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Post-shutdown Decommissioning  
Activities Report

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UNITED STATES OF AMERICA

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NUCLEAR REGULATORY COMMISSION

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OFFICE OF NUCLEAR REACTOR REGULATION

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THE SAN ONOFRE NUCLEAR GENERATING STATION (SONGS)

POST-SHUTDOWN DECOMMISSIONING ACTIVITIES REPORT

(PSDAR)

+ + + + +

MONDAY,

OCTOBER 27, 2014

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OMNI LA COSTA

CARLSBAD, CALIFORNIA

+ + + + +

PRESENT:

CHIP CAMERON, Facilitator

DOUG BROADDUS, NRR

LARRY CAMPER, NMSS

AL CSONTOS, NMSS

RAY KELLAR, Region IV

TOM PALMISANO, Southern California Edison

BRUCE WATSON, NMSS

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P-R-O-C-E-E-D-I-N-G-S

6:00 p.m.

FACILITATOR CAMERON: Okay, good evening, everyone. My name is Chip Cameron, and I'd like to welcome all of you to the public meeting tonight.

I was going to make a joke and say welcome to the annual meeting of Local 89, but --

(Laughter.)

Okay, but -- all right, all right.

But we do have a serious topic tonight, and it's the decommissioning of the SONGS facility, and specifically, it's a meeting on what's known as the Post-Shutdown Decommissioning Activities Report.

We're going to try not to use many acronyms tonight. We are going to use NRC, for Nuclear Regulatory Commission, and you're probably going to hear the term PSDAR -- that's the Post-Shutdown Activities Report, Decommissioning Activities Report.

That document was submitted by Southern California Edison under the regulations that the NRC has for decommissioning, and you're going to hear a lot about that tonight.

I just want to go through some meeting process items for you so that you know what to expect

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1 tonight, and I'd like to tell you about what the  
2 objectives are for the meeting, what the format is going  
3 to be, and just some simple ground rules that will help  
4 us to have a productive meeting tonight.

5 In terms of objectives for the meeting, one  
6 is to have the NRC provide you with a clear explanation  
7 of the NRC regulatory process for decommissioning, and  
8 the overview of what's in the PSDAR, the Southern  
9 California Edison document.

10 We also have Tom Palmisano doing a  
11 presentation for us tonight to go over the specifics of  
12 the post-shutdown report, and we'll be hearing from a  
13 panel of speakers including Tom in a few minutes.

14 So that's one objective, to clearly explain  
15 all that to you.

16 Second objective is to hear any comments,  
17 concerns you might have, and to also answer some  
18 questions that you might have about the presentations.  
19 And our panel reflects all the different organizations  
20 that are involved for the NRC in decommissioning, and  
21 Larry Camper, our lead senior official, is going to  
22 explain that to you in a few minutes.

23 I am going to have to ask your patience. We  
24 are going to have all the presentations before we go out  
25 to you for questions so you can get the whole picture,

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1 but we might be here for 45 minutes talking, not at you,  
2 but to you, and the speakers are going to try to keep  
3 it brief.

4 But just let me ask your patience with that,  
5 and after that's done, we'll go out to you for questions  
6 and comments, and I would ask you to hold your questions  
7 until all the presentations are finished.

8 In terms of ground rules, first of all, hold  
9 your questions. Second of all, let's only have one  
10 person speaking at a time, whoever has the floor at the  
11 moment, whoever has the microphone. And that's just  
12 very simply so that we can give our complete attention  
13 to whomever is talking at the moment.

14 And I am going to have to ask you to be  
15 brief. We're not going to be able to have lengthy  
16 presentations by you tonight. We will have listened to  
17 your comments, but luckily, there's a relief valve --  
18 if you don't get to say everything that you want to say  
19 tonight, the NRC is taking email, comments by email, on  
20 these issues, and they're also taking hard copy comments  
21 if you want to mail those in, and we'll put that address,  
22 the email address and the mail address up for you at --  
23 all during the meeting, so that you can copy that down.

24 And if your question or concern has already  
25 been raised or has been answered, if you could try not

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1 to repeat that -- and I know sometimes that's difficult,  
2 because you want to chime in with what you have to say  
3 and sometimes it's a little different, but let's try to  
4 keep it to what is necessary.

5 And the last ground rule is just please  
6 extend courtesy to everybody, and that goes for all of  
7 us, NRC, everybody. Just be courteous. You may hear  
8 opinions tonight that are different from your opinions,  
9 but just respect the person who is giving that opinion.

10 And when we do get to the discussion  
11 session, after the presentations, I am going to call for  
12 people, raise your hand if you have something to say --  
13 I am going to do it section by section, and that is  
14 because we are taking camera, web -- and that's going  
15 to be for a webcast, and that will be available on the  
16 NRC website, so if you want to see what was said, that  
17 is going to be your record of the meeting, and also the  
18 NRC's record of the meeting tonight.

19 And I just thank you all for being here  
20 tonight, and I'm going to turn it over to Larry Camper.

21 MR. CAMPER: Thank you, Chip. Welcome,  
22 everybody. It's great to see such a great turnout,  
23 really. Thank you for taking time out of your busy  
24 lives to come and be with us this evening.

25 We were here last September, and I

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1 commented at the time in my remarks what a beautiful  
2 place this is, and I can only repeat it again this  
3 evening. You really do live in a lovely spot, so it's  
4 good to be with you.

5 This evening we're going to conduct a  
6 meeting that is a required meeting by our regulations,  
7 and as Chip said, it's the Post-Shutdown  
8 Decommissioning Activities Report Meeting, or PSDAR.

9 The meeting that we were here for last  
10 September was an outreach meeting, as compared to a  
11 required meeting. So we're here to gather comments.  
12 We do have to share some information with you first, so  
13 bear with us as we do that.

14 Good. I mentioned we were here last  
15 September in an outreach meeting. Heard a lot of good  
16 input from citizens, and we appreciated hearing all  
17 that.

18 I'll cover the meeting agenda just briefly.  
19 In terms of facilitation, you know that Chip Cameron is  
20 going to be facilitating. He shared with you the ground  
21 rules so we can have a productive and meaningful  
22 interface tonight.

23 It's really about comments. We do have  
24 some subjects to cover, but -- we want all of you to be  
25 aware of the same information at the same time, but it

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1 really is about getting comments from all of you here,  
2 or as many of you as want to speak.

3 We do have some meeting feedback forms  
4 outside on the table. I would ask you to take time to  
5 complete the meeting feedback form. We like to get some  
6 feedback as to how the meetings went, and did you find  
7 it valuable and useful.

8 We will be adjourning at 9:00 p.m., we have  
9 the room contractually until 9:00 p.m., so we do have  
10 to stop at that point in time. If we go over a few  
11 minutes, I don't think the hotel will come in here and  
12 run us out, but let's strive for that 9:00 p.m.  
13 objective.

14 During the September meeting, it was a  
15 meeting that we initiated although it was not required  
16 by our regulations. And we did that because there was  
17 a lot of things that had happened at this particular  
18 plant, and our agency, our chairman in particular, our  
19 senior management, all had an interest in seeing to it  
20 that we came out here, heard your concerns, and  
21 communicated about not only the decommissioning  
22 process, but anything that folks wanted to talk about,  
23 and we did that.

24 At that time, we had a  
25 government-to-government meeting with local elected

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1 officials during the day, we did that again today. And  
2 we also had a meeting with non-government organizations  
3 at that time, and today we met with representatives from  
4 the Community Engagement Panel.

5 Each of those meetings about an hour and a  
6 half in duration, and we found them to be indeed very  
7 useful, with much good input. And I would -- I think  
8 it's fair to say that the elected officials and the  
9 Community Engagement Panel is listening. They shared  
10 a lot of very good information with us.

11 Last September, there were a myriad of  
12 topics that were talked about. I put down two in this  
13 particular slide, fuel management -- and I am sure we'll  
14 hear about fuel management again this evening -- as well  
15 as decommissioning timing, when will decommissioning  
16 start, how long will it take, what are the guidelines  
17 and the regulations by which they have to carry out their  
18 decommissioning activities?

19 For tonight, I want to start out by saying  
20 that I'm going to mention each of the speakers that are  
21 up here at the table tonight. Each of these will be  
22 making a presentation.

23 Chip alluded to the fact that our  
24 responsibility for decommissioning is spread out in  
25 several places, so we wanted to make sure we had the

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1 right expertise here. But I also want to point out --  
2 and I'd ask the NRC staff here, if you'd stand up for  
3 a moment and turn around and let the folks see you --  
4 we have a number of NRC people here, and the reason for  
5 that is because we wanted to make sure we had the  
6 expertise here. Thank you very much.

7 And if some question comes up over the  
8 course of the evening that one of the staff feel that  
9 they can better answer, then they can certainly  
10 indicate, and we'll recognize them, and they'll do that.

11 Also, we'll take a quick break, and we'll  
12 be here just for a little bit after the meeting. Any  
13 of these folks are a source of information for you,  
14 especially if you're shy about getting up and asking  
15 questions or making comments during the program this  
16 evening.

17 First is Bruce Watson. Bruce will address  
18 the Post-Shutdown Decommissioning Activities  
19 Requirements.

20 Next to him is Doug Broaddus, and Doug will  
21 cover the review, our review of the PSDAR, and the  
22 licensing status of the facility at this point in time.

23 Al Csontos will address spent fuel safety.

24 Ray Kellar, who is with Region IV, will  
25 address our inspection program.

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1                   And last but not least is Tom Palmisano, who  
2                   is actually with the SONGS unit and will provide the  
3                   contents of the PSDAR itself.

4                   I did also want to mention that of our staff  
5                   sitting out here, Keith McConnell, Dr. McConnell, was  
6                   the manager that was in charge of our recent waste  
7                   confidence decision, our long-term storage rulemaking,  
8                   and so Keith is prepared to answer some questions about  
9                   that initiative if need be.

10                  Chip will lead us into our public comment  
11                  session, and then at the end I like to make some summary  
12                  comments and share what I call aha moments, things that  
13                  we heard that were a big deal.

14                  So let me say that it's about our mission.  
15                  Our mission, as you see on the slide, is to regulate the  
16                  nation's civilian use of radioactive materials to  
17                  protect public health and safety, promote the common  
18                  defense, security, and protect the environment.

19                  That's our mission during operations.  
20                  That remains our mission during decommissioning. The  
21                  entire decommissioning process will be carried out  
22                  consistent with our regulations and our continuing  
23                  regulatory oversight to achieve the objective that you  
24                  see there on the slide defining our mission.

25                  I would also point out that there is a great

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1 deal of interest, of course, in things environmental,  
2 environmental impacts. There is a law called the  
3 National Environmental Policy Act of 1969, and we have  
4 regulations in our regulatory Part you see there, Part  
5 51. This is where we carry out our regulatory  
6 responsibilities to fulfill the requirements of the  
7 National Environmental Policy Act.

8 An important part of that is that the PSDAR  
9 contains an updated environmental report, and Tom will  
10 speak to the contents of that during his remarks.

11 And then of course ultimately, when we  
12 ultimately receive a license termination plan for this  
13 facility, we will be conducting an environmental  
14 assessment as part of that licensing action.

15 Our regulations for decommissioning are a  
16 set Part in Part 20, so Part E. What's important is to  
17 -- what does the term mean. The term means to remove  
18 as a facility safely from service, and reduce  
19 radioactivity to a level that permits release of the  
20 property for unrestricted use and termination of the  
21 license, or release of the property under restricted  
22 conditions and termination of the license.

23 I would point out that no nuclear power  
24 plant to date has ever pursued the restricted release  
25 pathway, and the facility for SONGS 2 and 3 is not doing

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1 that either, they're pursuing unrestricted release.

2 In terms of the release criteria for  
3 unrestricted release, in order for a site to be suitable  
4 for release in an unrestricted manner, the dose that  
5 must be achieved is a total effective dose equivalent,  
6 or TEDE, of equal to or less than 25 millirem, and as  
7 low as reasonably achievable.

8 And achieving that, that means the dose to  
9 the average member of the critical group, all pathways,  
10 including groundwater, and the period of performance  
11 is for 1,000 years.

12 You also see below is the dose criteria for  
13 restricted release. I would note that the criteria is  
14 the same except that there are provisions in place for  
15 institutional controls, and some criteria if those  
16 institutional controls fail, but that's not being  
17 pursued here.

18 Now when you see or you hear 25 millirem,  
19 what does that mean? Well, let me give you something  
20 to think about.

21 Millirem is a dose unit of exposure to  
22 people, radiation equivalent in man is what millirem  
23 stands for.

24 If you get on an airplane in Los Angeles and  
25 you fly to New York, you get about three millirem. The

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1 natural background radiation in the United States,  
2 depending upon where you are, ranges from about 300 to  
3 600 millirem.

4 There are places in the world, though,  
5 where the natural background radiation is much higher  
6 than that. Saskatchewan, Canada comes to mind, about  
7 4,000 millirem per year.

8 So at least when you hear that term now, 25  
9 millirem, you'll have some idea of what we're talking  
10 about.

11 I would point out that while our criteria  
12 is 25 millirem and as low as reasonably achievable, the  
13 decommissioning of nuclear power plants to date have all  
14 achieved a level of exposure much lower than 25  
15 millirem, on the order of a few millirem, four, five,  
16 six millirem.

17 This is a very important slide for you as  
18 members of the public. In fact, I think it's probably  
19 the slide that, if I were you, I would be most interested  
20 in, because it tells you what happens in the process,  
21 and where in the process you have informational  
22 awareness, or where in the process you get a chance to  
23 make comments.

24 On the left you see what the licensee is  
25 required to do. In the center is what our agency does.

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1 And on the right, of course, is the public.

2 There's an initial notification that takes  
3 place. It's a cessation of operations, and also a  
4 certification that the fuel has been removed from the  
5 reactor vessel.

6 Then, there comes a decommissioning  
7 report. That is the PSDAR. That is why we are here  
8 tonight.

9 Now you note that we review that, and we  
10 conduct a public meeting near the site, and you, the  
11 public, have an opportunity to comment.

12 I do want to be clear, though, that we don't  
13 approve the PSDAR. We review the PSDAR, and the  
14 licensee has to wait 90 days while we do that, while we  
15 carry out our review to ensure that our regulations are  
16 being satisfied, that the PSDAR is in fact adequate to  
17 satisfy those regulations. We also go about the  
18 comment-gathering process, and we will consider your  
19 comments as we continue to carry out our review.

20 Then actual decommissioning takes place.  
21 The reactor is completely decommissioned over a period  
22 of time, and Tom will specify tonight in his remarks how  
23 long this utility plans to take to accomplish that  
24 objective.

25 And then the next major milestone in the

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1 process is a submittal of a license termination plan.  
2 The utility will submit that license termination plan  
3 approximately two years before it desires to terminate  
4 its Part 50 license, that's the Part of our regulations  
5 that we use to regulate power plants, or to shrink the  
6 footprint to the remaining independent spent fuel  
7 storage installation pad.

8 That process, that LTP, is something we do  
9 review, and either approve or deny, and I think very  
10 importantly for your awareness is that the LTP process  
11 is a licensing action that carries with it the  
12 opportunity to request a hearing.

13 And if parties, or a party, requests a  
14 hearing and achieves standing, then we will carry out  
15 a hearing through our adjudicatory process.

16 Then final decommissioning takes place, a  
17 number of final surveys are done, we conduct  
18 verification surveys, and all that information is  
19 available to you the public through the inspection  
20 reports that are generated as we go about monitoring the  
21 Final Status Surveys.

22 And the Final Status Surveys are designed  
23 to achieve that dose standard that I cited a moment ago.

24 This particular slide, the point of showing  
25 you this slide is to show you that we've decommissioned

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1 a lot of sites. We've decommissioned on the order of  
2 80 sites, including 11 nuclear power plants.

3 We have a lot of experience, we have a lot  
4 of expertise, and not to sound puffy, because that's not  
5 my intention, but I just want you to know we have a lot  
6 of experience. We've done this a number of times. And  
7 we're going to bring all that expertise and experience  
8 to bear as we go about monitoring the decommissioning  
9 of this facility as well.

10 There is a transition that goes on when we  
11 move from an operating power plant to a power plant in  
12 decommissioning. We have a number of program  
13 responsibilities. Just so you know who's on first, I  
14 put this slide in. It shows you that the Office of  
15 Nuclear Reactor Regulation continues project  
16 management until the post-shutdown defueled technical  
17 specifications are issued, Doug will mention that a bit  
18 in his commentary.

19 Then the project management is transferred  
20 to my division within the Office of Nuclear Material  
21 Safety and Safeguards, and we will shepherd it through  
22 the entire decommissioning process until the very end.

23 Inspections continue to take place, and  
24 that's transferred to the Division of Nuclear Materials  
25 Safety and Safeguards from the Division of Reactor

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1 Projects, and of course, Region IV will carry out that  
2 inspection activity, and you'll hear about that from our  
3 Region IV representative.

4 And then, of course, support continues from  
5 the Nuclear Security and Incident Response Program  
6 within NRC.

7 So I will stop there. Bruce Watson will  
8 follow me and talk to you more about the PSDAR process.  
9 Bruce?

10 MR. WATSON: Thank you, and good evening,  
11 and thank you for all sharing your evening with us.

12 The NRC regulations which Larry went over  
13 that carry decommissioning have been in place for over  
14 17 years. Larry went into a little more detail on the  
15 Part 20, but the key factor for the reactor  
16 decommissioning is in Part 50, specifically 50.82.

17 These regulations took into a lot of  
18 experience that we incurred over the years with some of  
19 the initial decommissioning of some reactors in the  
20 early 1980s and 1990s.

21 Some of the key milestones from SONGS so far  
22 have been that they ceased operations -- permanently  
23 ceased operations on June 7, 2013. We received the  
24 defueled certifications for the two units also during  
25 the summer of 2013, and on September 23, they submitted

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1 the PSDAR for our review.

2 We issued a public notice for that PSDAR,  
3 and of course the public -- the PSDAR is available in  
4 ADAMS, which is our agency-wide document system, and  
5 there's the number for putting that in off the public  
6 website.

7 Our guidance allows three types of  
8 decommissioning options. The first is DECON, which  
9 basically means you're going to do prompt remediation,  
10 you're going to begin fairly quickly after you  
11 transition the reactor to a state where it can be  
12 decommissioned.

13 That transitioning typically takes one to  
14 two years, draining systems, isolating systems,  
15 isolating electrical systems and making the plant safer  
16 for disassembly.

17 The second option is SAFSTOR, in which you  
18 can allow the plant to stay in a sort of a mothballed  
19 state for a number of years.

20 And then ENTOMB, which we currently do not  
21 use and do not have any regulations for and no one has  
22 requested, and we don't expect anybody to request  
23 entombment, is another option, but not currently  
24 available.

25 But the bottom line is radiological

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1 decommissioning, and I stress the radiological  
2 decommissioning, which is what we regulate, the  
3 radioactive part of the decommissioning has to be  
4 completed within 60 years.

5 Now San Onofre has chosen to do DECON in  
6 their PSDAR, so they're going to begin fairly quickly  
7 with their schedule that's in there.

8 With the PSDAR from SONGS, though, they  
9 meet the three criteria that we're reviewing. The  
10 first part, major requirement, is a description and  
11 schedule for the planned decommissioning activities, so  
12 it as a fairly high-level schedule on how they plan to  
13 accomplish the decommissioning.

14 The purpose in this is to allow the NRC to  
15 schedule our resource to support inspection activities  
16 throughout the decommissioning to ensure that we're  
17 there for major activities where we think we should be  
18 there to ensure that the work is done safely.

19 The second item that's required to be in a  
20 PSDAR is a site-specific decommissioning cost estimate,  
21 including the costs of managing the irradiated fuel.  
22 In most cases, this is a fairly extensive document and  
23 has good detail in it.

24 The third thing is that the PSDAR must  
25 require -- is required to provide a discussion that

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1 provides the means for concluding that the  
2 environmental impacts associated with the  
3 decommissioning will be bounded by the appropriately  
4 -issued Environmental Impact Statement.

