

**Official Transcript of Proceedings**  
**NUCLEAR REGULATORY COMMISSION**

Title:                   Augmented Inspection Team Exit Meeting  
                              with Southern California Edison Company  
                              DVD 4/4

Docket Number:   (n/a)

Location:               San Juan Capistrano, California

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Pages 1-20

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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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AUGMENTED INSPECTION TEAM EXIT MEETING WITH SOUTHERN

CALIFORNIA EDISON COMPANY

+ + + + +

MONDAY

JUNE 18, 2012

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SAN JUAN CAPISTRANO, CALIFORNIA

DVD 4/4

+ + + + +

The meeting convened in the Community Hall at the San Juan Capistrano Community Center at 25925 Camino Del Avion, San Juan Capistrano, California, at 6:00 p.m., Richard Daniel, presiding.

NRC STAFF PRESENT:

RICHARD DANIEL, Facilitator

THOMAS BLOUNT

ELMO COLLINS

GEORGE CRAVER

EMMETT MURPHY

JOHN REYNOSO

JOEL RIVERA-ORTIZ

GREGORY WARNICK

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PRESENT: (CONTINUED)

GREGORY WERNER

ALSO PRESENT:

PETER DIETRICH, Southern California Edison Co.

DOUGLAS BAUDER, Southern California Edison Co.

THOMAS PALMISANO, Southern California Edison Co.

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

(2:23 p.m.)

1  
2  
3 MR. WERNER: Actually, the steam  
4 generators -- and Emmett might be able to help me  
5 too -- the original steam generators had what they call  
6 a square bend. The new steam generators have a U bend,  
7 and so they are actually shaped like a U. The other  
8 ones were more a square type arrangement.

9 As far as the whistle blower, I'm not aware  
10 of -- you have to give me a little more details. I'm  
11 not aware of a whistle blower.

12 PARTICIPANT: In the press a while back,  
13 there was a whistle blower who came to light and I don't  
14 know what he whistle blew. I'm wondering if those  
15 concerns were generated in way on any of these issues?

16 MR. WERNER: I don't have any knowledge of  
17 the individual that you're talking about or what the  
18 concern was. I'm sorry.

19 MR. COLLINS: And I would add, by policy  
20 and I think for good reason, when people bring us  
21 concerns, we protect their identity in that process to  
22 the maximum extent we can. And so if we did know of  
23 it, I don't think I would be able to convey that to you  
24 in a way that might connect it to -- and confirm that  
25 someone had brought us concerns.

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1 MS. MAGDA: Thank you. I'm Marnie Magda  
2 (phonetic) and I appreciate, Mr. Collins, you being here,  
3 again. I did hear you last September. And that's when  
4 I got the most frightened because you said 7.0 protection  
5 against earthquake was adequate.

6 So now that we look at this steam generator  
7 problem and you're telling us that it's only guaranteed  
8 at a 7.0 earthquake, and we look at the way in which  
9 I hear the language sometimes "I think" or "It's my  
10 understanding," and I remember Toni Iseman standing  
11 there giving us a quote of a man who said, "These are  
12 going to be the best. They will be wonderful." And  
13 the response from one of you was "Well, that was before  
14 my time."

15 So, my question is who is ultimately  
16 accountable? Whose name goes on this forever that we  
17 can all say, "This name, this person said that these  
18 were safe," because there is not a person in this room  
19 that has confidence in people with the nuclear regulatory  
20 system or Edison. The language -- I already knew when  
21 you said tube-to-tube, you were hiding something. You  
22 do this to protect yourselves and I guess to make us  
23 feel comfortable. None of us feel comfortable.

24 We -- the latest concern of these steam  
25 generators -- not just an earthquake could ruin things.

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1 We haven't even talked about firestorm that could come  
2 through 140 homes in Laguna Beach, that every September,  
3 we go against firestorms that could put all of the men  
4 working and women working at San Onofre at stake.

5 And what if we have at the same time steam  
6 generator pipes that start to crack? What are -- what  
7 is your back up for all of these possible contingencies,  
8 and who ends up -- whose name goes on this for the history  
9 of the world if we go to Fukushima? Whose name is saying  
10 this is safe?

