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1ST QUARTER COMMUNITY ENGAGEMENT PANEL
(REGULAR MEETING)

REPORTER'S TRANSCRIPT OF PROCEEDINGS
Laguna Hills, California
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Reported by:
Denise Herft, CSR #12983
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Pages 1 - 172

1 1st Quarter Community Engagement Panel

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3

4 DR. VICTOR: Okay, let's get settled
5 here. Thank you everyone for coming out tonight,
6 especially with the weather as beautiful as it is,
7 the wildflowers as extraordinary as they are, and
8 a clean 2- to 4-foot swell in the ocean, and
9 you're all here with us tonight, so I am grateful
10 for you coming. And I think it's testimony to the
11 importance of the subject that we're going to be
12 dealing with tonight about the canister
13 downloading events at the plant, what's been
14 learned and the direction forward.

15 My name is David Victor and I co-chair
16 the Community Engagement Panel, Dan Stetson is the
17 vice chairman, Jerry Kern here, the secretary.
18 Just wanted, before we get started, if you need to
19 evacuate the room, if a need arise to evacuate the
20 room, you can go back out the door you came in or
21 out the side doors. They're all labeled exit
22 here. You can also go out there but I think,
23 frankly, this is a better way to get outside.

24 The Orange County Sheriff's, two of them
25 are here tonight. Thank you very much for your

1 service. They're here for everyone's safety. And
2 if you have -- if there's anything that comes up
3 that requires the attention of the sheriff's,
4 please do let them know.

5 I want to recognize two guest speakers
6 that will be with us tonight, Scott Morris right
7 here, who's regional administrator for Region IV
8 of the Nuclear Regulatory Commission and sitting
9 next to Scott, Linda Howell, who is deputy
10 director of the division of Nuclear Material
11 Safety, which is the division that's been dealing
12 with the enforcement actions and other issues
13 surrounding the fuel downloading.

14 So, Scott, Linda, thank you very much for
15 coming from Texas and for joining us today.

16 I also want to recognize Doug Bauder who
17 is right here. Doug is the new vice president and
18 chief nuclear officer for Southern California
19 Edison and for SONGS. He has been in the nuclear
20 industry for 25 years and has 10 years of
21 experience at Southern California Edison. So glad
22 you can join us tonight. I know you had just
23 taken over your position at the last meeting. We
24 are delighted that you can be here tonight.

25 There are booths available outside,

1 community booths and SoCal Edison booths with a
2 variety of interesting information and so during
3 the break, if you haven't seen the booths already,
4 I urge you to go out and take a look.

5 I want to remind everybody that the CEP,
6 Community Engagement Panel, is an engagement
7 panel, it's not a decision making body, so it was
8 created to provide conduit, a two-way conduit
9 between the communities that are affected by the
10 decommissioning process and Southern California
11 Edison, in particular, as operator of that
12 process.

13 There's a lot of material for tonight's
14 meeting. The slides are available online. I
15 believe that they have now been posted online.
16 There are agendas on your chairs there. Normally
17 we put hard-to-read slides on your chairs, and I
18 believe tonight there are none of those, so you
19 wonder if there's progress in the world, that's
20 progress.

21 The meeting tonight is being
22 live-streamed on the site and will be archived on
23 the site as well.

24 I want to remind the panel members during
25 the first part of our meeting if you want to raise

1 a question, please put your flag up like this so
2 that I can see you and recognize you, and then
3 please state your name for those watching at home
4 and for the record.

5 Dan and Jerry and I will call out a
6 variety of action items that need to be followed
7 up on, we'll memorialize all that. I want to say
8 a little bit more about what's been happening in
9 terms of getting concrete answers, written answers
10 to a lot of questions that have arisen.

11 I want to draw your attention to the
12 agenda, which you have in front of you, but it's
13 also magically going to appear on the screen. Can
14 you back up one slide. If you have a public
15 comment and you don't want to say it tonight for
16 some reason, you can send it to that e-mail
17 address within five days, and we'll make it part
18 of the official record, and all written questions
19 and all questions raised that aren't answered here
20 tonight, will be answered, and I'll say a little
21 bit more about a new process for doing that to
22 make sure that all the questions get all answers
23 and that is a very robust process.

24 The next slide, please. There you go.
25 That's why you've got the agenda on your chairs,

1 because that slide is not legible, but that's the
2 agenda for tonight. We're going to take a little
3 bit of time to give you some updates about a lot
4 of things that are going on in the community in
5 just a moment. If you want to make public comment
6 tonight, please sign up on one of the cards.
7 There was a table as you walked in. They're
8 numbered cards and first-come, first-served.
9 We'll get through as many comments as we possibly
10 can tonight. And if you haven't filled one out,
11 please do that or do that during the break.

12 Dan Stetson and Jerry Kern are going to
13 support that process. And we are -- in the past
14 we've had structured public comment periods where
15 we have a portion of the public comment period
16 that's about whatever the specific topic is, and
17 then another portion for general public comments.
18 We have merged those together because we want to
19 make sure there's enough time for as many people
20 to make public comments as possible.

21 Okay. I want to go now to the first
22 major segment of the meeting, which are general
23 community updates and some updates from the CEP
24 process as it unfolds.

25 MR. STETSON: Did you welcome our new --

1 DR. VICTOR: I think the first item is we
2 want to welcome our new CEP members, so John
3 Taylor.

4 John, where are you? Thank you very
5 much. John Taylor from San Juan Capistrano.

6 Jim Desmond. Right there. Jim Desmond
7 from the County of San Diego Board of Supervisors.

8 And Juanita Hayes. Juanita, yes, you're
9 the alternate for Jim Desmond and so delighted you
10 could be with us as well.