5 Now, we have a document called NUREG-0586,  
6 it's publically available. It is the generic  
7 Environmental Impact Statement document where you can  
8 look at all the things that have been previously  
9 reviewed.

10 The PSDAR regulations require that we hold  
11 a public meeting, which we are doing tonight. We are  
12 here to hear your comments and hopefully answer your  
13 questions. Like I said, the PSDAR is available for  
14 public comment. You can find it, again, at that ADAMS  
15 number. We also passed out a number of CDs for your use.

16 We will accept written comments, like Larry  
17 said, and also ones from the website.

18 The key thing here is that the licensee can  
19 begin major decommissioning 90 days after the PSDAR has  
20 been submitted to us.

21 Lastly, I wanted to mention that we have  
22 continued our transition activities. One of those  
23 transitioning activities is in the inspection area, and  
24 Senior Inspector Greg Warnick has been here a little  
25 over a year now, and will be here for the near term, as

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1 part of that -- ensuring that the plant continues to be  
2 transitioned safely.

3 And with that, I'd like to turn it over to  
4 Doug Broaddus, who is going to talk about the reviews  
5 for the PSDAR.

6 MR. BROADDUS: Thank you, Bruce.

7 All right. So I am here tonight to talk to  
8 you tonight about our review process for the PSDAR, but  
9 I am also going to talk about some of the other review  
10 activities that we have ongoing associated with SONGS,  
11 both their licensing actions that they have, and some  
12 other related activities that we have under review.

13 As Bruce indicated, the -- our primary  
14 review is, you know, does the PSDAR contain the  
15 information that's required by the regulations? And  
16 Bruce talked about specifically those requirements.

17 The other area where we use as review  
18 guidance is in our Reg Guide 1.185. It's a Guide that  
19 provides the standard format and content of the PSDAR.  
20 So we -- that provides more details as to what  
21 information we expect to have in the PSDAR.

22 So the -- our review process, then, is that  
23 once we receive it, our project manager for the SONGS  
24 facility will send that out to all, and coordinate with  
25 the various different technical expertises that are

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1 needed to look at the various different issues within  
2 the PSDAR.

3 And our general process is, if there's  
4 additional information that we need to either confirm  
5 that it meets the requirements or that there's specific  
6 information that's missing that we need, we'll ask for  
7 additional information of the licensee.

8 So what is our criteria? What do we look for  
9 specifically from the standpoint of the PSDAR?

10 There are a number of things that could  
11 cause us to either need additional information on the  
12 PSDAR, or in fact, to possibly find it deficient.

13 One is that it doesn't contain the  
14 information that's required in the regulations, if it  
15 doesn't provide all the information that's specifically  
16 required.

17 The other is if the costs that the licensee  
18 have indicated would exceed the costs -- or the funding  
19 that they have available to them.

20 Another would be if they are -- if they  
21 haven't fully described the process that they're going  
22 to follow, or the process that they have described is  
23 one that could not actually be implemented. So we would  
24 -- that could cause us to have problems with that.

25 The other would be that the schedule is --

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1 would not be completed within the 60 year required time  
2 frame that Larry mentioned earlier.

3 The one caveat to that is if the NRC  
4 determines that there's a specific reason why a longer  
5 than a 60 year period would be necessary, for example  
6 to protect public health and safety for a particular  
7 reason, then that time period could be extended, but  
8 that's something that we would have to specifically  
9 review and authorize the licensee to go beyond the 60  
10 years.

11 All right. And the last thing, obviously,  
12 and the most important, is there -- are the activities  
13 going to endanger public health and safety?

14 One example would be if there's no waste  
15 disposal facility available, do they have to -- would  
16 they -- well actually, I'm sorry that's for the 60 years.  
17 If there wasn't a waste disposal available for disposal  
18 of the material, it could be that they need to go beyond  
19 the 60 years.

20 But from a health and safety standpoint,  
21 that's part of our criteria, just to make sure that the  
22 activities that they're doing are in compliance with our  
23 regulations and aren't in violation of our health and  
24 safety requirements.

25 All right. Next is, as part of the PSDAR,

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1 a site-specific decommissioning cost estimate has to be  
2 provided, and this decommissioning cost estimate has to  
3 address the specific -- the overall cost of the  
4 decommissioning. It has to provide a good  
5 understanding of the costs, the basis for those costs,  
6 and it has to ensure, you know, provide enough  
7 information to us to be able to say that they have  
8 reasonable assurance that they have funds available to  
9 complete their decommissioning activities.

10 The other thing is if the licensee has to  
11 change their plans, or if they have unforeseen problems  
12 as they go through the decommissioning process, that  
13 they have a means of adjusting their cost estimate for  
14 identifying new, or identifying new funding mechanisms  
15 if they don't have enough money to pay for it.

16 And that's -- from that perspective, we've  
17 heard the question of, so what happens if they get into  
18 that type of situation?

19 So the licensee is required to maintain the  
20 level of funding. If they have to change their plans,  
21 they have to revise their cost estimate in the PSDAR and  
22 submit that to us for a review, and we would look at that  
23 to ensure that they've come up with another funding  
24 mechanism or some other type of mechanism, or they've  
25 changed their approach to ensure that they're going to

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1 have the funding available to complete the  
2 decommissioning activities.

3 And these -- the licensee also has to submit  
4 a revision every year to this decommissioning cost  
5 estimate, so we're going to see changes as they're  
6 happening through the years, and so any problems that  
7 would occur, we would see them well before they would  
8 ever happen, and we would ensure that the licensee is  
9 taking action to adjust those.

10 As Larry indicated before, NEPA is part of  
11 the environmental process, is part of our review. In  
12 this case, the -- what the licensee would address in  
13 their PSDAR is that they've looked at the environmental  
14 impacts of the activities that they're going to take,  
15 they've looked at the previous environmental  
16 assessments that have been conducted, both for the site  
17 -- a site specific assessment that was done for the site  
18 as well as the generic final environmental assessment  
19 for decommissioning facilities -- looking at those to  
20 determine whether or not the environmental impacts they  
21 are going to incur for their activities would be bound  
22 by those prior estimates.

23 And so they would have to provide the basis  
24 for why they believe that it's met within, that it's  
25 within those prior environmental impacts.

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1 All right. And the inspection we do have,  
2 as Bruce mentioned, we have an inspection program where  
3 they'll go out and they'll confirm that the activities  
4 they're doing are in accordance with the prior  
5 environmental impacts and that they have the  
6 appropriate analyses to support the fact that they don't  
7 believe that their activities are going to exceed those  
8 prior environmental impacts.

9 All right. So we are here tonight to get  
10 comments back from the public. We are also going to be,  
11 as Chip indicated, we are going to be receiving  
12 additional comments for the 90 day period after we have  
13 gotten the PSDAR, which is through December 22.

14 We'll take those comments and we'll look at  
15 them, we'll consider them in our review as we're  
16 reviewing the PSDAR.

17 In particular, we would be looking to  
18 determine whether or not there is any health and safety  
19 impacts that would be encountered by their plan.

20 If we have questions, we will ask  
21 additional information from the licensee, we will ask  
22 them to provide that additional information.

23 We -- as Larry indicated, we don't approve  
24 the PSDAR, but we will document the completion of our  
25 review and determining, if we've determined that

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1 there's no additional information necessary, and we'll  
2 document the resolution of the comments that we would  
3 receive.

4 One thing that's important is the licensee  
5 cannot start major decommissioning activities until at  
6 least 90 days after the PSDAR has been received by the  
7 NRC. That gives us the time period to review the  
8 document, to receive public comments, and to be able to  
9 review those and act on them.

10 All right. One of the other areas that we  
11 are reviewing, it's called the Irradiated Fuel  
12 Management Plan.

13 Within two years after a licensee shuts  
14 down, they are required to submit to us an Irradiated  
15 Fuel Management Plan that addresses the costs of  
16 managing all spent fuel that's at the facility.

17 And this is not -- it's not -- it's a  
18 separate document from the PSDAR, but there is a  
19 relationship between the two, because the  
20 Decommissioning Cost Estimate has to include the cost  
21 of managing the spent fuel.

22 So although we're not asking specifically  
23 for comments on the Irradiated Fuel Management Plan, I  
24 wanted to make sure everybody understood that we are  
25 reviewing that as well. And that document does need --

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1 was -- is required to be submitted for our review and  
2 preliminary approval.

3 Our review on that will also look to ensure  
4 that they've got a good plan for managing the irradiated  
5 fuel and that they are able to account for the cost for  
6 that as well, that's part of it.

7 And the other part of it is to ensure that  
8 their plan complies with all the requirements for  
9 possessing and storing irradiated fuel.

10 I think that's it. I'm sorry, I almost  
11 missed one.

12 So there are other licensing actions that  
13 we're also doing for the plant right now. So as the  
14 plant, once it shuts down, the plant transitions from  
15 an operating status to a decommissioning status. So to  
16 do that, the licensee comes in and requests a number of  
17 licensing actions.

18 Those licensing actions can either be  
19 submitted as a license amendment, they could be an  
20 exemption from a specific part of the regulations, or  
21 they could be a request to rescind an order or have  
22 relaxation of an order.

23 So the types of requests that we've  
24 received are for changing the staffing levels of the  
25 plant, to change the type of personnel that they'll have

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1 there to focus more on the spent fuel and  
2 decommissioning activities; changes to the license  
3 condition to address, to more focus on the managing of  
4 the fuel activities; there's also been requests to  
5 change the emergency preparedness activities given the  
6 shutdown condition and the defueled condition of the  
7 plant; and we've received requests for previous orders  
8 for the licensee to, also to rescind some of those  
9 previous orders.

10 So those are the types of licensing actions  
11 that we've had, where we've approved a couple of them  
12 -- we're still in the process of reviewing a number of  
13 other ones, and we understand that the licensee is  
14 probably going to submit some more to us, and so I can't  
15 speak to those yet. So that's it.

16 MR. KELLAR: Good evening, I'm Ray Kellar,  
17 I'm from Region IV.

18 You've heard a little bit from Bruce and  
19 Doug, and you will be hearing from Al, about the  
20 regulations, the reviews for the licensing conditions,  
21 and also about safety reviews and evaluations here in  
22 a little bit, but I am going to talk about how it all  
23 comes together a little bit, and I am going to talk about  
24 the inspection program, particularly in Region IV, from  
25 a decommissioning and a spent fuel safety standpoint.

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1           So how do we get safely from a operating  
2 plant to a plant that's been fully decommissioned? As  
3 Larry mentioned, there's been the opportunity for the  
4 Nuclear Regulatory Commission to have oversight of, I  
5 believe he said, 11 nuclear plants over the last recent  
6 period.

7           I know in Region IV, we've had several  
8 opportunities for decommissioning plants, specifically  
9 Trojan, which is near Portland, Oregon; SONGS Unit 1;  
10 and we're currently inspecting Humboldt Bay, which is  
11 in Northern California.

12           So how do we assure compliance? The NRC  
13 looks at the regulations, which is what we've been  
14 talking about; we look at the licensing-based  
15 conditions, including the technical specifications,  
16 decommissioning technical specifications; also  
17 guidance documents, which would be things such as  
18 NUREGs. These are all part of the licensing basis which  
19 are a part of the inspection when the inspectors go out  
20 to do their work.

21           Also, the safety reviews will be performed.  
22 Al will be talking some about the reviews, I am sure,  
23 relative to spent fuel storage. And that leads down to  
24 the NRC inspection activities, where the inspectors go  
25 out using the regulations, using the licensing-based

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1 documents, and they perform the inspections to ensure  
2 that the licensee is doing things in accordance with  
3 what is safe and what they have been approved to do.

4 If we find that something is not right, then  
5 we will look at the NRC enforcement program and evaluate  
6 whether or not that would come into play.

7 So the regional-based inspection  
8 activities will consist of inspection of the spent fuel  
9 pool. We will generally look at the higher-risk  
10 activities, such as moving the fuel, such as loading the  
11 fuel into casks. Those will get extra attention.

12 During and after remediation activities,  
13 we will make sure that we're doing independent  
14 measurements to confirm the licensee's survey  
15 methodologies.

16 Additionally, inspection activities will  
17 include the spent fuel, that's also in my branch, as well  
18 as a movement to the (inaudible), which includes a  
19 series of operational tasks and oversight of those  
20 activities.

21 Physical security, while it's not my  
22 branch, will still be inspected according to the  
23 requirements. And there are a number of inspection  
24 plans that include oversight of activities including  
25 licensee management and organization; review of the

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1 license safety evaluations, so making sure that their  
2 50.59s have been done correctly; reviews of licensee  
3 self-assessments and audits; radiation exposures  
4 during decommissioning, transportation, and rad waste,  
5 making sure that all the requirements are met for that;  
6 as well as effluent environmental monitoring.

7 So the objectives of the inspection program  
8 include the independent verification of the safety of  
9 the licensee's activities, the adequacy of the  
10 licensee's controls and programs, ensuring that safety  
11 programs are promptly identified and the licensee puts  
12 effective corrective actions into place, identifying  
13 violations that occur and utilizing the agency-enforced  
14 policy to make sure that those are disciplined  
15 correctly, as well as review and examine any trends that  
16 develop dealing with the licensee's safety performance.

17 Using the inspection procedures, we  
18 planned some of the activities up to a year in advance,  
19 and the inspectors know what portion of those will occur  
20 at what time.

21 Those activities are coordinated with  
22 headquarters. We sometimes bring technical expertise  
23 along with us to the site to assist in those program  
24 inspections. They may be announced or unannounced,  
25 quite often they're announced, but we have the

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1 opportunity to do an unannounced inspection if there's  
2 a need to.

3 We utilize inspection plans that document  
4 those procedures and those activities that we want to  
5 perform inspection activities of. We have exit  
6 meetings at the end of each of the inspections where we  
7 do an exit with the licensee and present their findings  
8 at that time, and if there's any potential enforcement  
9 actions, those are also discussed.

10 The inspection reports are normally issued  
11 30 days after the exit, that would be for a -- not a team,  
12 but a team inspection consisting of three or more  
13 inspectors would normally be 45 days after the exit with  
14 the licensee before that report is issued.

15 The NRC enforcement policy, there is a link  
16 at the bottom of this slide that shows how you can get  
17 to the enforcement policy if you're interested in how  
18 the agency performs the enforcement activities.

19 So what happens after the inspection?  
20 After the inspection, the inspectors come back to the  
21 region. They brief the branch chief, and there is a  
22 debrief that includes NRC management where the findings  
23 are presented. And if enforcement actions need to be  
24 taken, those are also discussed, along with the  
25 enforcement officer, and those activities are followed

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1 through with.

2 The inspection reports are available in  
3 ADAMS, those that are available publically. Security  
4 reports, the details are not available, but the cover  
5 letter is usually available with ADAMS.

6 You can go to the link that I show on the  
7 bottom half of this web -- this slide, and it shows how  
8 you can get to the ADAMS website, the document numbers  
9 -- docket numbers, are shown here as well, you can do  
10 a search using Advanced Search under those docket  
11 numbers using the website for ADAMS, and you can  
12 actually look up the inspection reports that way. And  
13 we also track and follow-up on inspection reports.

14 And that concludes my portion.

15 MR. CSONTOS: Hi, my name is Al Csontos. I  
16 am the Chief of the Renewals and Materials Branch in the  
17 Division of Spent Fuel Management in the Office of  
18 Nuclear Material Safety and Safeguards.

19 What does that all mean? That's a  
20 long-winded title. What we do is we develop and  
21 implement the licensing certification and inspection of  
22 spent fuel storage facilities, the dry cask storage  
23 systems, the radioactive material transportation  
24 packages, for the -- with the applicable regulations,  
25 10 CFR Part 71 for transportation, 10 CFR Part 72 for

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1 storage.

2 We also coordinate with federal agencies  
3 like the Department of Transportation, for example, for  
4 some of the transportation packages' certifications.  
5 Four international bodies, regulatory bodies, as well,  
6 IAEA, International Atomic Energy Agency, and our other  
7 colleagues around the world.

8 Some of the things that we've learned in  
9 what we've done has been from our interactions with  
10 these international participants, and also Native  
11 American tribes.

12 So what are these things? These are spent  
13 fuel storage casks. Over here at SONGS, you have the  
14 lower-left version. It's a NUHOMS System 1029, okay,  
15 certificate of compliance.

16 What they are is that once the fuel has been  
17 cooled in a spent fuel pool that are part of the reactor,  
18 it is loaded into these special canisters, for these  
19 canisters, they're stainless steel canisters, they're  
20 about 5/8ths of an inch thick, and they're designed for  
21 the specific fuel that's at these sites, these reactors  
22 -- either a pressurized water reactor or a boiling water  
23 reactor.

24 The canisters are then vacuumed down, take  
25 all the water out, and they are backfilled with inert

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1 gas. That inert gas is usually helium, and it has a  
2 purpose of helping with the cooling of these canisters,  
3 and also to -- just to stop any kind of corrosion from  
4 occurring on the inside of the canisters.

5 So they're welded, they're vacuum-checked,  
6 they're leak-checked -- when they're vacuumed down,  
7 they're backfilled, and then they're checked for leaks,  
8 helium leaks. And then once they've passed all those  
9 rigorous tests and all the fabrication requirements and  
10 the quality assurance procedures, they are put into  
11 these casks.

12 And what these are, these concrete -- does  
13 this have a -- so right here, that's about five feet of  
14 concrete. And so that helps with the shielding, the  
15 bioshielding from radiation, as well as structural, for  
16 seismic concerns.

17 And so these are the ones that you have at  
18 SONGS presently. There is a third one, I know that you  
19 all were working with two vendors recently, and there's  
20 a third one that's -- this is a vertical system that  
21 multiple companies develop, and there's a third one  
22 that's an underground system that I didn't show here.

23 So we have a total of 71 total sites in the  
24 United States by this map. These are independent spent  
25 fuel storage installations.

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1           There are, in 34 states, there are over  
2           2,000 casks that have been fabricated and are in place,  
3           with over 82,000 fuel assemblies. They are all across  
4           the country. There's 56 in -- this is, it gets into some  
5           regulatory jargon here, but 56 General Licensed Sites  
6           and 15 Specific Licensed Sites.

7           And there are seven at decommissioned sites  
8           that will be similar to what is here at SONGS.

9           What is the difference between a general  
10          license versus a site-specific license? A general  
11          license is only granted to Part 50 licensees, reactor  
12          licensees. They require us at NRC, in our division, to  
13          review those cask designs.

14          We review them for certain things that I'll  
15          go into in a little bit, and then we do the site  
16          evaluations and such, and then the site-specific cases  
17          are specific to Part 50 reactor licensees or other  
18          applicants that would like to have -- would like to store  
19          this waste at their site.

20          So, like, for example at Private Fuel  
21          Storage in Utah, that is an SSC, a site-specific, SSC,  
22          has no reactor there, but they were willing to take fuel  
23          if they were allowed.

24          So Part 72 regulations. What are our  
25          review areas? What do we do in our daily jobs? We

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1 review the general design criteria, making sure that  
2 they meet the requirements for offsite radiation dose,  
3 subcriticality, and confinement.

4           What does all that mean? Confinement, we  
5 retain and make sure that the radionuclides in the fuel  
6 stay within the canister. For subcriticality, we don't  
7 allow any type of -- we make sure that the fuel is sitting  
8 in there so that they never get a place where they can  
9 go into a critical state. And offsite radiation dose,  
10 we have sensors around the associated pad to make sure  
11 that there is no dose that is beyond the requirements,  
12 the regulations.

13           We also have quality assurance programs,  
14 that's what Ray was talking about earlier. We  
15 fabricate these canisters -- or not we, but the licensee  
16 buys them from a fabricator -- and we make sure that  
17 they're done in a quality fashion.

18           Physical protection security, sighting,  
19 reporting requirements, and then training and  
20 certification of the personnel at the sites. We review  
21 all of those.

22           This takes a lot of people. And what we  
23 have is we have a cadre of subject-matter experts. We  
24 have structural engineers, we have thermal engineers,  
25 we have criticality specialists, we have health physics

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1 folks who do the shielding and radiation protection.