11 FACILITATOR DANIEL: Thank you.

12 MR. COLLINS: There was a lot in your  
13 question. I think we've already talked about seismic.  
14 Size of the earthquake, I think, is translated in ground  
15 motion at the site. That's what it's designed for.

16 We are requiring all licensees to reassess  
17 that seismic hazard with the latest scientific  
18 information that's available, and update it if  
19 necessary. So, more work to be done on seismic to make  
20 sure that we have a facility that's built the way it  
21 needs to be built.

22 With respect to whose name goes on -- okay,  
23 I licensed Southern California Edison. That is the name  
24 on the license. They are the ones that primarily take  
25 the responsibility for safety, to make sure the

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1 regulations are met, and to make sure that the facility  
2 is operated as it is supposed to be operated.

3 And for this specific issue, you know, I'm  
4 looking to make sure that when steam generators are  
5 changed that it's done properly, and the design  
6 objectives are met.

7 And so that's what -- that's my job as a  
8 federal regulator, and we conduct inspection programs  
9 and assessment programs to check that, to check that  
10 along the way, so, within the law and within our  
11 procedures and our guidelines.

12 But it's the name on the license that bears  
13 the responsibility for safety. So --

14 FACILITATOR DANIEL: All right. Thank  
15 you, Elmo. Charles has a question about the steam  
16 generator.

17 MR. MURRAY: It's Charles Michael Murray  
18 (phonetic) from Laguna Beach. Am I understanding that  
19 the new generators that have gone in both reactor Unit  
20 3 are unique, that there is one that is kind of similar  
21 someplace else, but they are unique, and there isn't  
22 anything identical on the planet that we can compare  
23 and contrast to, so the situation is unique and we are  
24 being exposed to this. Am I understanding this  
25 correctly?

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1 MR. WERNER: You're correct. These  
2 generators are the only type of generators in the world.

3 There are similar generators at Palo Verde, Waterford,  
4 ANO, Fort Calhoun, St. Lucie. But again, these specific  
5 generators designed by Mitsubishi, these are unique  
6 generators, here at -- yes, the size-wise.

7 MR. MURRAY: If that's the case, how did  
8 they get approved to be placed in an environment with  
9 eight million people?

10 MR. WERNER: Again, as we discussed earlier  
11 they were -- they did go through the 50.59 review process  
12 and we are still reviewing that process, but at this  
13 time we have not identified anything that would have  
14 required a License Amendment, other than those two items  
15 I talked about earlier that did go through the License  
16 Amendment review.

17 FACILITATOR DANIEL: Thank you Greg.  
18 Gene.

19 MR. STONE: Residents Organized for a Safe  
20 Environment would like to ask that before the plant is  
21 restarted, that a cost analysis be done by the California  
22 Public Utility Commission to determine whether it is  
23 cost-effective for the citizens to have the plant reopen,  
24 and within that investigation, it should be considered  
25 the twice-through cooling that is required by state law,

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1 but both nuclear power plants in California are only  
2 doing once-through cooling and have been given a  
3 three-year extension because they say it is too expensive  
4 to do.

5 But the law is -- and they have closed  
6 coal-fired plants for this and gas-fired plants for this  
7 once-through cooling, and why shouldn't California  
8 Edison and this be considered into the cost benefit  
9 analysis?

10 MR. COLLINS: If I understand your  
11 question, it's about -- you requested that some  
12 information be provided to the California Public  
13 Utilities Commission and then the cost, the  
14 implementation of the cooling that's employed.

15 I don't know if Pete or anyone from Edison  
16 would want to tackle -- I'm not cognizant, the NRC does  
17 not have purview over the interactions with the  
18 California Public Utilities Commission. So I guess I'm  
19 unable to be responsive to your request.

20 FACILITATOR DANIEL: All right, folks.  
21 It's getting a little late and I promised one gentleman  
22 that I would get back and let him finish, so I'm going  
23 to do that. And I'm not done yet, okay?

