

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

Date: Monday, June 18, 2012

Work Order No.: NRC-1798

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

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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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