2 We have materials folks like myself who  
3 look at all the materials issues, the corrosion issues,  
4 all the material properties issues, making sure that the  
5 confinement is maintained, and also making sure that the  
6 quality assurance folks are out there. Those are the  
7 inspectors, in a lot of ways.

8 So, what do we also look at? We look at  
9 three different types of scenarios -- normal,  
10 off-normal, and accident conditions. Normal and  
11 off-normal, normal occurs regularly, repeatedly.  
12 Off-normal is occasionally, once a year, maybe. And  
13 then accident conditions are things that we make sure  
14 that the licensees, make sure that these are fabricated  
15 to withstand these types of events -- tornado winds,  
16 missiles, earthquakes, seismic activity, floods,  
17 tsunamis, and fires and explosions.

18 Again, the technical reviews are quite  
19 long, and a lot of our reviews for new applications can  
20 be two, three years, okay?

21 We have structural engineers who look at  
22 the confinement that are maintained under all these  
23 accident -- the accident, normal, and off-normal  
24 conditions. We have criticality folks who look at  
25 making sure the fuel is sub-critical in all these three

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1 cases. Shielding that meets the radiation dose  
2 requirements at the site boundaries -- and then the  
3 thermal, making sure the cladding temperature is  
4 maintained so we have a defense in depth, so we can rely  
5 on the cladding.

6 And then the materials folks, who look at  
7 the property or properties, and also aging effects,  
8 during the renewed operating period, and I'll go into  
9 that a little bit later.

10 So for transportation of these systems, the  
11 same technical reviews as for storage. There is a  
12 little bit more in terms of, you need to show us, to the  
13 licensees that are out there, you need to do a bunch of  
14 tests.

15 Those tests are drops, 30 foot drops,  
16 they're puncture tests, they're deep water immersion  
17 tests, making sure that nothing will ever come out of  
18 these canisters. Fire -- there is a 30 minute  
19 requirement for jet fuel, making sure it doesn't fail  
20 in that way -- and all these other normal types of  
21 transportation, vibration loads, small drops, heat and  
22 cold.

23 Cold is a big deal. Some licensees have  
24 been rejected because they can't meet the requirements  
25 for transportation at -40 degrees Celsius.

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1           So now, storage renewal. So what are we  
2 doing now, the things that are changing on the landscape  
3 here.

4           There are two periods. There is the  
5 initial licensing period, which is the first 20 years.  
6 And then after that, it's between 20 and 60 years is the  
7 renewed operating period, okay?

8           The renewal, renewed operating period, has  
9 been going through some updates of late, and so what  
10 we've done is we've established a group at the agency,  
11 a strategy team, and what we've done is we've been trying  
12 to look at what we can do to update the guidance, because  
13 what we're looking to do is we're looking to change our  
14 approach to spent fuel management in the renewed period  
15 of operation to an operations-focused aging management,  
16 one that is learning from our operational experience.

17           It's proactive to get ahead of issues that,  
18 possibly, for degradation aging effects of canisters.  
19 You all know that your cars don't last 100 years, or 50  
20 years. And they age. And the same thing happens to  
21 canisters, or anything that's manmade, and so we're  
22 trying to get ahead of these, and we're trying to be  
23 proactive and have a responsive aging management, so if  
24 we do find anything, we go over and fix it, or require  
25 the licensee to fix it.

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1           So what that requires is aging management  
2 programs that we're developing in-house, and we're  
3 developing these guidance documents out there to help  
4 the licensees with how to manage aging as time goes on.

5           So two issues that have come up that have  
6 been recently dominating a lot of our discussions.

7           One is cladding integrity and high burnup  
8 fuel, in particular. And the second is  
9 chloride-induced stress corrosion cracking, which I'm  
10 sure we'll hear a lot about today.

11           We have spent at the agency over \$9 million  
12 over the past eight, nine years. We have spent an  
13 inordinate amount of staff resources on these issues.  
14 We feel we're getting ahead of these issues now, okay?

15           We're developing aging management programs  
16 for both, and we're -- we'll discuss in a little bit,  
17 and you can ask a lot of questions, but in 1927, NUREG  
18 1927, that will be coming out this springtime sometime,  
19 and we will have these aging management programs, these  
20 draft ones now, but they will be placed in there, to show  
21 how we are going to manage these aging effects.

22           But ultimately, we believe high burnup fuel  
23 is safe for storage and for transportation. We have  
24 licensed both high burnup fuel for storage and for  
25 transportation. Recently, we had the MP-197 that we've

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1 approved for transportation casks for use of high burnup  
2 fuel, okay.

3 We have other research that we're doing  
4 right now, at Oak Ridge National Labs, and we also are  
5 also working with the Department of Energy for their  
6 Cask Demonstration Surveillance Project.

7 We have an information notice on chloride  
8 SCC, chloride stress corrosion cracking, I hate to use  
9 acronyms.

10 And we're also developing this aging  
11 management program that's part of the NUREG 1927 that  
12 we can talk about at length if you wish.

13 So in summary, our regulations in 10 CFR 71  
14 and 72 ensure safety for both storing and transporting  
15 spent nuclear fuel. We have a large group of people who  
16 have a multi-disciplinary technical review for all of  
17 the different issues that I identified, and we are  
18 maintaining confinement under routine and accident  
19 scenarios for these canisters.

20 We're going forward with an  
21 operations-based aging management program, and it's  
22 going to be a learning, proactive, and responsive  
23 program for renewals and for aging management.

24 And you can read the rest. We're creating  
25 a stable, predictable, and efficient renewal regulatory

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1 framework, with clear, open, and transparent, reliable,  
2 regulatory expectations to the licensees to manage  
3 aging.

4 I think that's it.

5 MR. PALMISANO: Good evening. I'm Tom  
6 Palmisano, Vice-President and Chief Nuclear Officer for  
7 the San Onofre Nuclear Plant.

8 I've seen a number of you before in  
9 community engagement panel meetings, and I am going to  
10 cover the specific Post-Shutdown Decommissioning  
11 Activities Report that we submitted, and summarize  
12 what's in the report, talk about the different periods  
13 for the decommissioning plan.

14 I'll summarize the Irradiated Fuel  
15 Management Plan, and I'll also summarize the  
16 Decommissioning Cost Estimate.

17 So before I get into the specific remarks,  
18 Southern California Edison and our other co-owners  
19 issued some decommissioning principles early this year  
20 to provide clarity and guidance in terms of the  
21 principles we will follow in developing the plan and  
22 executing the plan to decommission San Onofre.

23 Particularly, our principles are safety,  
24 stewardship, and engagement -- safety first, safety in  
25 terms of all the activities, safe storage of spent fuel;

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1 stewardship in terms of being good stewards of the  
2 environment, good stewards of the decommissioning trust  
3 fund, recognizing this fund has been contributed by our  
4 rate payers; and engagement and transparency.

5 The Community Engagement Panel, which a  
6 number of you have been at the meetings, is part of our  
7 effort, our outreach effort, to engage the community,  
8 to be transparent in what we intend to do, and to listen  
9 actively to feedback.

10 I would encourage you to visit  
11 [songscommunity.com](http://songscommunity.com). All the documents I am going to  
12 discuss tonight have been posted throughout the course  
13 of the last six months on [songscommunity.com](http://songscommunity.com), so they're  
14 not only available on the NRC website, but they're  
15 readily available on our website, along with more  
16 detail.

17 So just to recap, you've seen some of these  
18 time frames before in the NRC presentations. June of  
19 2013, we decided to permanently shut down both units 2  
20 and 3. We certified permanent cessation of operations,  
21 one of the regulatory requirements.

22 We also at that point certified we had  
23 permanently defueled. The dates, I didn't put those  
24 dates on this slide, they were on the NRC's slide.

25 Through the course of 2013, we transitioned

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1 from operating plant staffing to decommissioning  
2 staffing, and in January 2014, we developed a 20 year  
3 decommissioning plan that we submitted as part of the  
4 Post-Shutdown Decommissioning Activities Report.

5 As you've heard, by NRC regulations, we  
6 have up to 60 years to complete the radiological  
7 decommissioning of the plant.

8 As we look at the situation at San Onofre,  
9 as we listen to feedback from our stakeholders, as we  
10 look at where our trust fund is, we think the right thing  
11 to do is to go into the prompt decontamination and  
12 dismantlement process and decommission the plant in  
13 basically a 20 year time period, and I'll show you a  
14 little more detail in a minute.

15 And then in September 2014, we submitted  
16 the required decommissioning documents, the  
17 Post-Shutdown Decommissioning Activities Report, the  
18 Irradiated Fuel Management Plan, and the  
19 Decommissioning Cost Estimate.

20 So let me give you the highlights here.  
21 Those of you who have been at the Community Engagement  
22 Panel meeting have seen this slide before. This is a  
23 simple look at the 20 year timeline for decommissioning  
24 the plant.

25 The top line is not to scale. To the left

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1 of the bold vertical line is between now and January  
2 2016, so we are not in the major decommissioning phase  
3 at this point. We need to submit the NRC documents we  
4 have done. So everything we're doing to the left of  
5 that line is planning and preparatory activities, and  
6 the licensing submittals to change our design and  
7 licensing basis.

8 There's a variety of physical plant changes  
9 we make such as defueling the plant, draining systems,  
10 eliminating non-radioactive hazards.

11 There's the licensing submittals, this was  
12 referred to as some of the other licensing actions we've  
13 requested, for example defuel technical specifications  
14 that changes the conditions of the license to match the  
15 fact that the plants are defueled; the specific  
16 decommissioning submittals that I've talked about; and  
17 then the dry fuel storage system.

18 I am going to talk about dry fuel storage  
19 more in a minute. We already have a system on site with  
20 50 canisters loaded with fuel that needs to be expanded  
21 to allow for the decommissioning process.

22 So we're in the process, and we've  
23 discussed this extensively at the Community Engagement  
24 Panel, of selecting the best plan to expand the system  
25 and load the remaining canisters.

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1           Then to the right of the heavy bold line is  
2 actually the balance, first of all, of the  
3 decontamination and dismantle period. It's about a ten  
4 year period where we do the major decontamination and  
5 dismantlement, and then farther to the right, you see  
6 words like completion of remaining site restoration  
7 work -- that's the non-radiological site restoration,  
8 as well as the License Termination Plan.

9           On the NRC slides you saw, that's the formal  
10 process where we submit the License Termination Plan,  
11 submit the Final Survey Plan, and execute that plan  
12 subject to NRC review and approval.

13           And then at the end of that 20 year period,  
14 the plant is decommissioned, it's dismantled. What  
15 will remain is an independent spent fuel storage  
16 installation, and that will remain until the Department  
17 of Energy starts taking fuel off the site, and we'll see  
18 more about that in a minute.

19           Post-Shutdown Decommissioning Activities  
20 Report, we've heard a lot about that, so I'll just  
21 summarize this very quickly.

22           We have submitted a report that meets the  
23 regulatory requirements. It describes the planned  
24 decommissioning activities. It provides the schedule  
25 for the activities. It summarizes the expected cost.

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1 And it has the discussion of the environmental impacts  
2 and concludes that our planned decommissioning  
3 activities are bounded by the site-specific  
4 environmental assessments that exist and the NRC's  
5 generic Environmental Impact Statement for  
6 decommissioning.

7 So our Post-Shutdown Decommissioning  
8 Activities Report meets the regulatory requirements.  
9 It is under review by the NRC.

10 So I want to go in a little more depth in  
11 terms of what the three elements of the PSDAR are. The  
12 license termination, and that is equivalent to  
13 radiological decommissioning; the used fuel management  
14 program; and site restoration, think about that as the  
15 non-radiological decommissioning to finish restoring  
16 the site.

17 This next graphic is just a bit hard to see.  
18 This actually runs out to 2052. I am going to show you  
19 more detail that's more readable here in a minute.

20 The green is going to be the license  
21 termination periods, or the radiological  
22 decommissioning periods; the orange in the middle, or  
23 the yellow in the middle, is actually the used fuel  
24 management periods that will go through the first 20  
25 years and then extend out as far as 2052; and then the

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1 red is the site restoration period, think about this as  
2 the non-radiological decommissioning, once the NRC  
3 aspects of decommissioning are complete.

4 So we've created some graphics based on  
5 some feedback from the public and the Community  
6 Engagement Panel to try to make this a little more  
7 visible.

8 Again, all these slides will be publically  
9 available on our websites, and I'm sure the NRC will post  
10 these as well.

11 So, and I've also tried to indicate the time  
12 periods and the types of activities.

13 So we're talking about license termination  
14 or radiological decommissioning on this slide. If you  
15 look from the left, June 2013-December 2013 defueling  
16 both reactors, certifying the reactors were defueled.

17 We're actually in Period 2 now, where we're  
18 doing the initial planning. And the initial planning  
19 is essentially complete, it's relatively high-level  
20 planning, and we're making the NRC submittals.

21 So this is the initial planning phase where  
22 we identify what the 20 year decommissioning plan is,  
23 the expected cost, and the summary of the activities.

24 Once we enter the major decommissioning  
25 phase, which we are not in, starting as early as July

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1 of 2015, we'll start major decommissioning activities.

2 This will be system decontamination to  
3 reduce the radioactivity's level inside systems. This  
4 will be starting the planning, and then as we get into  
5 later in the period, removing the internals of the  
6 reactor vessel. This, other than the fuel, is the most  
7 radioactive part of the plant, done underwater. This  
8 is done early in the process.

9 This would be something 2017, late 2016,  
10 2017, would be a rough timeline for that to start.

11 And later in this period, and I'll talk  
12 about spent fuel more in a minute, we will be offloading  
13 the spent fuel pools, actually moving fuel likely in the  
14 2017 time frame to an expanded ISFSI (phonetic) system.

15 Period 4, then, once the fuel pools are  
16 offloaded, we'll get into the system-enlarged component  
17 removal. At this point, we've reduced the level of  
18 radioactivity in the plant, we've moved the fuel out of  
19 the spent fool pools into the ISFSI or dry fuel storage  
20 system, and then we'll start removing the major  
21 components inside those reactor containment buildings  
22 and the other safety-related buildings.

23 At the end of that period, then, October  
24 2022 - July 2024, we're in a period where we're  
25 decontaminating the buildings, once the internals have

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1       been removed, and ultimately in Period 6, 2024 to 2032,  
2       we're actually demolishing the buildings themselves.

3               So that's roughly what a 20 year plan from  
4       2013 to 2032 looks like, for the radiological  
5       decommissioning of San Onofre.

6               Let me move on to used fuel or spent fuel  
7       storage. So this is a companion timeline. Again,  
8       we're in the planning period. We're now in Period 2.  
9       We're evaluating how to expand the independent spent  
10      fuel storage installation, preparing for the transfer  
11      of used fuel from the spent fuel pools to the ISFSI.

12              This period for spent fuel management runs  
13      from 2014 to 2019. Our intent is to safely move spent  
14      fuel out of the spent fuel pools to the dry fuel storage  
15      pad in a safe and timely manner. We intend to finish  
16      that by mid-2019.

17              The following period you see, 2019 to 2031.  
18      This is an extended storage period where all the spent  
19      fuel is in dry fuel storage on the independent spent fuel  
20      storage pad.

21              Period 4, we're expecting the Department of  
22      Energy, at some point, to start taking fuel off our site  
23      and other sites around the country. Based on the  
24      current information we have from the Department of  
25      Energy, the old Unit 1 fuel, which is already partially

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1 decommissioning, and all the Unit I fuel is already in  
2 the spent fuel system, would be removed first, starting  
3 roughly in 2031 through a 2035 time period.

4 And then the Unit 2 and 3 fuel, with what  
5 we currently understand the Department of Energy timing  
6 would be, would be removed from 2035 to 2049.

7 This is part of a bigger nationwide plan  
8 that the Department of Energy has to remove fuel from  
9 all the reactor sites, operating sites and  
10 decommissioning sites.

11 This is where we understand we would be in  
12 their queue to remove fuel from San Onofre.

13 And then ultimately, 2049 to 2051, with all  
14 the fuel offsite, we would then decontaminate and  
15 demolish and remove the independent spent fuel storage  
16 installation and go through a second license  
17 termination period related to the spent fuel storage  
18 system.

19 Site restoration, so think about this as  
20 now the non-radiological decommissioning. Again,  
21 we're in the planning period. You see a transition to  
22 site restoration.

23 We're actually -- the mesa is property on  
24 the other side of I-5, not part of the NRC's Part 50  
25 license where we have warehouses and storage areas and

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1 a training building, we're actually removing some  
2 buildings there presently. That's not a  
3 decommissioning activity, it's part of turning the  
4 facility back to the Navy.

5 You then see Period 3, and this is probably  
6 more operative for the power plant itself -- 2019 to  
7 2024, you know, consistent with moving fuel out of the  
8 spent fuel pools, decontaminating systems, major  
9 component removal, we start the engineering for the  
10 sub-surface removal, engineering and permitting at that  
11 point.

12 And actual sub-surface structure removal  
13 is in the time frame 2028 to 2031. This will then follow  
14 the major component removal, the major building  
15 demolition, and then continue with sub-surface  
16 structure removal.

17 I think it's important to note at this  
18 point, San Onofre is on land owned by the Department of  
19 the Navy. So the power plant itself is under what's  
20 called an easement dating from the 1960s which granted  
21 the owners the right to build and operate a power plant  
22 on the facility.

23 So as we talk about completing  
24 decommissioning, we're committed to unrestricted, you  
25 know, release for unrestricted use, and you've heard

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1 some of what that implies earlier, but ultimately the  
2 end use will be determined by the Department of the Navy.

3 So we have some work to do with the  
4 Department of the Navy to finalize exactly what their  
5 end use is, exactly what condition they would like to  
6 leave the -- use to leave the site in.

7 For example, most facilities that have been  
8 decommissioned don't necessarily remove every  
9 below-grade structure once the radiological  
10 decommissioning is complete.

11 So that's something that is up to the  
12 Department of the Navy. When I talk about the cost  
13 estimate, I'll tell you we've conservatively assumed we  
14 remove it all until they specify differently.

15 So this is what the completion then of the  
16 site restoration -- you see at the far end the ISFSI  
17 demolition.

18 Again, after the fuel is removed from the  
19 site by the Department of Energy, the remaining step  
20 will be the radiological clean-up of the spent fuel  
21 storage installation, followed by the demolition, and  
22 then a second licence-termination period.

23 That's a brief summary of what's in the  
24 Post-Shutdown Decommissioning Activities Report, I  
25 really encourage you go to [songscommunity.com](http://songscommunity.com) and take

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1 a look at it.

2 We've shared it extensively with the  
3 Community Engagement Panel and other interested members  
4 of the public, but it's available to everybody.

5 Our Irradiated Fuel Management Plan, it was  
6 mentioned that this is not a PSDAR document itself,  
7 although it is summarized in the PSDAR and the Cost  
8 Estimate. But it's another important submittal.

9 Excuse me.

10 So the current dry fuel storage situation  
11 in San Onofre, we already have 50 canisters loaded with  
12 fuel. As was mentioned earlier, we have the horizontal  
13 NUHOMS systems by AREVA TRANSNUCLEAR -- 50 canisters of  
14 fuel, I have one canister of what's called greater than  
15 Class C waste from the Unit 1 decommissioning. This is  
16 the internals of the reactor vessel.

17 On the upper left, you see a picture of the  
18 site, and to the upper left of that, you see a  
19 rectangular box. That's where the facility is located.

20 And then on the lower right you see a  
21 close-up of the above-ground horizontal system that is  
22 currently in use.

23 Our current state on spent fuel storage, on  
24 the left side, we have 2,668 fuel assemblies in the two  
25 spent fuel pools, roughly 50/50 between Unit 2 and Unit

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1 3, right.

2 Below that, you see existing dry fuel  
3 storage pad, it has Unit 1, 2, and 3 fuel in 50 canisters,  
4 1,187 assemblies.

5 What has to happen, the 2,668 assemblies in  
6 the pools called wet storage will be transferred into  
7 approximately 100 canisters. The exact number of  
8 canisters will be determined once we finalize our  
9 decision on which canister design to go with.