24 MR. HEADRICK: Thank you very much.  
25 There's been some great questions asked tonight, much

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1 more analytical. I tend to be more, just, going with  
2 the analogy of the intervention. And so I thought it  
3 was important and I just want to finish up my final  
4 conclusion.

5 It has been mentioned a little bit tonight  
6 and I know there's some questions, gray areas of  
7 jurisdictions and stuff, but it's a real, human question  
8 and I just want to finish my thought please.

9 It has been a rewarding game for some and  
10 we are grateful, especially considering Japan's fate,  
11 that we have not lost everything in one bad bet. Nature  
12 holds the wild card where anything is possible. And  
13 so far she has been kind to us.

14 We are here to tell you it is time to take  
15 your winnings and go home. Don't even ask to place one  
16 more bet. That would only confirm your gambling  
17 disorder and codependent relationship.

18 This is the time for introspection and  
19 reconciliation. We look forward to getting to a place  
20 where everybody wins, embracing the future with a  
21 healthy, renewed perspective. Thank you.

22 FACILITATOR DANIEL: Thank you, Gary.

23 (Applause)

24 FACILITATOR DANIEL: Folks we are going to  
25 take three more questions and then I'm going to ask that

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1 you submit any remaining questions on those feedback  
2 forms that I spoke of earlier. They are out in the lobby  
3 on the table.

4 So, we are going to have three last  
5 questions and we are going to wrap it up for the night.

6 Do you want to stand.

7 MS. CUMMINGS: My name is Tara Cummings  
8 \*\*\*2:31:23 (notes have Coving but I think she says  
9 Cummings, phonetic). I'm a pediatric nurse. One of  
10 the things that has been in the news lately is that  
11 because of new information about the external and  
12 internal radiation exposures to children, the new  
13 recommendations now are that they do not receive as many  
14 or as intensive imaging because they found that they  
15 have increased the amount of leukemia and brain tumors  
16 in these children by seven times.

17 We have a number of children that live close  
18 to San Onofre. There is a direct proportional increase  
19 in risk for leukemia and other things and the amount  
20 of time living near a nuclear reactor.

21 We have lots of different radiation  
22 exposures that continue to fall upon us. Some are being  
23 released by San Onofre. Some are coming over through  
24 the jet stream from Fukushima. Some of it has been here  
25 since the nuclear testing that went on in the '50s.

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1           Who is adding up the total exposure for our  
2 area? Some of these radioisotopes can stay lethal,  
3 harmful for hundreds of thousands of years. Who is  
4 adding up the total and measuring the total amount of  
5 radiation exposure in our population and determining  
6 what level of risk, and how are the new  
7 information -- what were you guys calling it, the  
8 learnings -- the new learnings about the true risks to  
9 human life being implicated into the testing that's being  
10 done and the regulations that are being used to determine  
11 the risk assessment on this nuclear power plant?

12           (Applause)

13           FACILITATOR DANIEL: Thank you Tara.

14           MR. WERNER: I share your concerns about  
15 children with radiation. I have a six-year-old. And  
16 actually, up until about a year and a half or two years  
17 ago, I didn't realize how much radiation a CAT scan,  
18 that's the study that you're talking about, I actually  
19 heard that the other day.

20           For perspective, a CAT scan, a whole body  
21 CAT scan, gets -- you get between 2,000 to 5,000 millirem  
22 for each whole body CAT scan. And again, for a child  
23 that has to be weighed, that's something you talk to  
24 the medical doctor to see if the benefit outweighs the  
25 risk. You're absolutely correct. As compared to like

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1 what the plant released last year, like I said, it was  
2 around 0.1, 0.1 millirem versus 2,000 to 5,000 millirem.

3 I think as Greg indicated, naturally  
4 occurring radiation is about 360 millirem, and then from  
5 other sources about 600, 650 millirem per year.

6 MS. CUMMINGS: (Off-mic)

7 MR. WERNER: Again, those actually, those  
8 -- the radiation was measured here along the coast,  
9 again, very low levels. But yes, actually, it does all  
10 add up. But again, still very low levels as compared  
11 to, for instance, the CAT scan. They are talking, you  
12 know, thousands of more times of radiation due to CAT  
13 scans as what you get naturally.