11 I want to thank Sergio Farias and Bill
12 Horn for their contributions, and I'll be sure to
13 send them a note after tonight's meeting with that
14 information as well.

15 MR. STETSON: And Dan Banks.

16 DR. VICTOR: And Dan Banks, right there.
17 Thank you very much. Dan Banks is also here -- I
18 think this is your first meeting with us tonight?

19 MR. BANKS: It is.

20 DR. VICTOR: Excellent. Great. Thank
21 you very much for joining us.

22 Okay. Next slide, please. There have
23 been a variety of efforts to engage local city
24 councils, and I want to ask Jerry Kern if he could
25 talk about what's been going on here and also make

1 an offer to other city councils that might want
2 briefings and other information.

3 Jerry.

4 MR. KERN: Thank you. It wasn't me that
5 scheduled this meeting on opening day, I just want
6 everybody to know that. But the Dodgers won and
7 the Padres won, so hopefully we have good feelings
8 for the rest of the day.

9 A few years ago when we first started
10 this I went out to a lot of the city councils
11 actually from here, Laguna Niguel, all the way
12 down to Solana Beach and Del Mar to make
13 presentations about what we're doing. I have
14 contacted a few of the cities in North San Diego
15 County. I haven't reached South Orange County
16 yet, but I actually to make that same offer. I
17 went through about five or six city council
18 meetings about three or four years ago and
19 obviously there's been a change in administrations
20 in all of those cities, so we just make sure if
21 those cities or anybody that would want a
22 presentation from myself and usually somebody from
23 Edison will come with me, we will make those
24 presentations to those city councils. So I'm just
25 making that offer and we are laying it out there

1 for anybody that would like to do that.

2 So I've done it through the San Diego
3 County Board of Supervisors, but that was about
4 three years ago and everybody else we have that is
5 an open invitation.

6 If you want your city to hear a
7 presentation at your council meeting, just let me
8 know or let -- go on the website and let me know,
9 and I will be glad to come.

10 DR. VICTOR: Thank you very much. I just
11 want to also underscore that in addition to
12 organizing that around issues specific to San
13 Onofre, you did the same with Neil Driscoll around
14 the new analysis of seismic risks in Southern
15 California, and I think that was very effective so
16 thank you very much.

17 I want to just mention under the heading
18 of activities by newly elected officials. My
19 newly elected member of congress Mike Levin has
20 set up a task force to give him some independent
21 information about San Onofre. I've spoken with
22 Congressman Levin several times, with his staff on
23 a regular basis. I think his local chief of staff
24 is here tonight, Kyle, if you want to -- thank you
25 very much. Glad that you're here.

1 We've certainly reached out to them and
2 offered to meet with the task force as it gets
3 settled. I know you guys are still in the process
4 of figuring out membership of that task force.

5 So the next slide, please.

6 I want to ask Dan Stetson to say a little
7 bit about where the California State Lands
8 Commission and Reef Expansion processes are.

9 MR. STETSON: Thank you, David.

10 There's been two very important meetings
11 over the last couple of weeks. The first one
12 actually was on March 7th, and that was the
13 California Coastal Commission, and they approved a
14 dramatic expansion of the Wheeler North Reef off
15 of San Clemente. As you may recall as one of the
16 operating conditions for keeping the plant
17 running, SCE agreed to develop an offshore reef
18 and they did. It didn't quite meet the minimum
19 biomass required. It met quite a number of the
20 other requirements but that was one that it didn't
21 quite meet, so Edison has agreed to invest another
22 \$20 million to virtually double the size of the
23 reef and that will start taking place in May and
24 through September.

25 The second very important meeting that

1 took place was on March 21st and that was
2 California State Lands Commission. And as you
3 know, we've been waiting for a couple of years for
4 the environmental impact report to be voted upon,
5 and so the State Lands Commission who is composed
6 of three individuals: lieutenant governor, the
7 state controller, and the state director of
8 finance; they met. They had presentation from
9 their staff, then there was a presentation from
10 Southern California Edison; there were a number of
11 comments and questions that were raised and many
12 of those were answered. And then the State Lands
13 Commission voted unanimously to certify and
14 approve the environmental impact report.

15 Next it's off to the Coastal Commission
16 for a coastal development permit.

17 DR. VICTOR: Great. Thank you very much.

18 I want to now go to the next slide.
19 Tonight's meeting is about fuel offloading and
20 where that process is and that is fitting and
21 proper, but over the long term what really matters
22 to us is creating a change in federal law that
23 makes it possible to send the spent fuel away from
24 San Onofre in a responsible fashion to an interim
25 storage site and then eventually a permanent

1 repository. That's the -- what we need to get
2 done over the long term.

3 Every meeting we've given an update on
4 that process. We got very close, I think, last
5 year in both the house and the senate. We have a
6 new congress this year, and I've been in
7 Washington a lot, and I want to give you a little
8 update on where that process stands and what I
9 think we should expect this year. I don't think
10 there's an action item for us as a community to
11 send a lot of letters. It's mostly an inside
12 Washington item, but I want to underscore where we
13 think that is right now.

14 There are two main strategies for getting
15 a change in federal law. We need a change in
16 federal law because current federal law is
17 ambiguous about what would happen if we wanted to
18 send spent fuel to an interim storage site, like
19 New Mexico or in West Texas. It's ambiguous about
20 how that would be funded, about who would hold
21 title to the spent nuclear fuel, and those things
22 really matter, because without clarity, we can't
23 actually send spent fuel to those sites.