10 Those of you who have been at the Community  
11 Engagement Panel meetings know that we're looking at a  
12 couple alternatives.

13 That's an approximate number of canisters,  
14 the number of fuel assemblies is accurate. It also  
15 includes 1,115 high burnup assemblies, and you've just  
16 heard a bit about high burnup fuel for storage and  
17 transportation.

18 So ultimately, we will have roughly 125 to  
19 150 canisters, again, depending on the final design, on  
20 the independent spent fuel storage pad by mid-2019,  
21 awaiting removal by DOE offsite.

22 The Irradiated Fuel Management Plan itself  
23 is required by 10 CFR 50.54(bb). Again, there is a  
24 specific NRC format, specific NRC content guidelines.

25 It provides a written notification

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1 discussing the plan that's required within two years  
2 following permanent cessation of operation, we filed  
3 that September 23.

4 It describes the program by which we will  
5 manage fuel and funding until the Department of Energy  
6 picks it up.

7 Our program is wet storage until 2019,  
8 followed by dry storage.

9 I've already given you these numbers --  
10 2,668 assemblies in the pools, an assumed start date of  
11 Department of Energy taking fuel from the industry of  
12 2024, our target removal date from all our fuel off site  
13 is 2049.

14 We demonstrate that we have adequate funds  
15 already collected and invested in our trust fund for  
16 spent fuel management for this period.

17 And it also describes how we're going to  
18 maintain the spent fuel pools while they are in service.

19 Moving on to the third NRC document we  
20 submitted, it's the Site-Specific Decommissioning Cost  
21 Estimate.

22 And you've heard this alluded to, so I just  
23 want to summarize this.

24 Again, it's a required filing. This needs  
25 to demonstrate that we have adequate funding,

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1 principally for radiological decommissioning.

2 Think of this as a companion, then, with the  
3 Irradiated Fuel Management Plan that discusses adequate  
4 funding for spent fuel management.

5 It also discusses the funding we have  
6 available for the non-radiological decommissioning.  
7 The NRC's focus is radiological decommissioning, and  
8 separately, spent fuel management. Our focus is that  
9 as well as site restoration.

10 So the plan discusses the decommissioning  
11 plan, describes funding, breaks down costs by the  
12 periods that I just showed you briefly, summarizes the  
13 things like the cost of services, undistributed cost,  
14 and outlines the cost for license termination, spent  
15 fuel management, and site restoration.

16 There are some key assumptions. We have  
17 developed a very conservative decommissioning cost  
18 estimate.

19 And I just want to highlight a couple  
20 things, for example, substructure excavation. This  
21 gets back to what the Department of the Navy will  
22 require.

23 For the cost estimate, we have assumed all  
24 the structure has to come out. So we've estimated the  
25 cost to assure we have adequate funds if the Navy would

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1 like us to remove all the structures in accordance with  
2 the amendment, the current easement, we have adequate  
3 money to do that.

4 We've assumed the ocean conduits, these are  
5 the large pipes that bring intake water and discharge  
6 water from the plant into the ocean, that they are  
7 removed, and the cost of that is in the cost estimate.

8 For the Unit 1 decommissioning, the State  
9 Lands Commission approved a plan to abandon the  
10 horizontal conduits in place as more -- a more  
11 preferable alternative, as opposed to removing them,  
12 form an environmental standpoint.

13 I expect we will have the same treatment for  
14 Unit 2 and 3, from a more preferable alternative, but  
15 I have not assumed that for cost purposes. I have  
16 assumed the cost of removing them completely.

17 And you see some other things in terms of  
18 low level waste burial escalation, cost -- consumer  
19 price index for the D&D period followed by a higher  
20 escalation rate until we demolish the ISFSI.

21 So the real picture here, in 2014 dollars,  
22 the total cost estimate down at the lower right is about  
23 \$4.4 billion, to decommission San Onofre completely,  
24 manage spent fuel through 2052 and decommission the  
25 independent spent fuel storage installation, and

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1 remediate the site in accordance with the current  
2 direction of the Department of the Navy.

3 You see the breakdown. The green is  
4 actually the radiological decommissioning portion,  
5 \$2.1 billion.

6 Down at the lower left, the yellow would be  
7 \$1.276 billion. That is spent fuel management through  
8 2052.

9 And then \$1 billion for site restoration,  
10 the non-radiological cleanup of the site and removal of  
11 buildings.

12 As I mentioned in the stewardship  
13 principle, the trust fund is really rate payer money  
14 that we have collected and we have invested, and through  
15 prudent investment, the fund has grown significantly.

16 We are adequately and fully funded today.  
17 Oversight of the trust fund -- it's overseen by a five  
18 member committee, two of whom are internal to company,  
19 three external, nominated by management, confirmed by  
20 the Edison board, and the three external members  
21 approved by the PUC.

22 So the fund has good oversight with  
23 independence from the PUC, from a regulatory oversight.  
24 The NRC, the second bullet, regulates all radiological  
25 decommissioning, and the NRC regulates used fuel

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1 management.

2 I cannot -- I am limited as to what I can  
3 spend on the decommissioning fund from an NRC  
4 perspective until the documents we have just filed are  
5 reviewed, the 90 day period is elapsed to allow them time  
6 to review and comment on it.

7 However, probably more fundamentally, the  
8 Public Utility Commission regulates the fund closely.  
9 So before monies can be withdrawn out of the fund and  
10 used for decommissioning, not only do we satisfy the NRC  
11 requirements, we have a Public Utilities Commission  
12 process to satisfy as well.

13 And both groups, the NRC and the PUC, will  
14 be involved in an ongoing basis in the -- ensuring the  
15 fund remains adequate, and then the PUC, making sure the  
16 fund is spent prudently.

17 In terms of open communication, public  
18 engagement, and education, there is a lot of things  
19 we're doing -- I have mentioned the Community Engagement  
20 Panel, and everything I have just covered, we have  
21 covered in multiple Community Engagement Panel  
22 meetings, and it has been posted on the website.

23 We really want this information available  
24 to the public, we really welcome questions.

25 We have held decommissioning education

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1       fairs. We have had one in the local area. We've got  
2       another one coming up in the evening, where members of  
3       the public can come in and we talk about  
4       decommissioning.

5                 We have public walking tours. We have now  
6       held two tours, open to the public to sign up, typically  
7       ten people.

8                 We welcome anybody to come walk through the  
9       plant. We stay outside of the protected area, but you  
10      get a good view of the plant, and our staff explains our  
11      decommissioning plan and the decommissioning process.

12                Private tours for key stakeholders, be they  
13      elected officials or other interested parties, as well  
14      as a robust website with all this information and more  
15      -- and again, we want to make sure we're doing everything  
16      we can to communicate openly and listen actively.

17                And with that, I'll close and turn it back  
18      to the NRC.

19                FACILITATOR CAMERON: Thank you, Tom.

20                And there's a lot of information, and we're  
21      going to go out to you now.

22                And there were some sign-in sheets when you  
23      came in. I am going to try to follow those, but you may  
24      have a question, you didn't sign up that you wanted to  
25      speak, but there is going to be a meeting summary

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1 prepared by the NRC that will be on the website, and  
2 there will also be the webcast.

3 So let's hear from a few people, and then  
4 you've been sitting for a long time, so we'll take a  
5 short break then, but you've heard the Community  
6 Engagement Panel mentioned, and we have several members  
7 here from the Community Engagement Panel.

8 But I am going to go to Dan Stetson first,  
9 for some comments from the Panel.

10 MR. STETSON: Thank you very much. My  
11 name is Dan Stetson, and I am the secretary for the  
12 Community Engagement Panel.

13 I want to once again compliment SONGS,  
14 Southern California Edison, for putting it together.  
15 We've had quite a number of public meetings where you've  
16 been able to come and ask questions, and we welcome  
17 those.

18 We've even had continuing workshops at the  
19 Ocean Institute where I work on an ongoing basis.

20 A couple of us had the opportunity to come  
21 and meet this morning -- David Victor, who is chairman  
22 of the CEP, Tim Brown, myself, and we were able to meet  
23 with some members of the NRC, and I just wanted to share  
24 with you just a couple quick takeaways from that  
25 meeting.

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1                   Number one, a big takeaway for me was that  
2 the NRC is not going away. They are here with us every  
3 step of the way. There are eyes, there are ears, there  
4 are inspectors, and they're the ones that are really  
5 going to walk us through this entire process, through  
6 the decommissioning and then also through the continued  
7 storage of the fuel there on site.

8                   So that process is going to be very  
9 important, and we are really looking to them to manage  
10 this.

11                  Also, as I looked out in that room this  
12 morning, I couldn't help but be impressed with the depth  
13 of experience of the folks that are there.

14                  Quite honestly, they are different than you  
15 and I. We think we all speak English, but so much of  
16 it comes across as Greek. But I want to thank them for  
17 trying to bring it to a level, even this evening,  
18 something that we can all really understand.

19                  But no matter what, I think we're all really  
20 interested in one thing, and that's the ongoing safety  
21 for this storage.

22                  We know that the fuel is going to be there  
23 for an extended period of time. We don't really know  
24 how long. We want it out of there as soon as possible.

25                  But as Al was saying, none of our cars are

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1 going to last for 100 years, and something is going to  
2 need to be done if something comes up, so all of us are  
3 interested, if the worst case happens, do we have the  
4 plan and the resources to take care of us?

5 All of us want to trust, but we need the NRC  
6 to validate our trust. Thank you.

7 FACILITATOR CAMERON: Thank you, Dan.  
8 Another organization that started very soon after the  
9 decision was made to shut the plants down was the  
10 Coalition to Decommission San Onofre, and we're going  
11 to go to Gene Stone.

12 MR. STONE: Hi. I am Gene Stone from  
13 Residents Organized for a Safe Environment. I am also  
14 a member of the California Edison CEP, and I am happy  
15 to do that and happy to be here tonight.

16 I would like to thank the NRC for hearing  
17 our comments today, and I am happy to see so many friends  
18 that are here to support this whole process and the  
19 environment.

20 I must say that I am not really happy  
21 because I no longer believe that California Edison is  
22 considering doing the state-of-the-art decommissioning  
23 that they promised at the first Community Engagement  
24 Panel, nor do I believe that the NRC will demand or  
25 require that of them, but, unfortunately, a more

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1 standard approach to decommissioning.

2 The NRC should have a more proactive  
3 approach to California's PSDAR. The fact that the NRC  
4 does not approve or disapprove this minimalist approach  
5 to the safe storage of nuclear waste is very  
6 disappointing and alarming to me.

7 Going forward with a plan that uses  
8 canisters that were designed for short-term storage  
9 does not make sense. It seems that we would be better  
10 served if the NRC would take a stronger approach in  
11 leading the industry into developing a much more robust  
12 canister system with defense in depth, not just talking  
13 about defense in depth, but real action items that the  
14 public can see that will help us in any situation that  
15 might arise.

16 Thank you very much.

17 (Applause.)

18 FACILITATOR CAMERON: Okay, thank you.  
19 Okay. And we're going to try to get to you, as many of  
20 you, as possible.

21 And unfortunately, it is just going to be  
22 one bite at the apple, so to speak, okay.

23 And if you have a question, you may want --  
24 we can give you a follow-up on that, and the NRC has also  
25 told me that besides the comments that are going to come

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1 in, the written comments, that if you send a question  
2 into them, that they will try to answer that question.

3 So if you don't get a chance tonight, we'll  
4 do that. And let's go to Donna Gilmore. Donna?

5 MS. GILMORE: Hi. I have been studying  
6 the issue, and what Gene said is correct.

7 We do not have a defense in depth system.  
8 We have 5/8s inch thick stainless steel that's the only  
9 thing keeping us from having a radiological accident  
10 that could result in us evacuating.

11 The canisters are subject to something  
12 called stress corrosion cracking. We do not know, of  
13 any of the canisters that are currently at San Onofre,  
14 we don't know if they have corrosion on them, we don't  
15 know if they have stress corrosion cracking, because  
16 they haven't looked at any of them, it's too dangerous  
17 for the workers to do that.

18 The canisters cannot be repaired. We're  
19 looking at potentially replacing canisters. There's  
20 no money in the decommissioning fund for replacing  
21 canisters.

22 There are canisters used in Europe and  
23 other countries that are much thicker, up to 20 inches  
24 thick, that were designed for maintenance, that were  
25 designed to be able to replace them, when and if they

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1 wear out, and the ones we have are welded, weren't  
2 designed being opened.

3 Their part of the plan is to get rid of the  
4 pools. If we needed to replace a canister, we need the  
5 pools, but the NRC plans to allow them to get rid of them.

6 So yeah, I am not happy with this plan. I  
7 have got a website, sanonofresafety.org, and I have been  
8 keeping track of this. Everything is resourced with  
9 technical documents.

10 There was a lot of misinformation in the  
11 presentations, a lot of half-truths in the  
12 presentations, so I encourage you to check the  
13 sanonofresafety website to learn the part that was left  
14 out of this meeting. Thank you.

15 (Applause.)

16 FACILITATOR CAMERON: Thank you, thank you  
17 Donna. Let's go to Rochelle, Rochelle Becker.

18 MS. BECKER: I'd like to frame my comments  
19 on several NRC regulations that you pointed out that  
20 you're going to follow in this process.

21 The problem with you pointing out that you  
22 have NRC regulations, policies, processes, is a recent  
23 OIG report that said that didn't work when you replaced  
24 the steam generators.

25 So I have no idea why we're supposed to

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1 trust you with the back end of the nuclear industry.

2 You didn't do the job right. You didn't  
3 require a license amendment request. We are sitting in  
4 the Public Utilities Commission trying to decide how  
5 much Edison gets, how much rate payers get back.

6 Rate payers are disgusted with this  
7 process. When the NRC fails, it is my wallet that this  
8 money comes out of, not yours.

9 When Edison fails, they try to argue that  
10 shareholders deserve more money than rate payers. Rate  
11 payers have very little input in this process. Rate  
12 payers pay virtually every penny of this process.

13 We are very tired of you telling us you have  
14 a policy, a procedure, a process that works. You don't.  
15 And we don't know that until it fails, and when it fails,  
16 we pay, and we're tired of doing so.

17 (Applause.)

18 FACILITATOR CAMERON: And Marnie  
19 (phonetic)?

20 MS. GLICKMAN: Thank you, I don't even know  
21 where to begin.

22 I have the Environmental Impact Report here  
23 that hasn't even been talked about, that anyone who  
24 reads it knows that it has to be old information. It  
25 can't possibly be what we know today about the hazards

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1 for San Onofre becoming a long-term nuclear waste dump.

2 I am asking so much that you, both in Edison  
3 and our Nuclear Regulatory Commission, actually get  
4 involved with not passing the buck, not saying it's not  
5 our fault, we just have to stick to what we have as our  
6 possibilities.

7 I see that the regulation on the  
8 re-licensing these casks that now can't even possibly  
9 last with salt corrosion on the ocean as long as you're  
10 going to allow them to stay there, even if it's the  
11 minimum of 40 years.

12 It's not until spring that your 1927  
13 regulation is going to talk about how we even take care  
14 of the process of checking these. We know now we don't  
15 have a way to.

16 I am asking for leadership at all levels and  
17 changes of the law. We can't leave that fuel on the  
18 ocean. It has to be moved. The fact that this plan is  
19 backwards, it is decommissioning the contamination that  
20 most of us could survive first, with our \$2 billion.

21 They've changed even the term so that it  
22 seems like it's more important. None of us care if  
23 those domes go away.

24 We've gotten used to seeing them. We're  
25 not going near them. Leave them and leave the money in

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1 the rate payers trust fund until all the fuel is off of  
2 location, somewhere away from the ocean. It is  
3 dangerous every day.

4 We have both security that I ask you to look  
5 for. You say you can't approve, but you do get to  
6 choose, you get to give waivers. Don't reduce the  
7 security.

8 Force an inspection of the 50 casks already  
9 there. Don't change the rate payer trust fund  
10 priority. Leave all \$4 billion until all the fuel is  
11 gone.

12 And please, make sure that we don't lose  
13 priority in the government, DOE, coming to get our fuel  
14 by some way of Edison and the DOE changing the priority.

15 We need your help. We need our  
16 legislators' help. Let's get it moved to a place in the  
17 desert, away from the ocean, having the DoD help us get  
18 it there now, tomorrow. Thank you.

19 (Applause.)

20 FACILITATOR CAMERON: Thank you, Marnie.

21 We're going to go to Cathy Allen.

22 MS. ALLEN: Good evening. My name is  
23 Cathy Allen. I work at Age Well Senior Services in  
24 south Orange County.

25 We serve approximately 400,000 seniors

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1 annually in south Orange County, and I have -- on behalf  
2 of them, I have a two part question for the NRC.

3 What is the NRC's process over time that  
4 there are enough funds available to maintain the dry  
5 cask storage on site indefinitely until the DOE resolves  
6 the regulatory issue?

7 What frequency do you perform an analysis,  
8 and what is the level of effort?

9 Thank you.

10 FACILITATOR CAMERON: When you say "level  
11 of effort," can you just explain that a little bit?

12 MS. ALLEN: The level of effort for your  
13 analysis.

14 FACILITATOR CAMERON: Okay. Do you  
15 understand the question, Larry?

16 MR. CAMPER: I was just going to say, is it  
17 financial analysis?

18 FACILITATOR CAMERON: Okay. So we're  
19 talking about finances. Can we -- who wants to give a  
20 -- okay, this is Mike Dusaniwskyj. Mike?

21 MR. DUSANIWSKYJ: Good evening. My name  
22 is Michael Dusaniwskyj. I am an economist with the  
23 Nuclear Regulatory Commission, and I am charged with  
24 making sure that the kind of question that the last  
25 question raised is my responsibility and my team's

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1 responsibility, to ascertain the reasonableness that  
2 there will be enough funds to decommission and to take  
3 care of spent nuclear fuel for the foreseeable future.

4 The point that must be remembered is that  
5 the spent fuel is really the property of the Department  
6 of Energy.

7 Once it leaves the San Onofre Nuclear  
8 Generating Station's footprint, it is no longer in the  
9 custody of the licensee.

10 Until that time, there is enough funds to  
11 take care of the foreseeable future. Now, as far as  
12 what the lady is asking, is what happens beyond a certain  
13 period of time, I will be frank and honest with you.

14 Whatever possibilities may happen into the  
15 future, which all of us can postulate their own  
16 possibilities, we have to reason only with what is  
17 reasonable to what is required by the regulations, and  
18 what the Department of Energy's foreseeable future is  
19 in stake.

20 I am going to have to say something you are  
21 not going to like, and that is the fact that if you  
22 postulate some possibilities that the funds do run out,  
23 the solutions will not be popular. The financial  
24 solutions will not be popular.

25 But the point that must be remembered is

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1 that the NRC does not regulate commerce. That is under  
2 the jurisdiction of the state Public Utility  
3 Commission, and it is our responsibility to make sure  
4 that all activities are done safely and completely.

5 And we recognize that safety takes money.  
6 Therefore, the NRC will not compromise on any level the  
7 safety of taking care of the decommissioning and the  
8 spent fuel nuclear -- excuse me, the spent fuel that's  
9 on site.

10 As far as how often we do the analysis, by  
11 regulation the licensees have to submit to us certain  
12 financial information that we look at to make sure that  
13 the foreseeable forecast is reasonable.

14 We want to make sure that the money is used  
15 exclusively for decommissioning. We check this once a  
16 year.

17 We also check on how much money is left. We  
18 keep checking on this until the license is terminated.

19 FACILITATOR CAMERON: Okay, thank you.  
20 Thank you for that question.

21 I am going to go to this gentleman here,  
22 this gentleman here, and then to Ace and Sharon Hoffman,  
23 and then we're going to take a break and come back. Yes,  
24 sir.

25 PARTICIPANT: Thank you. In regards to

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1 the economic analysis you're performing, I want to know  
2 if the NRC, and you specifically sir that just answered  
3 the question, have you taken into account that recently  
4 at Diablo Canyon, you found the conditions for stress  
5 corrosion cracking after only two years in the tank?