14 MR. COLLINS: I'd like to add a few  
15 thoughts. Your question about who adds it up, and who  
16 takes a look at the total picture, I think it's well  
17 established, I think, you know, and the NRC believes,  
18 you know, there is no threshold linear relationship,  
19 and any, any exposure to radiation has the prospect.

20 Now at the levels we're talking about, it  
21 is practically negligible and incalculable. But there  
22 are many other sources of radiation. For who, for  
23 NRC-licensed material, which is the nuclear power plant  
24 and most medical uses, you know, cobalt therapies and  
25 many of the diagnostic treatments, you know, we look

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1 at those, look at those radiation exposures.

2 In terms of risk to people off-site at San  
3 Onofre, we are engaged currently with the National  
4 Academy of Sciences to propel another cancer study to  
5 see what the data does show with respect to that.

6 The previous study did not show a  
7 correlation of increased cancer with respect to exposure  
8 from the nuclear power plant, but we are engaged again  
9 to redo that study.

10 It's a very difficult study because when  
11 you take a 0.1, perhaps, calculable dose and compare  
12 that to two rem, five rem, you know, from CAT scans and  
13 other radiation, how do you tease that out in the study.

14 And that's what the National Academy of Science is  
15 struggling with that right now, how they are going to  
16 do that and what data they are going to get.

17 So, we are serious about that and we want  
18 to complete that study and get the best data we can.  
19 So, we'll see where it goes.

20 MR. COLLINS: You're potentially referring  
21 to the EPA radiation network -- potentially.

22 MS. CUMMINGS: (Off-mic)

23 FACILITATOR DANIEL: We wouldn't be in a  
24 position to --

25 MR. COLLINS: I just don't have the

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1 information on that, so --

2 FACILITATOR DANIEL: We are going to hear  
3 from Lyn Harris-Hicks here.

4 MS. HARRIS-HICKS: I live two miles from  
5 San Onofre. I have lived there for most of my life,  
6 and my children and grandchildren are living in the  
7 radiation that you put forth.

8 And we know that it has raised what they  
9 call the natural background. There is no natural  
10 background of radiation. It is a man-made poison. It  
11 is the worst poison that we have every discovered how  
12 to put out, to kill people.

13 And it is being used to kill people in the  
14 countries overseas in the armaments. And we just can't  
15 keep on doing this. And so when you sit there and talk  
16 about -- you have to look a little more to see what  
17 happened on this one or that one, and you don't have  
18 any idea whether when you -- once you start it again,  
19 that the next week it might be all over again in different  
20 ones of those tubes, because the truth of it is that  
21 the metals are the basic fault here, and that won't be  
22 mentioned because that's the way the nuclear industry  
23 has gotten all of its -- and I shouldn't say all, never  
24 say all -- the nuclear industry has gotten its  
25 guarantees, loan guarantees, because without the loan

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1 guarantees they couldn't build anything.

2           And they waited a generation. Oh now, I  
3 mustn't get off on that. The point is that when you  
4 know you have not been able to create an alloy which  
5 can resist the terrible destructive action of this  
6 terrible technology, why do you go ahead looking for  
7 the little bits of fragments of what might have  
8 influenced making it worse, or less worse, when our lives  
9 are in the -- our lives, eight million, right of us --  
10 and probably a lot more than that, because we are learning  
11 every day about, from Fukushima, that that radiation  
12 is coming over us and it is making more and more people,  
13 and particularly the children -- how can you do that?  
14 How can you look in the mirror and do that?

15           FACILITATOR DANIEL: Thank you, Ms. Hicks.

16           (Applause)

17           FACILITATOR DANIEL: Charles.

18           MR. COLLINS: Well, I'd like to just  
19 comment. And you know, there is really probably nothing  
20 I can say to say Ms. Hicks, you know, except I do  
21 appreciate her sentiment and her challenge to us as the  
22 Nuclear Regulatory Commission to make sure we do our  
23 job with respect to safety.