24 There have been two strategies that have
25 been pursued simultaneously: One strategy is to

1 try to change federal law through the
2 authorization process. That is the strategy that
3 was followed last year in the house with a bill
4 that passed the house but didn't even get an
5 airing in the senate. There will be another
6 attempt at that in the house probably this fall.
7 This spring the house is busy doing other things,
8 climate change, green new deal, a variety of
9 activities, but this fall it looks like there will
10 be an effort to at least talk again about a new
11 version of what last year was called the Shimkus
12 Bill.

13 One of the things that is very
14 encouraging about that process is a lot more are
15 people talking about all the other rules that you
16 need to adjust including the rules around which
17 spent fuel gets sent first, which is very, very
18 important for us because the current arrangements,
19 although ambiguous, would send a shipment of fuel
20 from this site and then another site, and it could
21 take forever to get the spent fuel out of here, so
22 we're doing a lot of work to try and get the rules
23 changed to put spent fuel from places like San
24 Onofre that are decommission sites higher on the
25 list, and the politics of that are complicated but

1 there's a lot of work underway.

2 That's the authorization process, but
3 nothing has happened by that mechanism in the
4 senate. In the senate it's been a very different
5 strategy, which is trying to work through the
6 appropriations process, in particular because of
7 Senator Feinstein and Senator Alexander who have
8 been enormous champions of consolidated interim
9 storage and of getting funding for pilot projects
10 at these sites that are merging in Texas and in
11 New Mexico.

12 Pilot project funding is very, very
13 important, because if you can fund a pilot
14 project, if the Department of Energy can do a
15 pilot project, then we can begin to send shipments
16 of spent fuel, and we can begin to build a broader
17 political coalition that we need for a larger
18 change in federal law, so that's why it's so
19 important.

20 We have helped, along with many others,
21 to have the same language from the senate be
22 considered inside the house. My read is -- as of
23 the last few days, my read is that this year we're
24 not going to a get full appropriations in the
25 house for this, but we may well get what we need

1 for the pilot projects, and so there's a lot of
2 effort underway to make that happen. I want to
3 really applaud Senator Feinstein and her office,
4 Congressman Levin and his office, Congressman
5 Peters and his office, and Dorris Matsui,
6 Congressman Doris Matsui and her office
7 representing Sacramento, they among many others
8 have been enormously helpful in this and so I'm
9 encouraged. I am realistic about this. My guess
10 is that this year we're going to hit a double, in
11 the kind of opening day spirit, we're going to hit
12 a double. We're going to get -- there's a much
13 better than even chance we're going to get the
14 pilot projects, and that's the best we can hope
15 for, and then we move the ball, and then we're
16 back at this again next year.

17 I would prefer that we're doing this all
18 the current year because next year's politics are
19 going to be tough, because it's a presidential
20 election, but that's where we are in terms of that
21 process.

22 I want to mention one other aspect of
23 this, which is that if we are successful in
24 getting one or more of these interim storage sites
25 opened, we need a strategy for transporting the

1 fuel from here to there. We currently do not have
2 that strategy worked out in some detail. Tom
3 Isaacs is leading a panel for Edison as part of
4 the settlement that's going to work on some parts
5 of this, but a lot of this is very important, kind
6 of coordination amongst first responders and
7 communities through which the spent fuel might be
8 shipped.

9 And we have a few years ago asked the
10 California Energy Commission, the leadership of
11 the CEP, reflecting a meeting that we had, asked
12 the California Energy Commission to begin that
13 planning process. That effort two years ago went
14 nowhere, and thanks to Doris Matsui's office, we
15 have put this once again back in front of the
16 California Energy Commission, which has new
17 membership, and I hopefully will be able to report
18 by e-mail over the next few weeks that we are now
19 back in business, as it were, and the California
20 Energy Commission is going to be helping us out in
21 this regard. It would be a pity if we did all
22 this work to change federal law and we actually
23 had a strategy for sending the spent fuel out of
24 San Onofre and then we didn't have a game plan for
25 actually sending it out there, so we've really got

1 to be ready. And that game plan takes four or
2 five years to put together, so we've got to be
3 ready for that as it unfolds.

4 Next slide, please. There's just a
5 couple more of these updates, then we'll be done
6 with this.

7 It's in our interest to have other
8 communities like ours talking about this issue in
9 the same way and having the industry talk about
10 this issue in the same way and lobbying about --
11 lobbying congress for changes in federal law, and
12 the industry is interested in other things as well
13 but we really have an interest, a strong interest
14 in getting an echo chamber around the need for
15 interim storage, responsible interim storage,
16 responsible transportation strategies.

17 Dan, Jerry, and I wrote an Op-Ed in the
18 Los Angeles Times in January that has been
19 circulated very widely and very well received, I
20 think, that's part of this. I testified a while
21 ago in the house on this question, and we are now
22 going to a number of industry and community
23 meetings to try and build support and awareness
24 for this. I'll be at the two NEI, the Nuclear
25 Energy Institute meetings over the course of the

1 next couple of months.

