in it, the

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1 oil doesn't instantly leak out, and they know, oh,
 2 there's a hole in the outer skin, and, therefore, we can
 3 fix that and the oil doesn't leak out. What you guys
 4 are proposing is the old oil tanker that leaks plan.
 5 One thickness of steel. When it gets a hole in it due
 6 to corrosion it starts to leak and the radiation seeps
 7 out just like the oil did in the ocean. Haven't we
 8 learned anything yet? Hasn't mankind learned anything
 9 yet? We're still working with one five-eighths inch
 10 thickness of steel. Ridiculous. Get a new plan. We
 11 need at least two thicknesses of steel so when the outer
 12 one leaks, we can learn about it and then fix it before
 13 the inner one starts to leak. That's simple, but no one
 14 is even talking about two layers on these canisters. I
 15 want to bring up these other points. In the Songs one
 16 decommissioning there was no records kept. SCE lost
 17 them all. Lost them all. I asked them for it. Do you
 18 have any records of what you spent on Songs one? No,
 19 it's completely lost. What a disaster. Are we going to
 20 lose them again? Do we have a system to keep track of
 21 our costs? What kind of a system is it this time? I
 22 want to know, and that's why I'm asking the question on
 23 my list of questions. Major portions of the
 24 decommissioning process occur just a few phases, five
 25 different phases, and that encompasses something like 17

1 years and many billions of dollars. I think it's 2.4
 2 billion dollars. One of the issues was it's not broken
 3 down enough. How do we track it? Are we going to have
 4 just one big contract to your subcontractor, or are we
 5 going to be able to track each phase of this? Because
 6 it's almost impossible to track this kind of a project.
 7 We need better tracking, and that's what I'm asking for
 8 you to break out times and costs for each one of these
 9 sub phases that you've grouped together in another
 10 document I didn't talk about. So, please, I don't know
 11 how to process this, but I'm expecting a written
 12 response. Thank you.
 13 CHAIRMAN VICTOR: Thank you for your
 14 comments. I just want to assure you, you sent me an
 15 e-mail two days ago after we circulated the documents
 16 for today's meeting. That e-mail will be part of the
 17 public records as we circulate all the documents and has
 18 been now transmitted also to Edison.
 19 RAY LUTZ: My request is a written response
 20 from Edison or whoever else can answer the questions.
 21 CHAIRMAN VICTOR: Thank you for your
 22 request. So I now would like to see if there are
 23 additional comments the members of the panel would like
 24 to make. And I know Gene Stone would like the floor and
 25 perhaps others. Gene Stone, the floor is yours.

1 GENE STONE: I've heard a lot of great
 2 comments tonight from the public, and thank you very
 3 much. But I'd like to reemphasize what Ace and Ray just
 4 said. The Atomic Energy Act clearly states that there
 5 is supposed to be backup systems to all nuclear
 6 activity, and that has been true. There is backup to
 7 backup to backup in the running of a power plant, but
 8 the NRC has been negligent to the point of criminality
 9 as far as I'm concerned that there is no defense in
 10 depth in lay storage. We cannot consider that enough,
 11 and we should demand defense in depth in lay storage,
 12 and today there is none. Thank you.

13 CHAIRMAN VICTOR: Thank you for your
 14 comment. Other comments people would like to make,
 15 including comments about the public comment period and
 16 comments from members who would like particular comments
 17 raised by the public to be answers by Edison, especially
 18 regarding the agenda for tonight? Tim Brown.

19 TIM BROWN: There was a series of comments
 20 about cracks in canisters, radiation monitoring and
 21 stainless steel degradation. We have casks currently in
 22 San Onofre. How long have we had casks at San Onofre?

23 TOM PALMISANO: We currently have 51
 24 canisters loaded. 50 of them with spent fuel, one with
 25 what's called greater than Class C waste. The ISFSI pad

1 was built and they were loaded starting in about 2003 as
 2 part of the unit one decommissioning.

