

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)

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1 UNITED STATES OF AMERICA

2 NUCLEAR REGULATORY COMMISSION

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4 AUGMENTED INSPECTION TEAM EXIT MEETING WITH SOUTHERN

5 CALIFORNIA EDISON COMPANY

6 + + + + +

7 MONDAY

8 JUNE 18, 2012

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10 SAN JUAN CAPISTRANO, CALIFORNIA

11 DVD 4/4

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13 The meeting convened in the Community Hall
14 at the San Juan Capistrano Community Center at 25925
15 Camino Del Avion, San Juan Capistrano, California, at
16 6:00 p.m., Richard Daniel, presiding.

17 NRC STAFF PRESENT:

18 RICHARD DANIEL, Facilitator

19 THOMAS BLOUNT

20 ELMO COLLINS

21 GEORGE CRAVER

22 EMMETT MURPHY

23 JOHN REYNOSO

24 JOEL RIVERA-ORTIZ

25 GREGORY WARNICK

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1 PRESENT: (CONTINUED)

2 GREGORY WERNER

3
4 ALSO PRESENT:

5 PETER DIETRICH, Southern California Edison Co.

6 DOUGLAS BAUDER, Southern California Edison Co.

7 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.)

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

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

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

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

MR. COLLINS: And I would add, by policy and I think for good reason, when people bring us concerns, we protect their identity in that process to the maximum extent we can. And so if we did know of it, I don't think I would be able to convey that to you in a way that might connect it to -- and confirm that 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
3 here, again. I did hear you last September. And that's
4 when I got the most frightened because you said 7.0
5 protection 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
20 regulatory system or Edison. The language -- I already
21 knew when you said tube-to-tube, you were hiding
22 something. You do this to protect yourselves and I
23 guess to make us feel comfortable. None of us feel
24 comfortable.

25 We -- the latest concern of these steam

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1 generators -- not just an earthquake could ruin things.

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

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

12 FACILITATOR DANIEL: Thank you.

13 MR. COLLINS: There was a lot in your
14 question. I think we've already talked about seismic.

15 Size of the earthquake, I think, is translated in ground
16 motion at the site. That's what it's designed for.

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

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

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

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

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

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

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

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

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1 correctly?

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

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

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

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

18 FACILITATOR DANIEL: Thank you Greg.
19 Gene.

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

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1 considered the twice-through cooling that is required
2 by state law, but both nuclear power plants in California
3 are only doing once-through cooling and have been given
4 a three-year extension because they say it is too
5 expensive to do.

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

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

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

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

25 MR. HEADRICK: Thank you very much.

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1 There's been some great questions asked tonight, much
2 more analytical. I tend to be more, just, going with
3 the analogy of the intervention. And so I thought it
4 was important and I just want to finish up my final
5 conclusion.

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

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

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

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

23 FACILITATOR DANIEL: Thank you, Gary.

24 (Applause)

25 FACILITATOR DANIEL: Folks we are going to

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1 take three more questions and then I'm going to ask that
2 you submit any remaining questions on those feedback
3 forms that I spoke of earlier. They are out in the lobby
4 on the table.

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

7 Do you want to stand.

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

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

22 We have lots of different radiation
23 exposures that continue to fall upon us. Some are being
24 released by San Onofre. Some are coming over through
25 the jet stream from Fukushima. Some of it has been here

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1 since the nuclear testing that went on in the '50s.

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

14 (Applause)

15 FACILITATOR DANIEL: Thank you Tara.

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

22 For perspective, a CAT scan, a whole body
23 CAT scan, gets -- you get between 2,000 to 5,000 millirem
24 for each whole body CAT scan. And again, for a child
25 that has to be weighed, that's something you talk to

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1 the medical doctor to see if the benefit outweighs the
2 risk. You're absolutely correct. As compared to like
3 what the plant released last year, like I said, it was
4 around 0.1, 0.1 millirem versus 2,000 to 5,000 millirem.

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

8 MS. CUMMINGS: (Off-mic)

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

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

22 Now at the levels we're talking about, it
23 is practically negligible and incalculable. But there
24 are many other sources of radiation. For who, for
25 NRC-licensed material, which is the nuclear power plant

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1 and most medical uses, you know, cobalt therapies and
2 many of the diagnostic treatments, you know, we look
3 at those, look at those radiation exposures.

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

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

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

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

19 So, we are serious about that and we want
20 to complete that study and get the best data we can.

21 So, we'll see where it goes.

22 MR. COLLINS: You're potentially referring
23 to the EPA radiation network -- potentially.

24 MS. CUMMINGS: (Off-mic)

25 FACILITATOR DANIEL: We wouldn't be in a

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1 position to --

2 MR. COLLINS: I just don't have the
3 information on that, so --

4 FACILITATOR DANIEL: We are going to hear
5 from Lyn Harris-Hicks here.

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

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

15 And it is being used to kill people in the
16 countries overseas in the armaments. And we just can't
17 keep on doing this. And so when you sit there and talk
18 about -- you have to look a little more to see what
19 happened on this one or that one, and you don't have
20 any idea whether when you -- once you start it again,
21 that the next week it might be all over again in different
22 ones of those tubes, because the truth of it is that
23 the metals are the basic fault here, and that won't be
24 mentioned because that's the way the nuclear industry
25 has gotten all of its -- and I shouldn't say all, never

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1 say all -- the nuclear industry has gotten its
2 guarantees, loan guarantees, because without the loan
3 guarantees they couldn't build anything.

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

17 FACILITATOR DANIEL: Thank you, Ms. Hicks.

18 (Applause)

19 FACILITATOR DANIEL: Charles.

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

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1 And on these particular issues, I'll just
2 tell you, we are committed to make sure that we
3 understand this, with the best science and engineering
4 that is available right now, and San Onofre is not going
5 to run again until we are satisfied. So, thank you for
6 your comment.

7 FACILITATOR DANIEL: All right. It's
8 going to be -- Elmo?

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

11 FACILITATOR DANIEL: Okay. This is going
12 to be our final question. Charles.

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

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

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

25 Why isn't there an Environmental Impact

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1 Statement for the National Environmental Protection
2 Act, and why haven't we got an Environmental Impact
3 Report for the tubes on this?

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

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

14 Thank you.

15 FACILITATOR DANIEL: Thank you, Charles.

16 MR. COLLINS: I want to make sure I
17 understand the question.

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

20 MR. COLLINS: Yes, okay, good. Thank you.
21 Federal law tells us when the Environmental Impact
22 Statement --

23 MR. GRIFFIN: (Off-mic)

24 MR. COLLINS: I'm sorry. I stated that
25 poorly. That wasn't what I was trying to convey. First

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1 of all, Mr. Griffin, let me express my condolences on
2 the loss of your wife. I'm sorry to hear that.

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

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

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

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

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

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1 word here.

2 MR. COLLINS: Yes, I just want to -- Rick
3 already said what I wanted to say and that's my personal
4 appreciation for you taking the time to come out.

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

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

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

15 (Applause)

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

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