2 Dan, you want to say a little bit about
3 your travels and people you've been talking with.

4 MR. STETSON: Sure, David, thank you.

5 Yes, I'm going actually going back to
6 Virginia next week and presenting at a conference
7 back there, and the goal of what I've been asked
8 to speak on obviously is not on the intricacies of
9 the physics involved, but really the importance of
10 the Community Engagement Panel, talking about
11 ours here, CEP, how it's constructed, how we use
12 it, and there's so many nuclear power plants that
13 are going to be going through decommissioning over
14 the next number of years. One thing I really hope
15 to leave with these different communities is the
16 importance of the community and how they can
17 really help towards that goal of getting the spent
18 fuel moved from their particular area into a
19 central site.

20 After I actually present at the
21 conference, then I'm going to be spending a couple
22 of days in Washington D.C. meeting with some
23 federal legislators with pretty much the same
24 focus.

25 DR. VICTOR: Excellent. Thank you very

1 much.

2 I want to mention two other things about
3 all of this, you can like the industry; you can
4 not like the industry; there's a range of views
5 about that. One of the reasons that we are, in
6 part, talking to industry groups here and notably
7 the Nuclear Energy Institute is because we need
8 their help lobbying for these changes in federal
9 law. This will not happen automatically. It's a
10 very complex process. And so that's our interest
11 in doing this, and I hope this is -- that's your
12 interest in doing this as well.

13 I also want to mention that the
14 transportation -- the technology for transporting
15 spent fuel is moving along. There is a program to
16 develop and test a model railcar. That has now
17 been built, it's undergoing testing. Steve
18 Maheras from Pacific Northwest Lab, in particular,
19 has helped us stay abreast of that. There's a lot
20 of e-mail traffic and information that the CEP has
21 had and that's all on the website with more
22 information about that.

23 I see no problems with the railcar
24 technology. I mean it's kind of gravity and
25 rolling, it's a little more complicated than that.

1 The bigger issue will be that once the railcars
2 are certified, we're going to need enough of them
3 so that we can actually send large volumes of
4 spent nuclear fuel. And so that is going to be an
5 appropriations issue, maybe a private sector
6 issue, and that's what we're going to be working
7 on next, but that's a little bit down the road.

8 Next slide, please. Okay. I want to
9 mention, and I see Roger Johnson here, in
10 particular, I want to thank Roger for his
11 attention to this issue. Roger and others have
12 asked us and organized the communities to demand
13 completely appropriately that we have some
14 workshops about what's the worst that could
15 happen, what does it look like, how do we know
16 that, what will the responses be, that's a really
17 important question. And as part of that is also
18 understanding radiation better because radiation
19 is omnipresent in the environment, and so one
20 needs to understand what's safe, what's not safe,
21 what do we know about levels of safety and so on.

22 We got a process underway to have a
23 workshop, at least one workshop on those topics,
24 and that was late last fall. A lot of you
25 contributed to it. And then this process of

1 really learning what happened at the site in
2 August and July and fixing that and having a
3 nuclear excellence culture. You'll hear more
4 about that tonight. That process is consumed,
5 essentially all the bandwidth is Edison. I think
6 that's right. That's a priority. That needs to
7 be done properly, but we have not lost sight of
8 the need for this workshop. My guess is we're
9 looking at third quarter, but once the fuel
10 restart process is back underway and people can
11 focus on this appropriately, this is going to --
12 this is a very high priority, and I know this is a
13 high priority of the CEP.

14 Last thing I'll to mention in terms of
15 broader updates is the Nuclear Regulatory
16 Commission has a proceeding underway to ask people
17 for information about community engagement so the
18 NRC wants to have a larger view, if not rules,
19 about this question. That's ongoing right now. I
20 think the comments are due in the middle of April,
21 and maybe at some point Scott and Linda and others
22 can tell us if there's something useful you want
23 to hear from us. I feel like you hear from us all
24 the time, so maybe you know what we think, but
25 maybe there are things that will be useful to

1 get --

2 MR. MORRIS: Happy to do it.

3 DR. VICTOR: That will be very, very
4 helpful.

5 And the next and last slide in terms of
6 general updates is I want to ask Dan Stetson to
7 talk a little more about how we're trying to raise
8 our game on answering questions.

9 MR. STETSON: Thank you, David.

10 As you know, one of the main goals of the
11 CEP is to be a bridge back and forth between the
12 community and Southern California Edison. Of
13 course an important component of that is to get
14 answers to the many questions that you have.

15 First of all, the first slide that you
16 saw when you came in, I thought that was a very
17 important slide. Even if you sign up as you come
18 in and write down your name, that doesn't mean
19 that you're going to be receiving the e-mail
20 notices from SCE, so you really want to go to the
21 website, things that we are really not able to
22 answer fully here, you can go onto the website,
23 just click on this link and those questions are
24 there with a full and complete answer. And if
25 it's something that requires more information,

1 they have other links to that information.

2 DR. VICTOR: Great, thank you. Thank you
3 very much. Thank you very much.

4 I want to pause for a minute and see if
5 any of the members of the CEP have anything they
6 want to add by way of updates, what's happening.

7 Tom.

8 MR. PALMISANO: I want to just mention,
9 related to the environmental impact report that's
10 been approved by the State Lands Commission, at
11 the back of the package on slides 41, 42, and I
12 believe 43 shows the next steps and activities for
13 the Coastal Commission. If we don't get to that
14 tonight to discuss explicitly, I want to make sure
15 you're aware of that, please. It's an important
16 process and you need to be aware that it's
17 ongoing. Thank you.

18 DR. VICTOR: Okay. Excellent. Great.
19 Thank you very much.

20 And Steve Maheras just sent me a note
21 telling me that the railcars are actually in
22 Pueblo, Colorado going to testing right now, so
23 there you go. There's another update if you want
24 to know exactly where the railcars are.