6 And you certified these, the NRC certified  
7 these, that they would be good for 30 years.

8 Now, my guess is, sir, that that two years  
9 takes your analysis and puts it on its head. And I want  
10 to know if you've considered that.

11 Furthermore, Tom, you've got some stones,  
12 talking about the California Public Utility Commission  
13 with all the news in the paper today about how they're  
14 under investigation, and how they're submitting all  
15 their paperwork. Really?

16 Now, as far as the tank analysis goes, the  
17 tanks that you guys are considering won't crack for --  
18 excuse me, the tanks that you won't consider won't crack  
19 in a marine environment.

20 Again, the tanks that you guys are refusing  
21 to consider have the ability to be repaired. Everybody  
22 wants to repair their tank. We also want the tanks to  
23 be repaired.

24 The tanks that you are not considering do  
25 not have the ability to inspect the exterior of the

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1 canister.

2 You're saying that the industry has to come  
3 up with the solution in five years, but the NRC has given  
4 time and time again extensions to these kinds of rules.

5 We want it done now before it is approved.  
6 You guys, or the NRC, excuse me -- the casks that you  
7 guys are not considering do not have an early warning  
8 system before a radiation leak, i.e., you have no oil  
9 light for your car.

10 That's a major problem. You're expecting  
11 the public to accept the fact that you're going to go  
12 around and kick the tires on the car to ensure that  
13 there's some sort of integrity. That's a joke.

14 FACILITATOR CAMERON: I am going to have to  
15 ask you to finish up, sir.

16 PARTICIPANT: Thank you.

17 (Applause.)

18 FACILITATOR CAMERON: All right. Let me  
19 -- is Val (phonetic) here?

20 Oh, good, Val tries to keep control of Local  
21 89.

22 MR. MACEDO: Thank you, sir.

23 Yes, that is not a hard task to do, is take  
24 care of Local 89. Local 89 has been taking care of the  
25 power plant for many years.

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1                   Local 89 was involved in the process since  
2 day one. Unit 1, Unit 2 -- decommissioning of Unit 1  
3 as well, and then the building before the  
4 decommissioning of Unit 1 of the Units 2 and 3.

5                   With that being said, I just want to start  
6 off by saying thank you for allowing me to be a part of  
7 the Community Engagement Panel, it's been an education  
8 for me to better represent my members.

9                   I hate to use the word my members -- Local  
10 89's membership, because I've heard different opinions  
11 from both sides, and I respect everybody, and I've heard  
12 a lot of safety concerns come into play.

13                   My background, in the early 90s I was  
14 involved in the decommissioning of a uranium enriched  
15 -- U-235 enriched uranium processing plant in Sorrento  
16 Valley.

17                   Of course, NRC was involved, Bechtel was  
18 the contract at the time.

19                   So I'm very familiar with the  
20 decommissioning process at that scale. This is a much  
21 larger scale. I am thankful to be a part of the CEP  
22 panel.

23                   I want to disclose something here. For  
24 years, for years, Southern California Edison has a huge  
25 amount of respect for me, for the safety that has been

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1 put in place for our membership, for allowing me to be  
2 a part of the CEP panel -- it goes beyond that, as far  
3 as safety goes.

4 Local 89 has engaged in training. A lot of  
5 the members here, that are here today, don't have orange  
6 shirts on. There is no need to try to control the  
7 membership.

8 They are honest people. They are rate  
9 payers that built the power plant, that have the same  
10 voice as other people, and we're going to continue to  
11 respect everybody.

12 Those members that have been laid off, lost  
13 their jobs, because of the power plant going down, it's  
14 understandable.

15 But make no mistake, these members have  
16 gone through a serious curriculum in terms of training,  
17 on a daily basis, we have a large training facility, we  
18 have mobile sites, for not only Southern California  
19 Edison San Onofre decommissioning, but other  
20 contractors and other sectors of the market as well.

21 And I just want to say that I'm very  
22 thankful for the professionals to put all the  
23 information together, for allowing us to be a part of  
24 the process.

25 And let's give these members back their

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1 jobs. These professionals are disclosing full-on  
2 information that's beneficial to the safety and the  
3 decommissioning of this project, and I ask that you vote  
4 and get this thing going, and let's put these people back  
5 to work.

6 And let's continue to have SCE allow  
7 whichever vendor, whichever contractor steps up to the  
8 plate and becomes the awarding body for the  
9 decommissioning project to follow the safety process  
10 that it's had for years and make sure that all of our  
11 members, and anybody else that joins whichever union  
12 that goes into the decommissioning of this project, that  
13 allows them to go home safe to their families.

14 I thank you for the opportunity to speak.

15 (Applause.)

16 FACILITATOR CAMERON: Thank you, Val.

17 And thank you very much, and we're going to  
18 hear from Gary Headrick. We're going to go to Ace and  
19 Sharon. And we're going to take a break quick for ten  
20 minutes, and we're going to keep going. Gary?

21 MR. HEADRICK: Thank you. Can you hear  
22 me? There we go. My name is Gary Headrick, founder of  
23 San Clemente Green, and we've been concerned about our  
24 safety ever since being contacted by some of the great  
25 workers at San Onofre, who we have a lot of respect and

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1 concern for.

2 Just one note about Val, I -- you know, we  
3 had a conversation shortly after the plant was announced  
4 to be shut down, and Val was concerned that the NR --  
5 that he was being reassigned to fight fires when he  
6 hadn't been trained to do that in a radiological  
7 environment, but I think he's since been trained, so I  
8 am glad that's happened.

9 But the point I want to make about what I've  
10 heard tonight is, actually, the most encouraging words  
11 I've heard is that you're trying to keep ahead of this.

12 You are recognizing that you are not ahead  
13 of this issue about how we are going to deal with the  
14 nuclear waste on site, and deal with it safely, and I  
15 appreciate that.

16 But the problem is, we're still rushing  
17 ahead to this -- expedite this decommissioning thing,  
18 which we all want to see happen as quick as possible,  
19 but we all agree that it has to be as safe as possible.

20 And I believe that you need to seriously  
21 look at this problem longer, and not play word games  
22 about whether you approve it or not.

23 You are the regulators. You make the  
24 regulations. And you're also guilty of making  
25 exemptions for regulations whenever the industry wants

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1 it, and that's a real problem you have to get over if  
2 you want to earn the public's trust.

3 So I'm appealing to Tom Palmisano, who I  
4 appreciate and respect in depth. I think Edison is the  
5 one who we can thank for having shut down the nuclear  
6 power plant and done the responsible thing when the NRC  
7 did not step in and do -- prevent them from restarting  
8 a broken reactor without fixing it first.

9 You know, so Tom, please, give us some time.  
10 Let's look at that more sturdy cask system. Let's not  
11 rush into this, regardless of what the NRC decides.

12 We need you to do the right thing, and we're  
13 putting a lot of faith in you. We've got to get this  
14 right. Thank you.

15 (Applause.)

16 FACILITATOR CAMERON: Thanks, Gary.

17 And Ace, why don't you come here so that  
18 they can get you on the camera? Okay, go ahead.

19 MR. HOFFMAN: I agree that the people who  
20 worked at that plant were good all along.

21 I've been fighting them for 20 years. I've  
22 never had a problem at any of these meetings. Nobody  
23 has ever come up to me and said anything nasty or mean.  
24 I think you're all good people.

25 And if we decommission that plant right

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1 now, one of them is going to die, on average, because  
2 of the difference in the amount of radiation that  
3 they're going to be exposed to. And I wonder if they're  
4 ready to pick which one of them it's going to be, or  
5 whether it's going to be a multitude of them that are  
6 going to get some kind of cancer.

7 Now that is what is going to happen, because  
8 the NRC's own statistics say that there's going to be  
9 a couple hundred rem dosage if we do it now, and it's  
10 only going to be a couple dozen rem if we do it later.

11 So I'd like to see us wait. But what I'd  
12 really like to talk about is that 5/8ths inch thick  
13 protection against a -- that's the radiological barrier  
14 for the next 60 years, is that 5/8ths inch stainless  
15 steel.

16 The 3 to 5 inches of concrete is virtually  
17 irrelevant because it's designed with vents, so if  
18 something gets in there and damages the casks, we are  
19 going to have a problem.

20 ISIS is training six year old kids to be  
21 suicidal terrorists. ISIS is interested in a  
22 multi-generational attack against America. ISIS is  
23 producing videos in which they are recruiting people in  
24 order to attack America.

25 Now, Tom, I am sure that you are aware that

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1 there are many, many weapons that can go through 5/8ths  
2 inches of steel. This is a multitude of them.

3 We have to protect that plant better. We  
4 can't pretend that this -- that just because we're no  
5 longer a nuclear power plant, that we're no longer a  
6 target.

7 We are most definitely a target because of  
8 where we are and who we are, and because of our freedoms,  
9 and because we can have a meeting like this. This makes  
10 us vulnerable.

11 So you have to consider not just the things  
12 that they tell you to consider, but everything that your  
13 heart tells you to consider.

14 That's really all I have to say, this is  
15 practically the last meeting that we're going to need  
16 to attend here.

17 And I want to thank all of the workers at  
18 San Onofre. I don't believe any one of them did a bad  
19 job.

20 (Applause.)

21 FACILITATOR CAMERON: Thanks Ace, and last  
22 commenter before the break is Sharon.

23 MS. HOFFMAN: Good evening everybody, and  
24 thank you for giving me an opportunity to speak tonight.

25 I have a few questions.

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1           The first question is really kind of  
2 simple. Does anybody have the ability to say no? In  
3 a business environment, there's a big difference  
4 between the people who can say yes and the people who  
5 can say no.

6           And I didn't hear anybody from the NRC say  
7 I am the guy, I can say no, I can say stop, I can say  
8 we need more information.

9           And I think that's important. Somebody  
10 should be able to say no.

11           I also want to say to the gentleman who  
12 spoke about the finances that realistically, assuming  
13 that the DOE is going to take all the fuel from San Onofre  
14 by 2052 is not realistic.

15           If you look back to 1988, say, we would have  
16 said all that fuel that has already been accumulated  
17 would be gone by now. And it's not. So let's be more  
18 realistic than that.

19           And last but not least, let's not be in a  
20 rush to put this fuel into casks. It -- keeping it in  
21 the pools gives us an opportunity to observe it, gives  
22 us -- gives SCE and the NRC the opportunity to learn  
23 something about the aging of casks.

24           We're talking about leaving fuel in casks  
25 for hundreds if not thousands of years, and we have no

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1 experience in that. So what's the rush? Thank you.

2 (Applause.)

3 FACILITATOR CAMERON: Okay, thank you,  
4 Sharon. Let's come back around, let's come back around  
5 five to 8:00, that's like seven or eight minutes, and  
6 we'll get started down here, okay, and we'll keep going.  
7 Thank you.

8 (Whereupon, the meeting went off the record  
9 at 7:48 and resumed shortly thereafter.)

10 FACILITATOR CAMERON: All right. Are you  
11 ready, are you ready to go? And please introduce  
12 yourself.

13 MS. JOHNSTON: Hello. My name is Chris  
14 Johnston. I thank you all for coming, and I want to  
15 believe that your safety recommendation is number one.

16 And I'm concerned about our community, I'm  
17 concerned about eight and a half million people.

18 I would not want to be sitting in your  
19 shoes. You have a very grave responsibility before  
20 you.

21 I have concerns about the canisters, as  
22 other people have expressed -- the NUHOMS canister  
23 that's 5/8ths inch thick, that you have done some salt  
24 spray testing on at Diablo Canyon, and found stress  
25 corrosion cracking.

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1                   And we are talking about atmospheric  
2 corrosion here at San Onofre. So deeply concerned that  
3 these casks, these canisters, are not going to withstand  
4 atmospheric pressure.

5                   And beyond that, I'm also wondering, and I  
6 believe this is a question for Al, regarding the seismic  
7 rating for cracked canisters. Can you answer that?

8                   MR. CSONTOS: Can you hear me?

9                   MS. JOHNSTON: Yes.

10                  MR. CSONTOS: All right, first of all, let  
11 me get to your -- one point you mentioned about seeing  
12 stress corrosion cracking at Diablo, it has not  
13 happened, okay?

14                  MS. JOHNSTON: It has the potentiality to  
15 happen.

16                  MR. CSONTOS: There are chlorides there,  
17 okay?

18                  MS. JOHNSTON: Yes.

19                  MR. CSONTOS: There were chlorides that  
20 were found at Calvert Cliffs, there were chlorides that  
21 were found at Hope Creek, as well.

22                  They were on brackish water. Diablo is  
23 right there, that's the coast.

24                  That's one of the reasons why the EPRI went  
25 ahead and did that analysis, or went ahead and had

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1 volunteer sites -- these three were volunteers, okay.  
2 They didn't need to do it, they weren't required to do  
3 it, they just volunteered to do it, okay?

4 So that showed a lot of stewardship on their  
5 part, to do that.

6 Now, about two weeks ago -- all right, so  
7 about July, we held a public meeting. We went out there  
8 and showed our cards, and we said, this is the Aging  
9 Management Program that we want for stainless steel  
10 canisters, period, okay?

11 That required inspections, that required  
12 operational experience evaluations, that inquired --  
13 that required corrective actions, quality assurance,  
14 all that, okay?

15 Two, let's see here, about -- that meeting  
16 was, after that meeting there was another meeting on  
17 chloride stress corrosion cracking. And I know several  
18 folks were on that phone call, okay?

19 That meeting went very long. We were  
20 kicked out of the room because we had so many questions,  
21 which is great.

22 I talked to Donna after that meeting about  
23 these issues. That meeting was the prelude to the  
24 report that EPRI was about to provide. Now that report  
25 was published two weeks ago.

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1 MS. JOHNSTON: I read it, yes.

2 MR. CSONTOS: No, that's a different one,  
3 I think it -- the Flaw Evaluation and Growth  
4 Calculations, have you heard of that one?

5 MS. JOHNSTON: No.

6 MR. CSONTOS: Let me give that to you. You  
7 can go to the EPRI's website, and I am going to pull that  
8 up here.

9 Oh, it's back here. It's report number  
10 3002002785. Do you want me to repeat that?

11 MS. JOHNSTON: Yes. I, I, yes, it's okay,  
12 I will be watching the -- she's got it.

13 MR. CSONTOS: So -- so in that report they  
14 did a calculation, a much more sophisticated  
15 calculation than what we had intended to do, where we  
16 just did a quick calc, okay, for Calvert in specific.

17 Now what they evaluated is they looked at  
18 all the conditions, they went to the Camp Pendleton --  
19 is it Pendleton? -- Pendleton site here, and they pulled  
20 out all the information on the atmospheric, the  
21 weather, and everything.

22 Pulled out some of the calcs that they did,  
23 were very, were very sophisticated based on that.

24 Their worst case scenario, okay, this is --  
25 there's two, you've got to remember, there's two, two

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1 -- two stages of stress corrosion cracking for  
2 chlorides.

3 There's the incubation period, where you  
4 get all the environments, you get all the conditions  
5 that could start cracking, okay.

6 Then you have the actual crack growth.  
7 Okay, there's two stages -- incubation plus initiation,  
8 and then crack growth.

9 They just only looked at crack growth.  
10 They did not look at how long it would take to get to  
11 that stage, because just having chlorides there is not  
12 sufficient to have cracking to start, okay?

13 You need to be in a relative humidity  
14 environment, you need to have the material conditions,  
15 you need to have a lot of things that have to play out  
16 to get this to start cracking.

17 We raised this issue nearly nine, ten years  
18 ago. We're at the stage now where we're trying to act  
19 on it.

20 The calcs that came out, okay, and I'm going  
21 to give these numbers to you -- for ambient plus 15  
22 degrees, that means 70 degrees plus 15 degrees Celsius,  
23 so that's about what, 20, 25 degrees Fahrenheit, roughly  
24 -- to get a 50 percent through-wall crack, this is just  
25 not assuming how long it takes to start, to get the

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1 incubation period to begin, that could take years to  
2 decades, okay -- you have 18.2 years, okay, by their  
3 calcs, to go through-wall of a half-inch thick canister.

4 To go through-wall, completely  
5 through-wall, it's 60 years, over 60 years, okay. To  
6 go 75 percent through-wall it's about 40 years.

7 Okay, now if you take it to the 5/8ths inch  
8 canister, you're talking about, worst case now, worst  
9 case, 28 years to go halfway through wall, and to go full  
10 through wall, over 86 years.

11 So I want you to understand that this is the  
12 -- we're, we're trying to get ahead of this. That is  
13 what I am trying to say.

14 MS. JOHNSTON: What is your defense in  
15 depth, in that case, if it does happen?

16 MR. CSONTOS: If it does happen, you know,  
17 this is why we're doing the inspections, okay?

18 MS. JOHNSTON: How can you inspect  
19 canisters that can't be inspected?

20 MR. CSONTOS: Well, you mentioned that  
21 they already did inspections at Diablo, and I mentioned  
22 Hope Creek, and I mentioned the volunteer inspections  
23 there.

24 There are also Calvert Cliffs, the  
25 inspection for their license renewal, Oconee and Surry

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1 did as well. Those are visual exams --

2 MS. JOHNSTON: Okay, you're saying you can  
3 go all around the canisters and you can see everything,  
4 every potential crack?

5 MR. CSONTOS: So -- part of what, well,  
6 what we do here, and that's where in the meeting that  
7 we had that was back in that July time frame, we talked  
8 about a Koeberg plant, that was a South African plant,  
9 Donna, you showed me that slide that I showed you  
10 earlier, or that we had at that meeting.

11 The Koeberg plant had cracking in a 304 tank  
12 and a pipe, okay?

13 And they went ahead and inspected, and they  
14 repaired it. So there are repair technologies, and we  
15 have seen inspection technologies that are out there,  
16 okay?

17 MS. JOHNSTON: Okay, now back to the final  
18 question, is the seismic -- the seismic rating for  
19 cracked canisters back to --

20 MR. CSONTOS: So we did a calc on that --

21 FACILITATOR CAMERON: Thank you, Chris.  
22 Seismic.

23 MR. CSONTOS: -- so let me talk about the  
24 calc on seismic, all right.

25 What San Onofre did is they analyzed to six

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1 G's, which is ten times what their design basis was for  
2 for this 1029 system.

3 We went ahead and analyzed for the loads  
4 that would occur for the six G's, so that's ten times  
5 what a earthquake would be here for, what the  
6 design-basis earthquake, okay, ten times that.

7 You would have to lose over 80 percent of  
8 the entire canister thickness, the entire canister  
9 thickness, before you would have any issues, okay, for  
10 a ten time seismic.

11 That's the robustness in this design.  
12 That is what I am trying to get across, that this design  
13 and these systems are so over-designed for these types  
14 of conditions.

15 Now, yes, you know, we don't want to ever  
16 get to a crack that is 75 percent through-wall.

17 That's why we're doing this inspection.  
18 That's why we're doing these aging management plans.  
19 That's why we're trying to get ahead of this, okay?

20 The first -- the renewal for San Onofre will  
21 be in 2023, okay? 2023 is right around the corner.

22 At that time, we will inspect, probably the  
23 worst -- the worst, in terms of our environmental, our,  
24 you know, evaluation.

25 EPRI, that's the Electric Power Research

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1 Institute, that did this Flaw Evaluation Study, is doing  
2 a compendium that's coming out this year sometime.

3 That's looking at the environmental  
4 factors, the prioritization. And from that, we're  
5 going to prioritize which canisters, how we can focus  
6 our inspections on a specific canister, okay?

7 At that time, that's what we're going to be  
8 doing for -- by the time that San Onofre comes around,  
9 this technology will have been used.

10 We have put into the Calvert Cliffs  
11 renewal, we have put in there what they need to be able  
12 to inspect, okay, within the three years.

13 FACILITATOR CAMERON: Okay, thank you.  
14 And we did get an extension until 20 after 9:00, okay,  
15 so we have some more time, but one other suggestion is,  
16 and this all depends on Al's goodwill and schedule and  
17 all that stuff, but we need to be out of this room by  
18 20 after 9:00, but there's no reason why you can't have  
19 an informal conference with Al out there somewhere,  
20 okay?