3 TIM BROWN: And as part of that, is there
 4 monitoring onsite for any leaks, or would you tell if
 5 any was happening inside those? What's the, you now --

6 TOM PALMISANO: The casks are -- as they are
 7 loaded and they are drained of water, evacuated and
 8 dried, filled with helium, pressure testing that's done
 9 after lids are welding on, then the pressure connection
 10 is capped after it's confirmed it's got the right helium
 11 pressure. It's then surveyed for external radiation
 12 contamination, it's moved to the storage in a heavy
 13 concrete module, which is one of the defense in depth
 14 features for external event. And they are periodically
 15 inspected, temperatures are monitored external to the
 16 cask, make sure there is circulating air flow that's
 17 operating properly. Radiation levels and contamination
 18 levels are periodically monitored on the exterior of the
 19 structure. So that's what was done. There is not an
 20 internal monitoring of the cask. We judge cask
 21 performance by the external temperature.

22 TIM BROWN: Then the last item I want to ask
 23 about is performance. There was questions about how
 24 they perform in an ocean environment. Now, this is a
 25 very small sample, 52 casks in San Onofre. Have there

1 been any instant right now of rust, cracking or anything
 2 that has degraded on the casks today?
 3 TOM PALMISANO: The in-service casks in this
 4 country, and this ranges from the east to the west coast
 5 to the south to the midwest have performed without a
 6 leak of the radioactivity in the cask. Some of the
 7 earlier comments made by members talked about leakage
 8 between a double-sealed lid, which was one of the
 9 vulnerabilities in a cask or casks because they're
 10 mechanical seals. Legitimately there is a concern about
 11 future inspection programs. Chloride stress corrosion
 12 cracking is a phenomenon that can affect austenitic
 13 stainless steel, which these canisters are made of. The
 14 industry has experience with piping systems both in how
 15 to detect, how to prevent and how to repair it. The
 16 inspection technology has gotta be transferred.
 17 Technology exists that's gotta be customized for
 18 canister inspection. So in truth there isn't a tool
 19 today I can inspect with, but there is technology I can
 20 develop to, you know, that I can utilize to develop a
 21 tool. Much like over the years we've learned how to do
 22 in-reactor vessel repairs, techniques that didn't exist
 23 30 years ago that were developed over time. So what
 24 needs to happen with these casks today and whatever
 25 casks we buy in the future, there needs to be what's

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1 called and aging management and surveillance program to
 2 periodically inspect, check the cask and mitigate any
 3 problems with the cask. So that has to be part of the
 4 license renewal. The current casks at San Onofre their
 5 license expires in 2023. As part of the license renewal
 6 we need to develop and commit to that and put in place
 7 those --
 8 TIM BROWN: So they're coming up on 20 years
 9 right now it sounds like.
 10 TOM PALMISANO: The license for San Onofre
 11 expires in 2023, and that's actually held by the vendor
 12 Areva Transnuclear for that.
 13 TIM BROWN: Rust, breakage, anything on the
 14 current casks that have been reported?
 15 TOM PALMISANO: Not on the current casks
 16 that have been reported. Concrete spalling at other
 17 locations other than San Onofre on the external of the
 18 concrete structures, which is easily found and repaired.
 19 TIM BROWN: Last item. Sorry. Last item it
 20 was, you know, one of the things that was touted was the
 21 domes were prepared for any type of strike. You talk
 22 about defense in depth on the casks. They raise
 23 questions about can it withstand an attack or, you know,
 24 can you give us just a brief summary about --
 25 TOM PALMISANO: Sure. In general terms the