25 Sorry this took such a long part of our

1 meeting but a lot is happening and in particular I
2 want to draw attention to what we think is going
3 to happen this year. This is the most auspicious
4 year we've had I think in the history of the CEP
5 with regard to federal legislation.

6 Next slide, please.

7 I want to turn it now to Tom Palmisano
8 who is going to give an overview of what has been
9 learned from this process with the downloading
10 incident, what actions are being taken, not just
11 technical actions but management actions, and then
12 what the future looks like.

13 Tom, the floor is yours.

14 MR. PALMISANO: Okay. Thank you very
15 much. What I'm going to do over the next several
16 slides I'm going to recap some of what we
17 discussed in depth on November 28th, and it's
18 important so I'm going to recap it again. We've
19 got some important activities we've been engaged
20 in since then that I want to make sure I
21 thoroughly discuss with the panel and the public.

22 So, first of all, let me recap for those
23 of you who may not be as intimately familiar with
24 what happened on August 3rd. So this was an
25 unacceptable event. We were downloading canister

1 number 29 into the dry cask storage facility.
2 What you see here on the slide is a transporter.
3 It's called a vertical cask transporter. It's a
4 crane. It's a crane that lowers the canister down
5 into the storage vault. And the canister was
6 being lowered, the canister is actually inside
7 this transfer cask, and the canister lowered
8 about, oh, three for four feet in, came to rest on
9 a shield inside the internals of the structure.
10 That was not recognized by the operators lowering
11 the crane, lowering the canister, so they ended up
12 lowering the canister or the crane 18 feet. The
13 canister was wedged, if you will, in the top of
14 the storage facility and for about a 45 minute to
15 one hour period was unsupported by the rigging,
16 and hypothetically it could have dropped 18 feet.
17 Canister was welded, sealed shut, but it held 37
18 fuel assemblies.

19 So that's what happened on August 3rd.
20 The crew recognized that on the 20, 25 minutes
21 into the evolution when they were checking the
22 radiation readings to confirm everything was
23 satisfactory, they then recognized what happened,
24 were able to raise the crane, take control of the
25 canister again, lift it, center it, and

1 successfully lower it down. So the canister was
2 successfully lowered down, no damage to the
3 canister, no damage to the spent fuel, no risk to
4 either the workers or public health and safety.

5 However, let me be clear, this is an
6 unacceptable event. It should not have occurred.
7 I'm going to talk more about what we've learned.
8 We then that afternoon -- this was a Friday
9 afternoon -- we ceased all fuel handling. We had
10 another canister ready to go, which we have not
11 moved out of the fuel building yet as to
12 investigate the event. And initially it appeared
13 to be very simply a human error, possibly poor
14 procedural guidance as we started initially in
15 that first week to investigate the event.

16 We kept fuel handling on hold, and on
17 Monday, August 6th we made a courtesy notification
18 to NRC Region 4 and briefed them on the event,
19 briefed them on what had happened, and committed
20 not to resume fuel handling until both we
21 understood and corrected the causes and they had a
22 chance to inspect. And that commitment remains in
23 place, and we have not resumed fuel offload at
24 this point.

25 So I'm going to get into the causes of

1 the incident, but fundamentally initially what
2 appeared to be an error by the part of the people
3 lowering it down and not recognizing it was
4 wedged, there were deeper issues that came out of
5 the causal analysis in terms of adequate
6 procedures, adequate training, adequate equipment,
7 and adequate oversight as well as we missed some
8 lessons learned. I'm going to elaborate on that.
9 I covered this in depth on November 28th but I'm
10 going to go through it again but be a little
11 briefer.

12 What is important, although the canister
13 did not drop and was lowered safely, no damage to
14 the fuel, no risk to the workers or the public.
15 Had the canister dropped, what could have
16 happened? On November 28th I explained this, the
17 canister is designed and analyzed to withstand a
18 drop up to 25 feet and not breach the canister,
19 which is important because that's what contains
20 the radioactivity from the spent fuel. Had the
21 canister dropped 18 feet, the canister would have
22 remained intact, we would have damaged the fuel
23 assemblies inside, but there would have been no
24 loss of safety function of the canister and no
25 release of radioactivities. We've done extensive

1 reviews in our analysis, provided that to the NRC
2 and I believe in the webinar they summarized their
3 conclusion on that in the webinar they held on
4 Monday. I'll let the NRC speak to that. So that
5 is an important element of the design of this.
6 It's a very robust design to be able to withstand
7 events like that.

8 I'm going to talk about actions to
9 prevent reoccurrence in a minute. Now, let me
10 address something upfront that I addressed on
11 November 28th, but I just want to make it
12 absolutely clear, we made a serious error at the
13 Community Engagement Panel meeting on August 9th.
14 This was six days after the event, we had an
15 opportunity to discuss the event, we did not put
16 enough significance on the event early on, because
17 we hadn't done enough causal analysis, and I
18 particularly did not discuss it as part of the
19 normal update. It took a courageous contract
20 employee to bring it up during public comment
21 period, and I compliment that person for his
22 courage. That was a failure on our part, clear
23 failure on our part to be transparent, and we have
24 learned from that and have endeavored to be
25 transparent since then. You'll hear more of that

1 tonight as I discuss other issues. We are
2 recommitted to that sense of transparency in terms
3 of sharing information and we will continue to do
4 that as we get ready to restart fuel handling and
5 then eventually complete the fuel offload. That
6 was a serious failing on our part, and we
7 recognize that and take responsibility for that.