21 So I am glad you are not listening, Al,  
22 because I got you committed. Okay, great.

23 Let's go to Kevin, Kevin Blanch, back here,  
24 and then we're going to spend some time here, go to  
25 Richard McPherson, we'll go over that side of the room.

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1 Kevin, go ahead.

2 MR. BLANCH: Well, I want to first say that  
3 the NRC, which I call you guys the Nuclear Rallying  
4 Cheerleaders, I don't want any of you to take this  
5 personal, what I'm about to say.

6 I would be more than happy, I am staying at  
7 the hotel, to sit down and have a beer with any one of  
8 you, and I'll even buy, because we always buy.

9 I have been fighting San Onofre since I was  
10 a little boy. I was given two months to live three years  
11 ago. My father was nuked to death in the Nevada test  
12 site from Pendleton. I have been anti-nuclear.

13 I want to ask this simple question to the  
14 NRC, and again, do not take this personally, I call you  
15 the Nuclear Rallying Cheerleaders.

16 You have no Congressional powers  
17 whatsoever, none. You are the Nuclear Regulatory  
18 Commission. You are not the executive branch, you are  
19 not the legislative branch, you are not the judicial  
20 branch, none of the above.

21 Congress makes law, not you. And when you  
22 come out and slide in and say oh, we're turning America  
23 into America Toxic. We are going to take every one of  
24 these catastrophes, which is the biggest mistake in  
25 human history called nuclearism and turn them into

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1 official nuclear waste dump sites.

2 Only Congress has that ability to do that,  
3 not you. Not the NRC. I know Allison. I am glad  
4 Allison resigned, and hopefully on November 4th, maybe  
5 Harry Reid, who is protected from putting this monster  
6 in Yucca Mountain, which Congress was promised to put  
7 in Yucca Mountain.

8 I sat right here in the 60s and listened to  
9 these same ridiculous conversations about what we're  
10 going to do with the waste, where we're going to put it.

11 That stuff needs to come off that cliff  
12 yesterday. San Onofre is the poster-child for  
13 everything wrong with the nuclear industry. It is a  
14 catastrophe, and if it was up to the Nuclear Rallying  
15 Cheerleaders, it was all the grassroots.

16 And I would like to say thank you, and get  
17 this into the public domain, to the grassroot activists  
18 in Southern California.

19 I live in Utah, which you parked the  
20 generator in my backyard, illegally.

21 I would like to say thanks to Gene, Ace, all  
22 these people that have fought this tooth and nail. It  
23 was us as grassroots that exposed the lies that was  
24 going on by PG&E, the great crimes against humanity.

25 You protected them. The lie on the

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1 exchange of the generator, these crimes against  
2 humanity that were taking place -- you are not Congress.

3 Yucca Mountain is a bad idea. Shooting it  
4 into space is a bad idea. But I'll tell you what's  
5 really a bad idea. Nuclear. Building a nuclear site  
6 on a cliff, on the most beautiful beach in the world,  
7 on a cliff, and then storing the waste there for 40 years  
8 when it's not built to dispose of the waste.

9 Dry cask is a catastrophe, it's a pathetic,  
10 stupid idea. Yes, Yucca Mountain is pathetic, but  
11 Congress passed Yucca Mountain. You're not Congress.

12 Ship it to Yucca Mountain. Yeah, I know  
13 that's a horrible debate and Congress can't get anything  
14 done, but we still have a Constitution. And it was  
15 approved and passed to be in Yucca Mountain decades ago.

16 And Harry Reid blocks it. Yeah, I  
17 understand. Born and raised at Yucca Mountain, he has  
18 to get elected, his power.

19 But again, don't take this, any of it,  
20 personally, but I consider the NRC to be nothing but a  
21 group of criminals who protect other criminals.

22 San Onofre are criminals, period, period.  
23 What they pulled on the exchange, the crimes against  
24 humanity -- nuclear fallout is leukemia. My father  
25 died of it, and now I'm fighting for my life with it.

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1 So many are.

2 That stuff needs to come off that cliff  
3 before we get an earthquake. Dry cask, whatever you  
4 will -- not stay there. It is a catastrophe, ticking  
5 time bomb. Thank you.

6 (Applause.)

7 FACILITATOR CAMERON: Okay, Kevin.

8 We're going to go to Alan.

9 MR. WOO: My name is Alan Woo. I am with  
10 the Asian Pacific Planning Council of Orange County.

11 I used to be chair of the Low Income  
12 Oversight Board with the CPUC. So I understand a little  
13 about the rate payer and what regulatory agencies kind  
14 of look at.

15 I could kind of appreciate Southern  
16 California Edison though, in making a decision to stop  
17 operation.

18 They did that voluntary. There might have  
19 been some encouragement, but nevertheless, here we are,  
20 right? We're closed, we shut it down, we're trying to  
21 come up with a plan to contain it, store it, and then  
22 go forward as those policies that the federal government  
23 has to yet come into place.

24 Something has to be done now because I did  
25 a calculation when 2052 would be, that's 38 years from

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1 now.

2 I may not be around, and maybe most of you  
3 guys are not going to be around, and most of the  
4 activists here won't be around too, but we leave in place  
5 what we start today.

6 And I could appreciate that you thought  
7 about inspections, you thought about containment, you  
8 thought about storage, you thought about all these  
9 things, and that each one of you pledged that you are  
10 going to become good stewards in terms of making sure  
11 of the future.

12 So at least now, I could see the faces of  
13 people who are committed to doing something to  
14 decommissioning it in a responsible way, to contain this  
15 situation that we have, and to move forward.

16 I don't know what's going to happen in 38,  
17 40 years, who may be sitting up there, if there is  
18 anyone, whether anyone cares in Washington, or  
19 whatever.

20 But I know today, you know, there's people  
21 in the community that cares.

22 I know that we have a utility company that  
23 cares and has been transparent, and has been talking to  
24 us in the community about the impact on us, and you had  
25 a lot of workers here who need to go back to work who

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1 know and care how to clean up this thing.

2 So that's all I'd like to say, I just think  
3 that you presented a large plan here, it covers every  
4 area including environmental impact, we just got to see,  
5 if we don't start now, and we postpone it, you know, you  
6 are just postponing a problem and you're not getting  
7 started.

8 FACILITATOR CAMERON: Thank you, Alan.  
9 Donia?

10 MS. MOORE: Good evening. My name is  
11 Donia Moore, I am with the San Clemente Chamber of  
12 Commerce.

13 I'd like to thank the NRC and Edison for  
14 having this forum and allowing us to speak here.

15 I am aware, of course, as you've discussed  
16 often tonight, that the NRC gave Edison 60 years to do  
17 the decommissioning process, and they voluntarily  
18 decided to do it on a 20 year timeline, which I think  
19 is very commendable.

20 And I understand the need to remove the  
21 waste that's being stored currently at San Onofre.

22 However, I have a question, and that is that  
23 one of the things that hasn't really come up much is  
24 that, as I understand it, it's actually the federal  
25 government that is the body that is giving permission

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1 to remove the waste, and as where to put it, and there's  
2 no repository at this moment.

3 And I haven't heard anything about when  
4 there will be a repository to remove the waste to, so  
5 it's great to talk about removing the nuclear waste, but  
6 how are we going to do that if we don't have any place  
7 to store it?

8 And as I understand it, that's up to the  
9 federal government, is that correct?

10 FACILITATOR CAMERON: Should we go to  
11 Keith McConnell for a little bit of history on this?  
12 This is Keith McConnell, who is the Director of the Waste  
13 Confidence Directorate who did the Environmental Impact  
14 Statement and Rulemaking called Continued Storage.

15 But Keith, do you want to provide some  
16 information to Donia on that?

17 MR. MCCONNELL: Yes, it is the Department  
18 of Energy's responsibility to manage the disposition of  
19 spent nuclear fuel from all the power plants across the  
20 country.

21 The Department of Energy's most recent  
22 issuance in terms of a repository was put out in January  
23 of 2013.

24 What they envisioned at that time was a  
25 stage process where there would be a pilot effort to take

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1 the spent fuel to a centralized interim storage  
2 facility, and then there would be a full scale interim  
3 storage fuel facility in the 2020, mid-2020s time frame.

4 And then a process where they would go  
5 through and solicit interest in development of a  
6 geological repository other than Yucca Mountain.

7 And that's all in this strategy that they  
8 issued in 2013. Now there is legislation required to  
9 allow that strategy to proceed, and it also depends on  
10 community involvement and state involvement in terms of  
11 looking for a repository.

12 But that repository would not be available  
13 until the 2048 time frame, and that ties into the  
14 presentation that San Onofre gave today.

15 Does that help?

16 MS. MOORE: Yes, thank you, it does.

17 FACILITATOR CAMERON: Thank you, Keith.  
18 And let's go to Heather and Steve, and then we're going  
19 to go to Richard, and then we'll go over to Ray and  
20 everybody over there. Heather?

21 MS. JOHNSTON: My name is Heather  
22 Johnston, I am the Executive Director of the Dana Point  
23 Chamber of Commerce.

24 And I am interested in more of the process,  
25 so my question is, is what will be the daily

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1 responsibilities of the NRC resident inspector? How  
2 are their activities changed as the project progresses?  
3 And how are you going to communicate that to the  
4 community and to our local businesses?

5 MR. KELLAR: I think that's probably a  
6 question for me.

7 There is currently a senior resident on  
8 site. That person stayed on site after San Onofre had  
9 shut down.

10 Long-term, that position will not be there,  
11 day-to-day, but will be a regional-based inspector that  
12 will be in concert, or not in concert, but in contact  
13 with the licensee, and they will be aware of any of the  
14 higher risk activities as well as the activities that  
15 the licensee is undertaking.

16 So the resident inspector will not be  
17 there, but the inspector from the region, the teams and  
18 the individuals will be going out and performing the  
19 inspections, particularly based on the higher-risk  
20 activities.

21 Now, what I mean by that is, as the licensee  
22 prepares to move the fuel from the spent fuel pool to  
23 the ISFSI, that would be a higher-risk activity. Some  
24 of the dismantlement of the different systems that had  
25 radiation and radioactivity would also be a higher risk

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1 activity.

2 So we would have inspectors that would be  
3 there and watch those higher risk activities, as well  
4 as, I tried to explain during the presentation, there  
5 are certain aspects of the day-to-day operations that  
6 also are inspected on a routine basis, such as the  
7 organization of the licensee, how they maintain the  
8 business, how they perform their audits, how they  
9 perform their self-evaluations.

10 All those are looked at, and they're  
11 planned in advance, and the inspection teams would go  
12 out and inspect those, as well as the higher-risk  
13 activities.

14 MS. JOHNSTON: Thank you.

15 MR. KELLAR: You're welcome.

16 FACILITATOR CAMERON: Okay. Is this  
17 Laurie (phonetic)? Okay, why don't we stop here. Go  
18 ahead.

19 PARTICIPANT: Hi. I would like to ask the  
20 question of this gentleman on the end here, okay.

21 The gentleman on the end here made a  
22 statement about dose rates, and you said that you  
23 compared it to background radiation in certain areas of  
24 the world.

25 And I just wanted to state that what's in

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1 the casks there at San Onofre is not background  
2 radiation, it's the most dangerous manmade  
3 radionuclides in the world. And you can't compare that  
4 to background.

5 And if the rest of the NRC stands behind  
6 that statement, then that's a criminal act.

7 FACILITATOR CAMERON: And you're talking  
8 about Mr. Camper on the end? Larry, do you want to  
9 clarify anything on that one?

10 MR. CAMPER: Yes, I will. Thank you for  
11 the question.

12 What I was trying to do was to draw a  
13 comparison as to what it means in our standard that we  
14 require.

15 When that site is ultimately  
16 decommissioned, it has to meet that dose standard to be  
17 released, and that's 25 millirem and ALARA.

18 What I was trying to give some perspective  
19 on what is 25 millirem, because a lot of folks look at  
20 that and they say, well, what is 25 millirem?

21 So I was trying to draw a comparison. If  
22 you get on an airplane and you fly to New York, it's three  
23 millirem. The natural background radiation in the  
24 United States, as I said, is 300 to 600 millirem,  
25 depending on where you are.

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1 I agree -- I beg your pardon?

2 PARTICIPANT: That's not massive  
3 radiation.

4 MR. CAMPER: Oh, I agree with that, I agree  
5 with your point fully. If you're saying that there's  
6 a dose -- I'm sorry?

7 PARTICIPANT: The problem at San Onofre is  
8 not the background radiation.

9 MR. CAMPER: Oh, I agree with you fully,  
10 it's not background radiation. Of course it's not.

11 FACILITATOR CAMERON: Okay. Sounds like  
12 there's some agreement here, but let's let Larry finish,  
13 and then we're going to go to some other people, thank  
14 you, Laurie. Larry?

15 MR. CAMPER: No, I agree with you that it's  
16 not background radiation. I was simply trying to draw  
17 some reference to what 25 millirem meant when that site  
18 is decommissioned to satisfy that dose standard.

19 FACILITATOR CAMERON: Okay. Steve?

20 MR. ADAMS: I am Steve Adams (phonetic), a  
21 resident in Laguna Niguel.

22 And reading through the report, I had a  
23 question, couple of questions.

24 The term "islanding" of the pool, the spent  
25 fuel pools, was used, and I'm not clear on what islanding

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1 would be in those pools.

2 And then my next question is based on  
3 listening to some of the previous commentations. Is it  
4 safer for the spent fuel to be in pools, or is it safer  
5 for it to be in the casks that are proposed right now?

6 FACILITATOR CAMERON: Well those are good  
7 questions. And who would like to take the islanding on?

8 MR. PALMISANO: So let me take that on,  
9 because I think that came off our slides.

10 FACILITATOR CAMERON: Okay.

11 MR. PALMISANO: That is a term that refers  
12 to taking the current spent fuel pool cooling system  
13 which are installed plant equipment that will be taken  
14 out of service.

15 When we say "islanding," that means putting  
16 in dedicated standalone cooling systems for the spent  
17 fuel pools. So we essentially island it and separate  
18 it from, disconnect it from the rest of the installed  
19 plant equipment. That's what the term islanding means.

20 FACILITATOR CAMERON: Okay. And does  
21 anybody want to talk to the question that's been  
22 percolating for a while now about is it safer in pools  
23 or dry storage? Doug?

24 MR. BROADDUS: So, the -- our requirements  
25 are that both processes have to be safe, and so we

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1 consider them, and we've looked at them in the past, you  
2 know, to see, is there benefits one way or the other?

3 And there was recent -- there was a recent  
4 study that was actually put up to the Commission, to our  
5 Commission, to see whether there was a need for their  
6 to be an expedited transfer of fuel from the spent fuel  
7 pools to dry cask storage.

8 And the determination was that there is no  
9 real benefit from that standpoint to do it in an  
10 expedited manner, so to get in there sooner.

11 In some cases, you can't actually take the  
12 fuel and put it into spent -- in dry cask storage, within  
13 -- until after a certain amount of time, because it just  
14 can't get into the casks, the casks can't handle the  
15 amount of heat that's going to be generated by that, so  
16 it has to stay in the spent fuel pools.

17 But the spent fuel pools are build to be  
18 very -- very rugged structures that are going to  
19 withstand the same seismic types of loads and such that  
20 the casks would have to be able to withstand as well,  
21 to be able to dissipate the heat in the same manner as  
22 the casks would, but just through a different process.

23 They're dissipating it through the water  
24 that they're in, whereas the casks are dissipating it  
25 through the transfer into the air, or the atmosphere

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1 that's within the casks themselves. So it's a  
2 different process.

3 (Off mic question.)

4 FACILITATOR CAMERON: Let me -- let me  
5 just, this will be the last question, but go ahead.

6 MR. ADAMS: No, I was referring to the  
7 comment that was made about, like, a terrorist attack.  
8 Is it being in a pool, is that safer than being encased  
9 in stainless steel and concrete?

10 MR. BROADDUS: All right, so, from the  
11 standpoint of terrorist attacks, obviously with -- you  
12 can't quantify, it's very difficult to quantify what  
13 type of a terrorist attack has to occur.

14 So what we've tried to do, and what we've  
15 done, is establish what's called a design-basis threat,  
16 and that's a threat that has been established to provide  
17 assurance, very high assurance, of that they're going  
18 to be able to, the licensee would be able to thwart an  
19 adversary coming in to, and then attacking it.

20 So that's what the -- from a terrorist  
21 standpoint, our defense in depth is to ensure that they  
22 have a good strong security program to ensure that the  
23 terrorists are not going to be successful in whatever  
24 attack that they would do.

25 FACILITATOR CAMERON: Okay, thank you,

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1 thank you for that. Richard McPherson.

2 MR. MCPHERSON: Good evening. I hear a  
3 lot of negative information, about 90 percent of the  
4 people are talking negatively about nuclear power,  
5 something they don't really know about.

6 50 years ago, I suited up in NICs (phonetic)  
7 for the first time, and I participated in a defueling  
8 of a reactor and a refueling of a reactor.

9 And I have been involved in that process  
10 ever since. I was even selected to represent the United  
11 States at the International Atomic Energy Agency for  
12 four years on something called Nuclear Fuel Cycle  
13 Facilities, which is the front end and the back end, the  
14 environment and public opinion.

15 And I have now been involved for almost 51  
16 years in nuclear power. I have little or no concerns  
17 over what you are presenting here because I've seen it  
18 presented so many times, and I've seen it be successful.

19 It's unfortunate that there's so much  
20 misinformation out there and there's so much  
21 misinformation that's generated on purpose to cause  
22 fear in people.

23 But as an operator of five nuclear power  
24 plants, and I've been involved in refuelings and been  
25 involved in the back end of the fuel cycle since, a lot,

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1 since 1992, I appreciate everything you are saying and  
2 doing and I think we're going to be safe.

3 Thank you very much.

4 (Applause.)

5 FACILITATOR CAMERON: Yes, sir.

6 MR. GARDNER: Yeah. God evening, I'm  
7 Richard Gardner (phonetic) from Capistrano Beach.

8 I feel that the process is in place to lead  
9 us to a safe condition, even though I think I agree with  
10 everyone that getting the spent fuel out of the, off the  
11 site and in a permanent repository would probably be the  
12 long-term benefit, and that's not in your hands.

13 What I am here to suggest is that the San  
14 Onofre Nuclear Generating Station should be re-purposed  
15 into a reverse osmosis drinking water facility, at least  
16 for the intake structures and the turbine buildings.

17 And I believe that, you know, without  
18 actually doing the, you know, preliminary design, that  
19 it would be easy to have 50 million gallons a day, or  
20 100 million gallons a day.

21 And that water would be provided, and it  
22 would be adequate supplies for the Marine Corps that  
23 live on the base, and also it would satisfy the demands  
24 of at least 25 percent of south Orange County, which  
25 goes, which covers a great distance.

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1           So I think that's a much higher and more  
2 important use, considering if this drought does not --  
3 if we don't get some rain pretty soon, we could be  
4 drawing Lake Mead down, and we may be in a position where  
5 we would have hundreds of thousands, if not millions,  
6 of people dependent on a water source that isn't there.

7           So that's why I think it would be best if  
8 there was a planning, a planning facility where we would  
9 look at a contingency of converting or re-purposing the  
10 plant, and doing it in a way that the transition could  
11 occur, to whoever the third party is, and it could be  
12 Southern Cal Edison but it could be anyone else, and that  
13 the discussions with the Navy happen immediately so that  
14 we could save Southern Cal Edison over \$130 million for  
15 the demo of the turbine buildings alone, and we would  
16 save the water authority another \$100 million for the  
17 new facilities.

18           And you know, the plant here in Carlsbad is  
19 costing \$1 billion for an RO plant to produce 50 million  
20 gallons a day.

21           So we could have that, and I think we should  
22 begin to focus on that's more important than many of the  
23 things that we are now concerned about that are  
24 hypothetical.

25           So if anyone can figure out how to get

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1 through the right departments within the federal  
2 government and in the state, to think about how it  
3 affects Southern Cal Edison's planning process, I would  
4 like to be actively involved. Thank you.