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1 current design at San Onofre, the other designs that we
 2 are considering that are licensed by the NRC are
 3 designed to withstand external events such as
 4 earthquakes, flooding, tsunami, tornados in other areas
 5 of the country, tornado-generated projectiles like a
 6 telephone pole going into the casks. And the NRC sets
 7 the requirements and cask manufacturers have to
 8 demonstrate they meet them. Likewise, there are
 9 security threats that are classified that the casks have
 10 to be designed coupled with our security system and
 11 security force to prevent. So there is a design basis
 12 for both security and external events that the casks
 13 have to meet.
 14 CHAIRMAN VICTOR: Thank you very much. Let
 15 me see. Anymore comments down here? Directly on this
 16 topic, Gene? Okay. And then to Ted Quinn.
 17 GENE STONE: Tom, to present date, as you
 18 said, license renewal is coming up to 2023 for the 51
 19 casks that you have. Have you ever pulled a cask out
 20 and inspected it?
 21 TOM PALMISANO: We have not pulled a cask
 22 out, no.
 23 GENE STONE: So this is, what, 16 years and
 24 we have never pulled one out to inspect it?
 25 TOM PALMISANO: We have not pulled one out

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1 at San Onofre.
 2 GENE STONE: Thank you.
 3 CHAIRMAN VICTOR: Ted Quinn.
 4 TED QUINN: I'd like to ask about the
 5 meeting in October. It's on emergency planning, which
 6 is a really important subject to me. Will you also talk
 7 about security planning or is that a separate time?
 8 CHAIRMAN VICTOR: I view security planning
 9 as part of the footprint of the plan to be incredibly
 10 important. Do you want to comment directly on this?
 11 TOM PALMISANO: Yeah. I think when we
 12 planned the October meeting -- first off, we would be
 13 glad to talk about security planning in some level of
 14 detail, but a bit of that quite frankly is classified.
 15 CHAIRMAN VICTOR: Yeah, we're not --
 16 TOM PALMISANO: So we won't cross that
 17 boundary. To reassure everybody, the security
 18 requirements don't change. You know, the security
 19 requirement footprint shrinks because I don't have
 20 reactors to protect, but I have the spent fuel storage
 21 instillation to protect through the same security
 22 requirements that existed before. I think in October
 23 we're going to have a full workshop or session on
 24 emergency planning. So as we plan that, what I'd like
 25 to suggest, David, is we work with you to craft the

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1 agenda and see what time we have available.
 2 CHAIRMAN VICTOR: I'd also like to ask Ted,
 3 if he's willing, let's get the agenda done earlier than
 4 normal, and let's come back to you, Ted, and see whether
 5 the parts of the meeting that are related to security
 6 planning that can be discussed in a non-classified way,
 7 if that's sufficient if that will be helpful to you.
 8 TED QUINN: Thank you.
 9 CHAIRMAN VICTOR: Let me also ask any other
 10 members of the panel who want to work with me and Tim
 11 Brown on the agenda for that meeting. That's going to
 12 be a tricky meeting for us because we're going to be
 13 reviewing a plan that's already been submitted but is
 14 still under consideration. So we're not going to have a
 15 workshop separate from the meeting, but we're going to
 16 try to run the meeting in workshop mode with a little
 17 more back and forth. Hopefully that will be affective.
 18 October 6th; right?
 19 TED QUINN: October 9th.
 20 TOM PALMISANO: I believe it's the 9th.
 21 We'll double check the date.
 22 CHAIRMAN VICTOR: Don't listen to anything I
 23 say about that date. Listen to what was written down.
 24 TIM BROWN: We're fairly confident it's this
 25 year. It's going to be this year.

1 actually have a lot we can learn from other sites as
 2 they deal with aging issues and so on. The other thing
 3 that has been quite impressive to me is how dependant we
 4 are on the cask vendors. And so when we think about
 5 buying casks, we're not only thinking about a marriage
 6 to the cask, but a marriage to the vendor. And we have
 7 to evaluate the vendor and their presence in the
 8 American market and their interest and ability to make
 9 long-term -- to participate with us long-term because we
 10 need them to do the license renewals and so on. This
 11 20-year time line people have been talking about, that's
 12 just the first license. So you get -- and nothing is
 13 licensed beyond 20 years. So you keep getting license
 14 renewals, and so we're very dependant upon the cask
 15 vendors. So I would urge that as these discussions
 16 unfold that we pay attention not only to the technical
 17 details, but to, frankly, the integrity, presence and
 18 incentives of the vendors, which are perhaps just as
 19 important.
 20 The last thing I was struck by in doing this
 21 review is that the defense in depth, which is a term
 22 that has come up a lot today, is not a term of art that
 23 is getting used in the regulatory process in this area,
 24 but instead there is lots of other regulatory procedural
 25 details and engineering issues that I think when we look