8 With that, let me move on. So I'm going
9 to -- the next several slides I'm going to recap
10 what I discussed at length on November 28th, so I
11 will be brief but let's make sure the Panel's
12 questions are answered.

13 DR. VICTOR: Are you going to say
14 anything more about the drop analysis or that's --

15 MR. PALMISANO: We -- I think we've
16 posted a redacted version of the drop analysis,
17 but the drop analysis has showed that the canister
18 can withstand up to a 25-foot drop without
19 breaching the confinement boundary. We've had the
20 analysis done by Holtec, we've reviewed it, we've
21 had it reviewed separately by an independent
22 engineering firm, and we've done multiple reviews
23 on this and it is a solid analysis that clearly
24 demonstrates the canister.

25 DR. VICTOR: So I just want to underscore

1 one thing about this because I've heard some
2 things, a lot of things in the press about
3 referring to another Nuclear Regulatory Commission
4 analysis a different kind of canister and I think
5 the way that analysis was done was also
6 misinterpreted. We have asked -- Tom Isaacs and I
7 have spent a lot of time with your senior
8 management and have asked for a full and plain
9 English report on what the drop analysis shows.
10 And I believe that report is now on the site and
11 we need to make sure --

12 MR. PALMISANO: We're finalizing that and
13 we will provide that.

14 DR. VICTOR: -- that as part of the going
15 forward, I know you're going to talk about the
16 scratch analysis later and so on but as part of
17 going forward, that information in plain English
18 needs to be available to the public so they can
19 understand why the industry including the Nuclear
20 Regulatory Commission has such confidence in the
21 drop analysis. It's really important because
22 people have understandably been concerned about
23 what would have happened, what's the worst case
24 here, and that's been analyzed as part of the
25 licensing process to again very rigorously.

1 MR. PALMISANO: It's a legitimate
2 concern. We have the detailed analysis. We are
3 preparing the laymen's version, if you will.

4 DR. VICTOR: Okay.

5 MR. PALMISANO: And will make that
6 available.

7 Okay. Again, recapping what I talked
8 about in November since then as we really
9 understood the significance, not only of the event
10 of a canister being unsupported for 45 minutes to
11 an hour, but I think equally important is the
12 underlying causal factors. How did this occur?
13 What did we miss? This is really where the meat
14 of a lot of the corrective actions come in.

15 So Holtec is our contractor who was
16 performing the activity under our oversight and
17 supervision. We and Holtec collectively have
18 performed significant in-depth analyses to
19 identify performance deficiencies and causes. I
20 was pretty candid about this, and I'm going to be
21 candid tonight about what we learned and what
22 we're disappointed in our performance. We've
23 identified causes related to training, procedures,
24 use of the technology to monitor the lift and the
25 load and oversight and related to this what we

1 call our corrective action process, in other
2 words, how did we miss some early indicators that
3 we were going to have this type of problem.

4 We have engaged a third-party engineering
5 firm looking at not only the technical analyses,
6 like a drop analysis or a scratch analysis as
7 well, they have strong expertise in root cause
8 analysis and corrective actions, so they have been
9 engaged in this since the start of our
10 evaluations.

11 Additionally we brought in and
12 independent readiness assessment team. We reached
13 out to people, retired utility executives, people
14 with dry cask storage experience, particularly
15 with Holtec experience to form an assessment team.
16 We've had them review the corrective actions,
17 assess our activities on site, witnesses are
18 practice runs and give us their candid feedback in
19 terms of what appears acceptable, what needs
20 further work, et cetera. So that activity has
21 been ongoing and we'll continue to use them as we
22 get ready to resume fuel offload.

23 Let me step to the next slide here, so I
24 used this graph before as a way to summarize the
25 causal factors were found in the areas of the

1 training, equipment, corrective action, oversight,
2 and procedures. So briefly I'm going to walk
3 through this again. Again, we had talked about
4 this in some depth. I'll be glad to answer any
5 questions for the Panel.

6 With respect to procedures, so we had
7 started the fuel offload with a standard set of
8 procedures that the vendor had used at their other
9 sites, which may have been appropriate with a
10 certain level of detail for experienced crews but
11 as we look at what happened to us, they really
12 were weak procedures, they needed more information
13 about critical steps, more explicit information
14 about qualification of the people, load limits for
15 the download to make sure we monitor the load to
16 see if it were to hang up, we can see that early,
17 and training on use of the equipment.

18 We're the second site to use this system.
19 The first site a couple years ago was Callaway in
20 Missouri. We had gone to Callaway and seen their
21 procedures, their activities, had Callaway on
22 site. What we realized is we have a long
23 campaign, about a year long to load 73 canisters.
24 Our procedures were not sufficient for that long a
25 campaign, especially when we married it up with

1 people coming and in out of the job periodically
2 as they rotated in and out. So that was a key
3 causal factor, and we have rewritten all the
4 procedures, we have walked through these
5 procedures, we have what is called a Canister
6 Simulator, that is basically a full-sized canister
7 filled with concrete so we can go through all the
8 activities and we have worked through all the new
9 procedures with multiple operations to ensure the
10 procedures are correct, they have the right
11 detail, and the crews are comfortable that they
12 understand the procedures. When I get to
13 training, I'll talk more about that.