24           And on these particular issues, I'll just  
25 tell you, we are committed to make sure that we understand

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1 this, with the best science and engineering that is  
2 available right now, and San Onofre is not going to run  
3 again until we are satisfied. So, thank you for your  
4 comment.

5 FACILITATOR DANIEL: All right. It's  
6 going to be -- Elmo?

7 MR. COLLINS: Well, I'm just doing a time  
8 check. We have to be out by 10.

9 FACILITATOR DANIEL: Okay. This is going  
10 to be our final question. Charles.

11 MR. GRIFFIN: My name is Charles Griffin  
12 (phonetic). I'd like to speak about the tubes. My wife  
13 just passed away in December from lung cancer. Isn't  
14 that interesting. Okay.

15 But about the tubes, and you've learned  
16 tonight that this is a different design, and I've learned  
17 tonight that it's quite a bit different design than what  
18 was originally there.

19 And why didn't it trigger -- I initiated  
20 the California Environmental Quality Act in 1970. It  
21 was passed by Nixon and Governor Brown passed the  
22 California Environmental Quality Act.

23 Why isn't there an Environmental Impact  
24 Statement for the National Environmental Protection Act,  
25 and why haven't we got an Environmental Impact Report

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1 for the tubes on this?

2 And because it involves looking for  
3 alternatives, and certainly we have cheap, natural gas  
4 and that's certainly a workable alternative, we just  
5 built a natural gas facility at John Wayne Airport.

6 So, we can build local ones. We can put  
7 them out in the desert. We don't have to cover our desert  
8 with solar cells. But we also can build an alternative  
9 utilizing hydrogen and boron and make a fusion reactor  
10 there that's the size of a bathroom and you can put in  
11 any substation and diversify this with a smart grid.  
12 Thank you.

13 FACILITATOR DANIEL: Thank you, Charles.

14 MR. COLLINS: I want to make sure I  
15 understand the question.

16 MR. GRIFFIN: We need an Environmental  
17 Impact Report. Why haven't we got it?

18 MR. COLLINS: Yes, okay, good. Thank you.

19 Federal law tells us when the Environmental Impact  
20 Statement --

21 MR. GRIFFIN: (Off-mic)

22 MR. COLLINS: I'm sorry. I stated that  
23 poorly. That wasn't what I was trying to convey. First  
24 of all, Mr. Griffin, let me express my condolences on  
25 the loss of your wife. I'm sorry to hear that.

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1           But the licensee, I mean the NRC in the  
2 implementation of our provisions, you know, has those  
3 in our regulations about when an Environmental Impact  
4 Statement should be triggered.

5           And we believe we followed those  
6 regulations in this instance, but we also acknowledge  
7 because of the prospect for a License Amendment which  
8 might trigger additional reviews or additional federal  
9 actions, and at least a statement of no significant  
10 hazards determination.

11           We have got to go back and do our inspection  
12 and review and make sure we got this one right. It's  
13 actually a question we're asking ourselves, as well,  
14 and we haven't arrived at the answer yet. So, thank  
15 you.

16           FACILITATOR DANIEL: Ladies and gentlemen,  
17 I'm sorry. The night is wearing long. Please give us  
18 your questions on those feedback forms, but before you  
19 go, I want to thank you for the thoughtful questions  
20 and comments that you have all come out and asked.

21           And I want to thank you again for your time.  
22 You have been a wonderful audience. Thank you very  
23 much. And I am going to let Mr. Collins have the last  
24 word here.

25           MR. COLLINS: Yes, I just want to -- Rick

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1 already said what I wanted to say and that's my personal  
2 appreciation for you taking the time to come out.

3 Your questions, we have done our best to  
4 try to answer your question and be forthright with it.

5 And just to restate what we've indicated a number of  
6 times, we're not satisfied yet. A lot of work has to  
7 be done for this difficult technical issue.

8 We are going to have more meetings and we  
9 are going to continue to talk about it before NRC makes  
10 a decision. So I expect I am going to get to see you  
11 again and we'll get to talk about this some more. So  
12 thank you very much for your attendance tonight.

13 (Applause)

14 (Whereupon, at 2:44 p.m., DVD 4 ended, marking the end  
15 of the meeting)

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