5 FACILITATOR CAMERON: Okay, thank you.  
6 Let's go over here to, let's go to Ray. And then we'll  
7 go to --

8 MR. LUTZ: Okay, hello, my name is Ray  
9 Lutz, I am with citizenoversight.org.

10 I wanted to bring up some of the things that  
11 concern the public about the process and where we are  
12 today.

13 I am one of those that are very happy that  
14 the plant is shut down. I don't think that nuclear  
15 power is a good idea, I don't think that it's safe to  
16 have all this waste around.

17 That's the definition, the non-definition  
18 of green. If you have a whole bunch of waste at the end,  
19 it's not green energy.

20 And we have a whole bunch, 3.2 million  
21 pounds of highly radioactive waste that we've got to  
22 deal with now.

23 The problem is that it almost seems like  
24 we're seat-of-the-pants operation here. Almost  
25 nothing has been really planned ahead -- you say, we've

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1 decommissioned all these other plants, but we really  
2 don't really have a solution for this fuel, still.

3           It's really not a good plan yet. And no one  
4 is sitting here saying, here is our plan for the next  
5 ten, twenty, thirty years. There is no plan. All we  
6 got is here. That's the end of the plan, a foreseeable  
7 future.

8           You say, for the foreseeable -- what the  
9 hell is that? What is a foreseeable future? Ten  
10 years? Is that it? Is that the foreseeable future for  
11 the NRC? 20 years? I mean, what is foreseeable?

12           Because right now the only plan is leave it  
13 here on the coast. Edison doesn't have a plan for the  
14 next ten years, the next place. Everybody is pointing  
15 fingers. The Department of Energy's responsibility,  
16 not us.

17           NRC, we don't even have to approve the damn  
18 plan. It's not our responsibility. If it goes south,  
19 eh, we didn't approve it. That was their problem,  
20 because we have a way out, we've covered our butts. We  
21 don't have to approve the plan.

22           Who came up with this? Who came up with the  
23 fact that the actual license amendment process is at the  
24 very end? When everything is done, we finally talk  
25 about whether we should approve it.

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1           Like, in 50 years from now, we're going to  
2 talk about what we did was 50 years ago, was okay.

3           The NRC is all backwards. You have the  
4 license amendment for the termination at the very, very  
5 end, instead of doing it -- why did they do that? And  
6 it's because they said, oh, there's going to be some  
7 activists that are going to be out there and they're  
8 going to put blocks in what we're doing, so I'll tell  
9 you what, let's put the license termination plan at the  
10 very end, so that no one can block it.

11           That's where we are now. The NRC doesn't  
12 even have to approve it.

13           Seat-of-the-pants operation, no approval,  
14 no long-term or even 10, 20 year plan. These are all  
15 big problems in our minds.

16           The fact that the license termination is at  
17 the very end of the process. It should have been now.  
18 And you're saying we don't have to approve it.

19           My proposal is, you are going to have to  
20 work around this system. Stop pointing fingers at the  
21 Department of Energy.

22           Southern California Edison, thank you for  
23 shutting it down. Now you need to do your part by  
24 planning, here is what we are going to do with the fuel  
25 over the next twenty, thirty years. Make a plan. It's

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1 not going to be perfect, but at least get it started.

2 NRC, do your part by approving this plan.  
3 I don't care if they say it's not your, you can't approve  
4 it -- do it anyway. Say, we are approving this, and  
5 you're putting your butt on the line.

6 And I expect you to be able to say we're not  
7 approving it, and Southern California Edison will  
8 cooperate. And they'll say, you know what, you guys  
9 haven't approved it yet, there are some problems?  
10 We're going to fix those. I know Tom Palmisano would  
11 love to do that. He would love to fix any problems that  
12 you've got.

13 So don't say, oh, it's the end of the clock  
14 -- we're not done yet, but go ahead. Make sure that  
15 everything is done, all the i's are dotted and all the  
16 t's are crossed.

17 I think it's right. You know, this thing  
18 about the fuel pools, the guy just asked, he's not here  
19 anymore. That study that you said, oh, it's the  
20 expediting the fuel out of the fuel pools into the dry  
21 casks -- the only reason they said that was because of  
22 cost.

23 That wasn't because of a safety issue, and  
24 the whole system that you guys use at the NRC is screwed  
25 up because you start with the cost analysis before

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1 you've ever gotten done with the first, the safety  
2 analysis. They jump right away into the -- whether it's  
3 cost effective or not.

4 And so that's why they came up with that.  
5 It probably is better to put them in the dry casks.  
6 Let's face it. If you have a terrorist attack, the fuel  
7 pools are not as safe as a dry cask. And that should  
8 be the answer.

9 Sir, you answered that? Your answer  
10 should be, the fuel pools are not as safe as a dry cask  
11 in a terrorist attack.

12 You know, you've got to say something -- you  
13 think they're just equally as safe? Is there an answer?

14 MR. BROADDUS: I explained that it's the  
15 design-basis threat, and the licensee has to protect  
16 against the design-basis threat, and regardless of  
17 whether they are attacking the spent fuel pools or  
18 they're attacking the casks, they have to be able to  
19 thwart, they have to be able to thwart the adversary --

20 FACILITATOR CAMERON: Okay.

21 MR. BROADDUS: So it -- and prevent the  
22 attack from being successful --

23 FACILITATOR CAMERON: Thank you.

24 MR. BROADDUS: -- so it doesn't matter  
25 where they attack.

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1 FACILITATOR CAMERON: All right. Ed.

2 DR. SIEGEL: Yeah, hi, my name is Dr.  
3 Edward Siegel (phonetic), a graduate of Berkeley,  
4 Michigan, Michigan State, MIT, Westinghouse Combustion  
5 Engineering GE, PSEG, and the IAEA, many years. Son of  
6 Sidney Siegel, co-director of Oak Ridge in the  
7 beginning.

8 What I heard today is summarized best by a  
9 Harry Belafonte lyric, "It was clear as mud but it  
10 covered the ground."

11 One of the problems that occurs is in this  
12 document, which I just got from someone here, which I  
13 presume is available, my goodness, people at Southwest  
14 Research Institute found that alloy composition  
15 dominates things. That's in the scientific literature  
16 from the 50s.

17 People like Sidney Siegel, or, you know, my  
18 father, Alvin Weinberg, director of Oak Ridge, fired for  
19 doubting allow safety, embrittlement in nuclear plants,  
20 around 1970.

21 What is San Onofre? It's a crime scene.  
22 What's the crime? Well, if I ripped off one of you for  
23 \$5.3 billion, I'd be in prison forever, even after I was  
24 dead.

25 So the question that has to be asked is what

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1 happened? The surfers at San Onofre, which I'm too fat  
2 and old to be one of, for thirty years wanted the  
3 reactors removed.

4 So what's the rush? And by the way, what  
5 happened in San Onofre isn't the worst thing. There's  
6 an old paperback about a meltdown, like Fukushima --  
7 that would mean evacuation of Riverside, San Diego, and  
8 Orange County for centuries. It would bankrupt the  
9 United States if no one is killed, and that's a big "if."

10 Who did it? Well, I don't know.  
11 Certainly Southern California Edison had something to  
12 do with it -- they crushed EPRI, EPRI is their public  
13 relations arm. I was interviewed by Chauncey Starr  
14 (phonetic) and Ed Zebrowski (phonetic), and when they  
15 heard about alloy 182 weld embrittlement, they were  
16 horrified, I was on an interview.

17 They didn't hire me. I worked for a nasty  
18 Jewish P-R-I-C-K named Hyman Rickober (phonetic) -- he  
19 wasn't just afraid of Soviets, he was afraid of  
20 everyone, he was paranoid schizophrenic. He knew what  
21 he was doing. He won the Cold War from us, as this  
22 fellow from the nuclear Navy can attest.

23 I have two books I'd just like to bring to  
24 people's attention, and by the way, if you want to find  
25 out about me, Google "A-N-N-A Mayo, If Leaks Could

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1 Kill," and if you want to find an article by me, go to  
2 flickr.com and put in the word "giant  
3 magneto-resistance read page 312."

4 This is a book on fractography. What you  
5 do is you look at things with a microscope, just like  
6 a crime scene where someone is murdered, and you see what  
7 you see.

8 Once it's put away in Idaho, they'll never  
9 find it again. It has to be examined here. Why?  
10 Because there's \$5.3 billion in bills we're going to  
11 have to pay. Who is going to pay them?

12 My feeling about nuclear fuel is that  
13 people who produce it should eat it for dinner, and the  
14 Securities and Exchange Commission is watching very  
15 carefully.

16 Lastly, in closing, a very interesting book  
17 which you all can buy online -- it's called De re  
18 metallica, I'll show you the front page, you can buy it  
19 from Dover for 30 dollars, by Georgius Agricola, it's  
20 the first book on metallurgy.

21 It talks about why Roman -- you see, there's  
22 nothing needed, you don't need anything hard in a  
23 nuclear reactor, any woman knows this, your cuticles  
24 when you're skiing -- hard things are brittle, they  
25 brink.

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1           You're not machining with a nuclear  
2 reactor, or nuclear weapons, or jet engines.

3           De re metallica, translated by Herbert  
4 Clark Hoover, President of the United States --  
5 publication date is interesting, 1550, half a  
6 millennium ago. Hard things break. Roman swords  
7 which stab through Hebrew and bronze shields, and Greek,  
8 broke, because they were brittle.

9           Why doesn't DOE, where the sins come from  
10 -- NRC shouldn't be badly blamed -- I'm, my thinking is  
11 Soviet sabotage, when I was a little boy.

12           Not my father or Alvin Weinberg, not Eugene  
13 Wigner who founded it -- I have some names, I've been  
14 looking at this for 40 years.

15           How come the NRC, but especially DOE, the  
16 only person doing anything in the DOE is Lofaro, look  
17 up anything by Robert Lofaro, alloy embrittlement  
18 mitigation -- and what happened at San Onofre may have  
19 saved us from a much worse thing, core meltdown.

20           But why should we pay for it? If someone  
21 would like to pay my part of the stranded costs, I'll  
22 give you my name, if anyone wants to give me a business  
23 card, I can email you lots of stuff. Thank you.

24           FACILITATOR CAMERON: Okay, thank you.  
25 Thank you, Ed.

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1 (Applause.)

2 Yes, sir.

3 MR. JOHNSON: Thank you. Roger Johnson,  
4 San Clemente.

5 Earlier this evening you showed a slide, I  
6 think it was slide 20, on which you listed the reasons  
7 why this plan should be denied.

8 One of the reasons was that it would  
9 endanger public health and safety. And I think this  
10 plan does endanger public health and safety.

11 And I think a lot of other people do too,  
12 and one of the things that has been ignored in your  
13 report, and it's been touched on here briefly, I'd like  
14 to focus on this, is terrorism.

15 The National Academy of Sciences was very  
16 concerned about this. In 2006, they wrote a report  
17 called Safety and Security of Commercial Spent Nuclear  
18 Fuel Storage, and they addressed the whole report on  
19 that.

20 I noticed on slide 38, you ignored  
21 terrorism. You listed all the possible things that  
22 could go wrong, and you ignored terrorism.

23 One of the first things that the National  
24 Academy of Sciences said is that nearly all the studies  
25 on the dangers of nuclear power plants focus on

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1 accidents related to equipment failure, and they  
2 completely ignore some of the other ones.

3 So after 9/11, terrorism became a reality.  
4 So here are a few things that they said. They say,  
5 attacks, this is page 35, attacks by a knowledgeable  
6 terrorist with access to advanced weapons might cause  
7 considerable physical damage to spent nuclear plants.

8 Then they go on to point out the U.S.  
9 commercial nuclear power plants are not required by the  
10 NRC to defend against air attacks, that's page 31.

11 They go on to say that nuclear power plants  
12 are not designed to resist external terror attacks.  
13 There are currently no requirements in place to defend  
14 against large-scale terrorist attacks.

15 Then they go on to say, this committee, the  
16 National Academy of Sciences, judges that some attacks  
17 involving aircraft would be feasible and could be  
18 carried out, and a zirconium cladding fire would melt  
19 the fuel pellets, could release some of the  
20 radionuclides in the atmosphere, and could be  
21 transported hundreds of miles downwind.

22 Some of the other observations about dry  
23 casks. Dry casks were designed to ensure storage, they  
24 were not designed to resist terrorist attacks.

25 And when they talk about fuel pools, they

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1 said, "This Commission concludes that there are  
2 scenarios that could lead to partial failure of the  
3 spent fuel pool walls, thereby resulting in partial or  
4 complete loss of fuel pool coolant."

5 So it goes on and on, and the one other thing  
6 they noticed is that a problem with terrorism is they're  
7 site specific, and the NRC has come up with this generic  
8 plan, which means that all plants are equal.

9 So it does not recognize that you have  
10 chosen to store waste on earthquake faults in a tsunami  
11 zone, in the middle of metropolitan areas, and in an area  
12 which is easily accessible by terrorists, it's two or  
13 three hundred feet from public highways, any truck bomb  
14 could go in there.

15 The Commission also said that to defend  
16 against truck bombs, you needed to have at least 400 feet  
17 of setback. Old Pacific Highway is 300 feet, anybody  
18 can drive and park there and blow up a truck bomb.  
19 There's hardly a day in the week when truck bombs don't  
20 go off somewhere in the world.

21 So this is a very dangerous site that you've  
22 chosen, and I think one thing that you should -- should  
23 be considered, and is not being considered, is that this  
24 is meant to be a temporary long-term, an oxymoron,  
25 storage facility, and if you're going to store it

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1 long-term temporary, let's store it long-term temporary  
2 somewhere else, like in a remote region where it's safe.

3 You don't need a permanent solution.

4 (Applause.)

5 FACILITATOR CAMERON: Thank you, thank you  
6 Roger. We're going to go over to this side of the room,  
7 and we'll be coming back to you.

8 But let's -- let's go to Dan. Dan?

9 MR. DOMINGUEZ: My name is Daniel  
10 Dominguez, I am the Chief Officer for the local union  
11 that represents the maintenance and operators at the  
12 plant.

13 I'll keep my statements short. I have  
14 worked at the plant for 32 years, 25 years as a reactor  
15 operator, and of those 32 years, my primary goal was to  
16 operate -- was to protect the health and safety of the  
17 public, and in the process, generate electricity for the  
18 benefit of society.

19 There has been a lot of talk. I want to  
20 cover one point is that in my 32 years, I have had lots  
21 and lots of interaction with the NRC.

22 And in my interactions, I've always found  
23 them very professional, and I've always found them that  
24 they had the same goal that I had, which was to protect  
25 the health and safety of the public.

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1                   When the gentleman, I forget who it was that  
2                   said they put no price on safety, they do not put a price  
3                   on safety. I can attest to that. That's been my  
4                   experience.

5                   And finally, the question about whether  
6                   it's safer in the pool or safer in the ISFSI. For the  
7                   last 15 years I've monitored the ISFSI pad, and it is  
8                   safer in the ISFSI. Thank you.

9                   FACILITATOR CAMERON: Okay, thanks Dan.  
10                  We're going to go to Patricia and Reuben, and Carlos,  
11                  we're coming back to you, I didn't forget.

12                  MS. BORCHMANN: Thank you. My name is  
13                  Patricia Borchmann, I live in Escondido.

14                  I am concerned about the safety of this  
15                  proposed decommissioning plan that Edison has prepared,  
16                  and they are trying to expedite, and, you know, make it  
17                  appear as if it's no, not going to be any problem, or  
18                  nothing has been overlooked, or nothing has -- there are  
19                  no unforeseen risks.

20                  I disagree. I think that a lot of the  
21                  technical comments that have been made are very  
22                  credible, and I think -- well, I think arguments on both  
23                  sides have been made that are very technical and very  
24                  credible, so if I understand there's a dilemma, and, you  
25                  know, the job is not finished.

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1           But what I would like to emphasize is that  
2           you have the authority right now, there's nothing  
3           holding you back -- you don't have to wait 90 days to  
4           -- until this 90 day limit is up, to ask for additional  
5           information. You have that authority right now.

6           And I think that based on the concerns that  
7           have been presented at your Community Engagement Panel  
8           through the series of public meetings held by Southern  
9           California Edison and their technical experts, there  
10          has been plenty of technical, highly technical,  
11          incredible concerns raised that aren't covered in  
12          Edison's plan.

13          Edison -- you know, NRC, you are saying, as  
14          a lot of people have said, they put no -- there is no  
15          cost placed, there is no price limit placed on safety.

16          I agree with that, because Edison, Edison  
17          is supposed to be the one absorbing the cost issues, and  
18          they're not. This plan they prepared is the shortcut,  
19          walk-away, cheapest possible method. And it's not good  
20          enough for southern California.

21          And there's no reason that -- I don't think  
22          people realize, you know, they have better options, that  
23          are used internationally, that provide the kind of  
24          protections that this densely populated area deserves.

25          Thank you.

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1 (Applause.)

2 FACILITATOR CAMERON: Thanks, Patricia.  
3 And Reuben?

4 MR. FRANCO: Thanks, Chip.

5 Thank you all for letting me speak here  
6 today. I am Reuben Franco, I am the President and CEO  
7 of the Orange County Hispanic Chamber of Commerce, and  
8 I live in south Orange County.

9 Given that we have a lack of leadership in  
10 Washington for any long-term solution to the problem of  
11 long-term storage, it's my belief that moving the spent  
12 fuel like the plan suggests, from the fuel -- from the  
13 pool to the cask storage, would be a lot better solution,  
14 a lot safer solution, and hopefully we can move down that  
15 road.

16 So I'd like to thank Edison and the NRC and  
17 the employees there for doing their part and trying to  
18 come to a solution to this and a resolution, so thank  
19 you.

20 (Applause.)

21 FACILITATOR CAMERON: Thank you, Reuben.

22 And let's go to this gentleman right here,  
23 and then we'll go over to Carlos, and then I'm going to  
24 see if I can find some people.

25 MR. ALDINGER: Thank you.

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1                   Hi, my name is Karl Aldinger. I am a  
2 concerned citizen from Fallbrook.

3                   My question is, will there be a contingency  
4 plan for when, inevitably, a cask cracks or fractured?

5                   I know Mr. Csontos, you mentioned the  
6 ability to weld them. It appears to me that that's the  
7 way these are formed in the first place. You create the  
8 container, insert the fuel, weld it, so naturally, you  
9 should be able to weld up any problems you have.

10                  Has the commission planning process  
11 considered having additional storage containers  
12 manufactured ahead of time so if we do have a  
13 catastrophic failure, you're not standing there looking  
14 around for who is going to create this thing that could  
15 take five years to create?

16                  We've seen, in the past, it takes an  
17 enormous amount of time to build stuff that you guys  
18 require.

19                  Our steam generators took five, seven  
20 years, and I don't expect these containers to take that  
21 long, but who knows what situation we're in 40 years from  
22 now. It may not be that easy for us to get more of those,  
23 and so it may make sense to try to procure those now.

24                  I wanted to point out that Hanford and WIPP  
25 both indicate that a failure to plan for contingency

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1 creates a toxic mess that's very hard, if not  
2 impossible, to attend to quickly.

3 So I hope that, in your thinking, that it's  
4 not we build the casks, we build the cement surrounding,  
5 and then we pray. I hope that there's an easy way to  
6 clean up any problem that you do determine, that there  
7 is made with a cask -- that you've thought about this  
8 ahead of time and said, it's okay, we've got this.  
9 We're not going to send in troops for four or seven  
10 months to go slowly clean up a mess.

11 In talking about the desalination plant,  
12 it's worth noting that the Western hemisphere's largest  
13 desalination plant is currently being constructed five  
14 miles from this room we are standing in.

15 That plant will provide human drinking  
16 water to many sitting in this building. And unlike  
17 Japanese officials, who have been very slow at lying  
18 through their teeth about the amount of emissions their  
19 ongoing nuclear disaster is leaking directly into the  
20 Pacific Ocean three and one half years after the  
21 earthquake and tsunami, we will not be so polite if and  
22 when an accident at San Onofre spent fuel storage  
23 poisons our drinking water.