14 Also, we have an oversight organization.
15 We, Edison provided oversight to the contractor
16 doing the work. We did not see some of these
17 problems sufficiently to prevent this, so we've
18 overhauled our oversight processes and procedures.
19 We have put much more detail into our oversight
20 processes and procedures in terms of what we do
21 and accept with the contractor, and we've written
22 very specific field performance guides for what we
23 look at when we're in the field whether it's in
24 the spent fuel pool watching them put fuel
25 assemblies in the canister or watching the

1 canister being transported or downloaded. So
2 we've added considerable robustness and detail to
3 the oversight procedures.

4 So training, training goes hand in hand
5 with procedures. When you think about having a
6 trained qualified operator with a good set of
7 procedures to perform the task successfully. So
8 we've looked at training, and we've looked at the
9 qualifications of people who were involved in
10 event and who have been involved in the previous
11 canister loadings, and we've revised the training
12 programs to match the procedures and provide the
13 more detail and specificity. So we've got a much
14 more detailed and robust set of procedures,
15 coupled with a more detailed training and
16 qualification program.

17 We have retrained all personnel involved:
18 contractor personnel, Edison personnel,
19 supervisory personnel, management oversight
20 personnel. So we have all been trained in the
21 more detailed procedures and on the new equipment
22 that I'll mention in a minute. Particularly we
23 then retrained our oversight specialists. We
24 looked at the oversight specialists we're using,
25 which were experienced folks, but not necessarily

1 enough experience say on a Holtec dry cask storage
2 system, so we've changed the mix to bring in more
3 specific experience, we have trained them in the
4 revised procedures, and we are providing more
5 oversight and supervision to our oversight people
6 to make sure they're an effective barrier as they
7 observe the contractor activities.

8 Equipment, again, I talked about this
9 last time so on August 3rd when this download is
10 occurring, the crane has basically some load
11 indication built into it so you can see the load
12 as the canister goes down and you should expect to
13 see a load on the crane, and then as the canister
14 sits at the bottom, the crane should basically
15 unload, the load should come off.

16 The system was not, I would say, user
17 friendly. You had to shift between multiple
18 computer screens, and certainly not as accurate as
19 we needed to allow the operators to be successful.

20 Likewise, the other thing that was in
21 place was a person up in a man basket as a spotter
22 to watch the top of the canister go all the way
23 down. Those were the two things in place to make
24 sure the load was moving as we would expect. The
25 that did not work effectively. One of the key

1 things the spotter moved himself out of direct
2 sight of the top of the canister, well-intended
3 thinking he's minimizing his radiation exposure
4 but not understanding the importance of the visual
5 monitoring of the top of the canister all the way
6 down. So he was not in a position to see it stop
7 and hang up, likewise, the load monitoring was not
8 user friendly, if you will, to allow the crane
9 operator to realize the canister was wet.

10 So what we've done, a number of things,
11 first, we now have a camera mounted with multiple
12 people able to see the screen, so a camera
13 continuously monitors the top of the canister.
14 We're not relying solely on a person to watch the
15 top of the canister. So we can observe the
16 downloading remotely, we have more people up
17 around the equipment. One of the errors we made
18 is we had too few people associated with the
19 download. Everybody else stepped farther back to
20 minimize their radiation exposure, which is a
21 legitimate concern, but we over-functioned on
22 that.

23 So we have more people monitoring the
24 download with multiple indications. Likewise,
25 we've significantly improved the load monitoring.

1 In addition to what was already built into the
2 crane, we put in some independent load monitoring
3 shackles and this is an example here. This is one
4 side of this -- this is one of the slings
5 connected to a shackle, and this reads the load on
6 the shackle. These are tested and calibrated and
7 transmits directly to a monitor that several
8 people can watch the load, independent of the
9 crane operator to make sure we watch the load as
10 the canister is lowered and understand exactly how
11 the downloading is proceeding. Even something as
12 simple we picked up from Callaway, tie a rope on
13 the top of the canister and somebody stands there
14 with a long length of rope in his hand and feels
15 it continuously go down, follow the canister down.

16 We've got -- that may sound a little
17 hokey but something that simple gives you yet
18 another way to make sure you know the canister is
19 moving, not just the crane coming down, but the
20 canister is moving. All those combined give us
21 significantly improved capability. This equipment
22 now is all built into the procedures and the
23 training such that the operators know exactly what
24 they're looking at, what they should see. At
25 certain points in the download there are alarms

1 built in to see if we start to encounter an
2 obstruction where the canister would start to hang
3 up and take some of the load off the crane, all
4 that is built into this. So the equipment, the
5 procedures, and the training all come together to
6 allow the people to be successful on a download.

7 A corrective action program, this one is
8 an important underpinning of everything we do in
9 nuclear. We have had a corrective action program
10 for a number of years. Our vendor had a
11 corrective action program, we failed to use the
12 program effectively.

13 DR. VICTOR: Let me just ask, Ted Quinn,
14 is that about the previous slide or --

15 MR. QUINN: In the NRC webinar they
16 provided on Monday, they provided a visual that
17 was really impressive, and it showed the before
18 and after crew assignments that I wish you would
19 present today, because I think it's very telling
20 on the number of people signed before and now the
21 number of people what their specific job actions
22 are, I think it's really important for the public
23 to see that.

24 MR. PALMISANO: I'll tell you what, I
25 don't have it loaded in the slide dec. I will see

1 if we have that available.