1 CHAIRMAN VICTOR: It's going to be this
 2 year. You're an awesome vice chairman. I really want
 3 to thank you for that. Any other comments that the
 4 panel -- Dan Stetson.
 5 DAN STETSON: Really just a suggestion. I
 6 want to thank you, Tom, for the tour that you provided
 7 me, and Chris mentioned that tours are going to be open
 8 to the general public soon. So I really think that that
 9 is a wonderful activity, and I'd like to remind everyone
 10 in the audience to take advantage of that. I went there
 11 with my wife with a ton of questions, and they went into
 12 great detail on every single question, so thank you for
 13 that.
 14 CHAIRMAN VICTOR: Thank you very much. So I
 15 just want to make four brief comments related to those
 16 issue that have come up today about the casks and where
 17 we're headed on that just to give people a sense of
 18 this. As I've already mentioned, it's a process we set
 19 up in the CEP to gather facts, talk about them. We're
 20 not going to agree on everything, but to try and orient
 21 this around the facts. I have been tremendously
 22 impressed by how much information there is out there.
 23 There is still a lot to be learned, and this is a
 24 long-term aging program. The first stainless steel cask
 25 went into service in this country in 1989. So we

1 at them we will recognize as defense in depth. But,
 2 frankly, the technical community has not been doing a
 3 very good job in communicating what is actually going on
 4 in terms of what we would think of as defense in depth.
 5 So I think part of the answer to the request from Gene
 6 Stone and a variety of other people is to articulate in
 7 plain English what this actually means at the San Onofre
 8 site, how this unfolds, what our relationships to the
 9 vendors are and so on. And I know when Tim and I did
 10 the survey of the CEP members, the vast majority of them
 11 asked us to talk about other things than nuclear waste,
 12 nuclear fuel, and I appreciate that, and our next
 13 meeting in October will deliver on that promise. But we
 14 will not lose sight of this issue. We will continue to
 15 work on it. We will continue to gather facts in a very
 16 prompt way and organize some discussions around this.
 17 So look for more from us about this even in the coming
 18 few days.
 19 I think we are now finished with our formal
 20 agenda. I want to thank all of you on the eve of this
 21 long weekend for spending an evening with us, and I look
 22 forward to seeing you again at our future meetings.
 23 Thank you.
 24 (Whereupon at 8:55 p.m. the proceedings
 25 concluded.)

<p>1 STATE OF CALIFORNIA) 2)SS. 3 COUNTY OF SAN DIEGO) 4 5 I, JANETT JIMENEZ, CERTIFIED SHORTHAND 6 REPORTER IN AND FOR THE STATE OF CALIFORNIA DO HEREBY 7 CERTIFY: 8 THAT SAID MEETING WAS TAKEN DOWN IN 9 STENOGRAPHIC WRITING BY ME AND THEREAFTER REDUCED INTO A 10 TRANSCRIPT UNDER MY DIRECTION. 11 I FURTHER CERTIFY THAT THE FOREGOING IS A 12 FULL, TRUE AND CORRECT TRANSCRIPT OF SAID MEETING. 13 I FURTHER CERTIFY THAT I AM NEITHER COUNSEL 14 FOR NOR RELATED TO ANY PARTY TO SAID MEETING, NOR IN ANY 15 WAY INTERESTED IN THE OUTCOME THEREOF. 16 IN WITNESS WHEREOF, I HAVE HEREUNTO 17 SUBSCRIBED MY NAME ON THIS 10TH DAY OF SEPTEMBER, 2014. 18 19 20 21 22 _____ 23 JANETT JIMENEZ, CSR NO. 13215 24 25</p>	
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