24 The reverse osmosis system being built  
25 there is not designed to and is not likely capable of

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1 filtering out radionuclides. Thank you.

2 (Applause.)

3 FACILITATOR CAMERON: Okay, thank you.  
4 So do you want to offer anything about what happens if  
5 a cask breaks, Al?

6 MR. CSONTOS: Sure. So first, what we're  
7 trying to do in these aging management programs is to  
8 set up the guidelines, or the guidance, that says, you  
9 know, this much and no further, okay, in terms of  
10 degradation and what is acceptable, okay?

11 That's first. Second is, is that  
12 stainless steel repairs have been done in the nuclear  
13 industry for decades, probably longer than I've been  
14 alive.

15 And it has -- they've had thousands, in the  
16 80s and 90s, thousands of welds that have had cracking  
17 in the reactor system, the stainless steel, same  
18 stainless steel that these are made out of and others  
19 are made out of, that have been repaired.

20 Overlays have been done for decades. So  
21 there are technologies out there. When there are  
22 unique issues, like what happened, and I've been  
23 bringing up Koeberg, that's a plant that had, that's  
24 right near the coast, breaking waves right next to it,  
25 in South Africa, that had this same issue.

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1           And their tank was very thing, so the  
2 typical methods of doing repairs was not appropriate,  
3 okay?

4           So they went off and they did some quick R&D  
5 and got repairs done very quickly. It was an overlay,  
6 okay, but it was a unique overlay.

7           So the capabilities out there are, they're  
8 there. They're there now, okay?

9           Just bringing it to bear to this side of the  
10 house, which is the dry cask storage side, is not that  
11 big of a deal, in my opinion.

12           FACILITATOR CAMERON: Okay.

13           MR. CSONTOS: But, and then the other issue  
14 was, you said, for casks that have been damaged beyond  
15 our threshold, or to a point where, you know, we need  
16 to do something.

17           We have casks that are transfer casks, as  
18 well as transportation casks, that are at different  
19 sites that we could pull together, or, you know,  
20 sometimes they are on individual site-specific sites --  
21 site-specific licensees will tend to have them right  
22 there on their site, and they can be stored within them  
23 and held and stopped, if we're having any issues.

24           FACILITATOR CAMERON: All right. Thank  
25 you, thank you Al. Carlos?

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1 MR. OLVERA: Thank you. I'll try to make  
2 this short.

3 I am referring to off-site emergency  
4 planning. My name is Carlos Olvera (phonetic) from the  
5 city of Dana Point.

6 When we became a city in 1989, Southern  
7 California Edison installed an emergency response  
8 center at city hall. We have not had to use that for  
9 San Onofre, but we did use it a couple years ago when  
10 we had a tsunami. It only measured six inches, but  
11 nevertheless, it was nice to have it.

12 So I would just ask you, will that facility  
13 be maintained throughout decommissioning?

14 MR. PALMISANO: Let me speak to that.

15 We've submitted a defueled emergency plan  
16 for, you know, that is based on the scenarios that can  
17 occur in decommissioning plants.

18 We will, we have some offsite facilities  
19 the utility maintains. The offsite facilities that the  
20 counties and cities maintain will really be up to them  
21 in the future.

22 We've talked to the Interjurisdictional  
23 Planning Commission, which is the agency which  
24 coordinates all offsite emergency planning, not just  
25 for nuclear issues, but for all hazards, and that

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1 question really is for them.

2 They are certainly going to keep their  
3 emergency capabilities in place while the fuel pools are  
4 in service.

5 FACILITATOR CAMERON: Okay, and we do have  
6 someone from FEMA, but -- the Interjurisdictional  
7 Planning Committee, they couldn't be here tonight, but  
8 they did give me something that they wanted me to read  
9 into the record, very short.

10 "The members of the SONGS  
11 Interjurisdictional Planning Committee have committed  
12 to maintaining emergency response capabilities related  
13 to nuclear preparedness throughout the SONGS  
14 decommissioning process, and to continue our  
15 multi-agency partnership to accomplish this goal."

16 And I'll read more of this if we have time,  
17 but I just wanted to get that on the record, and if you  
18 could just introduce yourself to us.

19 MR. GRUNDSTROM: My name is Richard  
20 Grundstrom, and I am the Technological Hazards Branch  
21 Chief for FEMA Region IX.

22 And part of what we do is we oversee the  
23 radiological emergency preparedness program around the  
24 offsite agencies around the nuclear power plants.

25 The IPC, all the Interjurisdictional

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1 Planning Committee and all the local communities, have  
2 a very, very robust emergency response plan, and it's  
3 been exercised for years in its -- in a transition over  
4 the period of time, like the gentleman mentioned, it was  
5 activated for the tsunami. It's now becoming an  
6 all-hazards plan.

7 Just because the San Onofre Nuclear Power  
8 Plant is going to shut down, the plan is going to remain  
9 in place. They are still going to have the robust EOC  
10 (phonetic), and they're still going to have the planning  
11 efforts that they do now.

12 FACILITATOR CAMERON: Okay. And we're  
13 going to go to Jacqueline Woo (phonetic), and I'll just  
14 read more of the Interjurisdictional Planning Committee  
15 as I'm walking over there.

16 "As a part of our ongoing emergency  
17 planning, we will retain the ability to receive  
18 information, independently monitor and assess  
19 conditions, and take actions to protect our residents,  
20 visitors, and emergency workers." This is Jacqueline.

21 MS. WOO: Thank you.

22 I have been following the San Onofre whole  
23 spectacle through the news, and it's really eye-opening  
24 to come here and to hear from all these different  
25 perspectives, especially from those who actually work

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1 onsite, who put their lives on the line.

2 My question is, is there a list of other  
3 agencies that we're working in collaboration with for  
4 the decommissioning effort, and if so, how can the  
5 public participate, will there be any public hearings?

6 FACILITATOR CAMERON: Okay. Anybody want  
7 to take that on?

8 I think it was a pretty straightforward  
9 question. Do you understand it up there?

10 MR. BROADDUS: When you're talking about  
11 other -- other agencies, are you talking about federal  
12 agencies, state agencies?

13 I mean, what -- ?

14 FACILITATOR CAMERON: I think any, any  
15 other agencies that might be involved.

16 MR. PALMISANO: Let me just make one quick  
17 comment.

18 We've focused our discussions tonight on  
19 NRC requirements for decommissioning and the  
20 Post-Shutdown Decommissioning Activities Report, the  
21 Irradiated Fuel Management Plan.

22 Realize also, the state of California,  
23 through the California Environmental Quality Act, also  
24 has some permitting reviews they will do, similar to  
25 what we did on Unit 1 activities in some cases.

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1           So there will be some state agencies  
2 involved. That is, you know, starting in the near  
3 future.

4           I don't have a list per se. But if you pay  
5 attention to our songscommunity.com website as we  
6 proceed through the state permitting process for  
7 decommissioning activities, that information would be  
8 available.

9           FACILITATOR CAMERON: Yes, and FEMA, FEMA  
10 obviously, right. Go ahead, Larry.

11           MR. CAMPER: No, I was going to say that,  
12 for example, Department of Transportation regulations  
13 that apply to the waste that will be leaving the site  
14 when decommissioning is going on, we actually enforce  
15 those regulations, but they are Department of  
16 Transportation regulations.

17           There are also certain EPA considerations  
18 that we carry out as part of our regulatory process.

19           With regards to the hearing question part  
20 of it, I mentioned that when the License Termination  
21 Plan is submitted, there is an opportunity for a  
22 hearing. And if a body, if a group or an individual  
23 seeks a hearing and is granted standing, then it goes  
24 to an adjudicatory process. But that's an actual legal  
25 hearing.

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1 FACILITATOR CAMERON: Okay.

2 MR. CAMPER: It's not a public exchange of  
3 information, it's an adjudicatory hearing.

4 FACILITATOR CAMERON: As opposed to a  
5 meeting. Thank you, Larry.

6 MR. BROADDUS: Yes, if I could --

7 FACILITATOR CAMERON: Let's go -- go  
8 ahead, Doug.

9 MR. BROADDUS: -- if I could say one other  
10 thing, which is just that for any of the other licensing  
11 amendments that San Onofre has submitted to us for  
12 review as well, it's just like with the License  
13 Termination Plan, there's an opportunity for a hearing  
14 provided on each of those as well.

15 So anyone who is interested or, you know,  
16 wants to participate in that can make their request for  
17 those as well, such as the emergency plan that Mr.  
18 Palmisano talked about previously, that's one of the  
19 licensing actions that are under review right now.

20 FACILITATOR CAMERON: Okay, thank you.  
21 Thank you, Doug.

22 And we're going to go to this gentleman  
23 here, but I wondered, is Steve Adams, Francis Bauer  
24 (phonetic), or Dave Peiser still here?

25 Okay, Dave?

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1 MR. PEISER: I am Dave Peiser, and I am  
2 running for Congress right here in the 49th District,  
3 and San Onofre is obviously part of this District, and  
4 I am running against Darrell Issa, in case you wanted  
5 to know that.

6 So the first thing I want to say is thank  
7 you for all your hard work to make sure that -- to make  
8 sure of the safety and well-being of our District, with  
9 all the actions that you are taking, and I want to thank  
10 everybody who is in this audience, too, to bring your  
11 concerns.

12 And the one concern of mine is that,  
13 according to the timeline, the Department of Energy is  
14 going to take this fuel offsite, and I'm concerned that  
15 that's never going to happen, considering the history  
16 that has been going on so far with trying to find a  
17 permanent site for nuclear spent fuel.

18 So for that reason I have two points. One  
19 is I have, because of my serious concerns, I'd really  
20 like to see us put a plan in place to get the fuel offsite  
21 as soon as possible.

22 And number two, if you cannot figure out a  
23 way to do that, I really think we should look at a longer  
24 term containment strategy with the cast iron type casks,  
25 something more permanent and durable that's going to

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1 last longer than the timeline that you've put together.

2 Thanks.

3 (Applause.)

4 FACILITATOR CAMERON: Okay, thank you.

5 And let's go to Ted, Ted Quinn.

6 MR. QUINN: Hi, I am Ted Quinn, and also a  
7 CEP member, like Dan, and Gene Stone, I think.

8 I'd like to thank the NRC for sponsoring  
9 this meeting. It's a pleasure to see the factual data,  
10 and I'm going to emphasize the word factual data, being  
11 presented.

12 In the CEP we've had multiple meetings, two  
13 workshops, to foster public and plant owner exchanges  
14 on key issues, and it's continued tonight, even though  
15 this isn't a CEP meeting.

16 The public interactions have been great to  
17 see, particularly the ones that are on a factual basis.

18 I would just like to comment, if Dr. Siegel  
19 is still here, there's a good book about threats called  
20 One Second After by William Forstchen on the loss of  
21 electricity in a North Carolina town, that I think is  
22 quite an interesting read.

23 Thank you.

24 FACILITATOR CAMERON: Okay. Thank you,  
25 Ted.

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1 Francis Bauer? Steve Adams?

2 Okay, and Alice has left. Do you want to  
3 ask that question, Sharon?

4 Okay, we have a request for clarification  
5 from Sharon on a couple of dates. Go ahead.

6 MS. HOFFMAN: The gentleman who spoke  
7 about the DOE and the waste confidence gave a date of  
8 2048 for building an interim facility, and yet Mr.  
9 Palmisano talks about all the waste being removed by  
10 2049.

11 There is something wrong with those dates.  
12 And I would just like somebody to clarify how those two  
13 dates work together.

14 FACILITATOR CAMERON: Okay, and I think --  
15 I think Keith's 2048 was based on what DOE actually  
16 stated, they thought a repository would be ready in  
17 2048.

18 So why don't you talk, and then we'll ask  
19 --

20 MR. MCCONNELL: The distinction is that  
21 there were two facilities in DOE's strategy.

22 The first was a centralized interim storage  
23 facility. That would be located somewhere in the U.S.  
24 And that would occur in the 2020s, so the fuel would be  
25 removed from the reactor facilities to this centralized

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1 facility.

2 That would then be staged for a repository  
3 that would be available in 2048 for the final  
4 disposition of spent fuel.

5 FACILITATOR CAMERON: Okay, and Tom, do  
6 you want to add anything?

7 MR. PALMISANO: No, I think that clarifies  
8 it.

9 The dates we're working from are based on  
10 Department of Energy information for the interim  
11 facility, so for a planning basis, that's what we're  
12 using at this point.

13 We're obviously monitoring the situation.  
14 The 2048 is a permanent repository. So our goal, quite  
15 frankly, is for the fuel to be removed as soon as DOE  
16 can remove it to an interim facility, and that's what  
17 our dates are based on.

18 FACILITATOR CAMERON: Okay. And I just  
19 wanted to thank all of you, you've been a tremendous,  
20 tremendous group, and I am going to turn this over to  
21 the senior NRC official, Larry Camper, to close the  
22 meeting out for us.

23 Al Csontos will be held hostage after the  
24 meeting, okay?

25 So go ahead, Larry.

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1 MR. CAMPER: Thank you, Chip.

2 Before I make my closing comments and  
3 observations, I do want to ask Duane (phonetic), who is  
4 in our Office of Nuclear Security Incident Response --  
5 several times terrorism has come up.

6 And I asked Duane to say something about a  
7 concept called safeguards. We have other ways than  
8 environmental impact statements or safety reviews for  
9 addressing terrorism, and it's under the umbrella of  
10 safeguards.

11 So Duane, would you make a few comments  
12 about that to clarify for people how that works, without  
13 getting into the details you can't get into?

14 DUANE: Yes, I'll try to. That's one  
15 thing about security, a little bit more sensitive  
16 subject, so we don't talk about it as much.

17 But one thing that's been mentioned a lot  
18 during our discussions is that security is going to go  
19 away, or go down -- so I do want to let you know that  
20 NRC does have a process, and so security will remain in  
21 place.

22 We have a high -- we require high assurance  
23 that security -- that all of the sites, from operating,  
24 as it starts off operating, to decommissioning through  
25 the ISFSI, that they maintain a specific level to go

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1 against what we call our design-basis threat.

2 And so that design-basis threat is  
3 basically scenarios that have been made up of different  
4 types of threats, and each reactor, each  
5 decommissioning site, has to make sure they maintain  
6 those -- their security at that level.

7 When we say that security is being changed,  
8 basically what we're saying is because the operations  
9 of the facility from an operating facility to a  
10 decommissioning facility changes.

11 You reduce the area, because, for example,  
12 you no longer have the reactor, you no longer have the  
13 auxiliary equipment that protects the reactor, so of  
14 course you don't have as much area to have to secure,  
15 so it's not that security goes away, it's just that it  
16 changes the instructions so that we can maintain that  
17 same level of security.

18 So we wanted to make sure it was clear that  
19 security is going to be there. The NRC does a very good  
20 job, we have a whole office dedicated to ensuring that  
21 different plants, including SONGS, will maintain their  
22 security even as they make changes -- they have to submit  
23 those changes to us, and we do review those changes to  
24 make sure that they still have that high level of  
25 assurance.

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1           So I just wanted to make that point so that  
2           it's clear that the site will still be protected, and  
3           that's what, also, Doug was saying in regards to the  
4           difference between spent fuel pool and the dry  
5           canisters, and that the plant itself will be still  
6           secured. So that's why it wouldn't matter.

7           So I hope that helps.

8           MR. CAMPER: Great.

9           FACILITATOR CAMERON: Thank you.

10          MR. CAMPER: Thank you, thank you.

11          FACILITATOR CAMERON: And Larry.

12          MR. CAMPER: Okay, thank you.

13                 First of all, let me thank everyone for all  
14                 the comments -- very insightful comments, and let me  
15                 assure you that the meeting is being transcribed. The  
16                 staff will review the transcript as we go through our  
17                 review process, you know, tracking against the 90 day  
18                 clock that's been mentioned several times over the  
19                 evening.

20                 The staff will caucus following this  
21                 meeting and discuss the various things that we heard,  
22                 and we'll caucus as we look at the transcript, and your  
23                 comments will in fact be considered as we conduct our  
24                 review.

25                 The second thing I want to mention is, and

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1 I'll go back to the term who can say no? Who can say  
2 no? We can say no.

3 It is correct that we do not approve the  
4 PSDAR, consistent with the existing Commission policy.  
5 Why is the policy that way? Because in 1996-1997, the  
6 Commission determined that the activities that are  
7 conducted during decommissioning are bounded by the  
8 operations and safety considerations that take place  
9 during an operating reactor, there's nothing that is  
10 taking place during decommissioning that is  
11 extraordinary as compared to the safety and  
12 environmental considerations of an operating reactor.

13 And therefore the Commission put in place  
14 the process that we have today, whereby the PSDAR would  
15 be submitted, certain information would be provided in  
16 that PSDAR, and you've seen the contents of that in some  
17 of the slides today -- and then the emphasis is put then  
18 upon the ultimate end state of the site.

19 What does the site look like from a  
20 radiological standpoint when that license is prepared  
21 to be terminated?

22 Now, one can criticize that process, I  
23 understand that. I am merely offering an explanation  
24 as to why it is the way that it is.

25 Now we ask questions, we have asked

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1 questions, of other PSDARs in the past that have been  
2 submitted. We may find ourselves asking questions  
3 about this PSDAR.

4 But I want to point out that the reason we  
5 ask the questions, and the reason that we review the  
6 PSDAR, is to ensure that our regulations are in fact met.

7 We have the authority to stop this  
8 decommissioning or any other decommissioning at the  
9 PSDAR state if we can't get answers to the questions that  
10 lead us to believe that our regulations would be  
11 complied with. We have regulatory tools that would let  
12 us do that.

13 So we have the authority to say no, even  
14 though we don't approve the PSDAR as such, for the  
15 reasons I've just explained.

16 So do understand that we do have that  
17 authority to say no.

18 There's been a great deal of talk about  
19 moving the fuel. I think we all think that that's a very  
20 legitimate concern. Our country, our -- we do not have  
21 a national policy at this point in place that leads to  
22 moving of the fuel to another location from the coast  
23 here.

24 I think we all prefer, would prefer, that  
25 we did. But that's a national policy decision. It's

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1 not a decision that SCE can make, it's not a decision  
2 that we can make, it's a national policy issue.

3 What we have to do is make sure that this  
4 decommissioning takes place in a safe manner, and that  
5 the fuel that remains in dry cask storage on the pad is  
6 done safely and in a way that will protect public health  
7 and safety.

8 I hear a great deal of interest in the cask  
9 of choice, in the cask performance considerations.  
10 Those are very fair questions, those are very fair  
11 concerns. And we'll do everything that we can to  
12 continue to put information on our website that will  
13 enunciate the various studies and things that we're  
14 working on that Al commented on in his presentation as  
15 he answered questions.

16 Why exemptions? Another fair question.  
17 The reason that we grant exemptions for things such as  
18 emergency preparedness and certain security  
19 considerations, operator qualifications when reactors  
20 move into decommissioning, is because our regulations  
21 currently in Part 50 are designed around an operating  
22 reactor.

23 We have not yet put in place a set of  
24 regulations that would be appropriate once the reactor  
25 had gone from operations into decommissioning.

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1           The reason that we haven't is in the year  
2           2000 the staff started down the pathway of a Rule that  
3           would articulate specifically what are the conditions  
4           that the reactors must be in when in a decommissioning  
5           mode. That Rulemaking was put on the back burner, it  
6           was postponed, by the Commission, because at the time,  
7           it was determined that we had higher priority  
8           Rulemakings to work on that dealt with security in a  
9           post-9/11 environment.

10           So, I'll stop there. I think there has  
11           been some excellent comments. We thank you for those.  
12           We will consider them. And we'll look forward to  
13           communicating with you more as we go through the  
14           process.

15           FACILITATOR CAMERON: Okay. And thank  
16           you, Larry.

17           And here's where you can submit email  
18           comments or hard comments, hard copy comments, right  
19           there. That will remain up there, and there are copies  
20           of the Post-Shutdown Report, compact disks out on the  
21           table there. So, thank you.

22           (Whereupon, the meeting went off the record  
23           at approximately 9:00 p.m.)

24  
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