2 MR. MORRIS: It is on our website.

3 MR. QUINN: Oh, it's on your website,
4 okay.

5 MR. PALMISANO: At the break, maybe
6 before the comments, I can have those two
7 graphics. What it shows is during a download
8 previously, we would have a number of people step
9 a distance away from the canister so there are
10 just two people up there, the spotter and the
11 crane operator during the download, because
12 radiation levels change as the canister goes down,
13 and one of the things we do is try to balance
14 radiation exposure by the number of people. We
15 erred, we and the contractor erred; we moved
16 too many people too far away.

17 What Ted Quinn is talking about is this
18 graphic shows what happened on August 3rd and
19 before when we had just two people at the crane
20 during this evolution, we now have about 10 or 12
21 all in key positions, and basically, I'm not just
22 the only spotter looking at it, there's multiple
23 people with a television camera, the rope to know
24 the canister is moving, et cetera. So we'll see
25 if we can pull that graphic up.

1 DR. VICTOR: Very quickly, so safety is
2 job one here, very crucial, who is paying for this
3 now? Because Holtec didn't do it properly and
4 they just are going to pay this cost, or who's
5 going to pay the cost?

6 MR. PALMISANO: Ultimately, obviously, we
7 have commercial issues with Holtec, and I don't
8 get into commercial issues here, but in general,
9 we have a contract that has certain requirements,
10 and we will certainly do the right thing on behalf
11 of our customers in terms of recovering costs for
12 this. That's really all I can say about that
13 here.

14 So corrective action program, what a
15 corrective action program is to take low level
16 issues and identify them and understand them and
17 trend them before they become an event like
18 occurred on August 3rd. What we failed to do in
19 the first 28 canisters, the crews were having some
20 difficulty, you know, it's not the first time,
21 there's a tight fit to lower the canisters, some
22 interference occurs, you'll hear me talk about
23 scratching later where some rub and wear
24 indications occur on the canisters, but when the
25 crews were having some difficulties if they felt

1 it was not significant, they didn't identify it so
2 we could learn from it. So that's a failure to
3 effectively use what we would call a low-threshold
4 corrective action system that we had learned to do
5 for years in operation.

6 So that was one of the significant things
7 as we looked back is why didn't we see these
8 problems developing before they become an event.
9 So what we've done is we've strengthened the
10 application our, the owner and the licensees'
11 corrective action program, the vendors will now
12 use our program, end of our discussion. The
13 things will go in our program; we have more
14 experience with it, quite frankly, we provide more
15 oversight, and we failed to do that, relying too
16 much on the vendor's program, so we strengthened
17 that and we trained all of our people about two
18 aspects: one, proper use of the corrective action
19 program and specifically lessons learned from
20 August 3rd.

21 July 22nd you may remember I talked about
22 was a precursor event, a canister did not get hung
23 up and not supported, but they had considerable
24 trouble downloading it where it would contact,
25 they would have to lift it, recenter it. That's

1 the type of thing we didn't capture and understand
2 on July 22nd that may have prevented the
3 August 3rd event. So that's the intent behind
4 this. And I've said, we've retrained everybody on
5 the corrective action program, appropriate use,
6 the appropriate threshold.

7 And then oversight, this is both the
8 technical people that provide oversight as well as
9 the management oversight. So we've significantly
10 enhanced the oversight organization, we brought in
11 more people with more fuel handling experience.
12 As I've said, we've revised their training
13 procedures, we've done a rigorous review of the
14 contractor procedures, and we've strengthened
15 senior management. Doug joining the project in
16 addition he provides, for example, more executive
17 management on the project, and we strengthened
18 management at all levels on the project.

19 Now, this I did not discuss in detail on
20 November 28th so let me pause here. Let's go back
21 one and see if there's questions. I've just
22 recapped things I talked about on the 28th, but I
23 want to make sure if there are questions, we take
24 a pause here.

25 Yes, sir?

1 MR. TAYLOR: Has anything been done to
2 engineer the process of dropping the cask that
3 would prevent it from getting hung up?

4 MR. PALMISANO: We have made a number of
5 changes to approve the alignment. This is all
6 about -- let me see if I can go -- Manuel, can you
7 run back to the slide that shows the cask,
8 transfer cask and the download set up? This will
9 make more sense in a minute. Right there.

10 What you're looking at is a transfer cask
11 that's roughly about let's say 25 feet tall, rough
12 numbers. The canister inside is just under
13 17 feet tall, and that sits on a mating device and
14 then it gets lowered roughly 25 feet into the
15 vault. Okay. So this is called a blind lift in
16 that you've got to line this up but then you
17 really can't see the bottom of the canister.
18 There are some tight clearances by design for
19 radiation shielding, so what we learned out of
20 this is we were not paying enough attention to the
21 initial alignment setting up some unnecessary
22 contact and interference.

23 Now, I don't want anybody to be naive,
24 there will occasionally or frequently be some
25 incidental contact. Any vertical system whether

1 it's this one or others, depending on the
2 tolerances, has some contact as the canister is
3 lowered. We found alignment is important, okay.
4 We've significantly improved that and demonstrated
5 that during dry runs as well as the equipment to
6 better monitor. That is what has been done.

7 MR. TAYLOR: Thank you.

8 Thank you, Manuel. Let's go back to the
9 slide I left at.

10 Other questions from the Panel? I want
11 to make sure we take a minute.

12 Okay. So let me go on. So now I want to
13 talk about event reporting. This gets to the
14 violation that the NRC discussed in the
15 pre-decisional enforcement conference in the
16 recent webinar on Monday when we got the results.
17 One of the things we did, we did not interpret the
18 regulations correctly in terms of a formal report
19 to the NRC. The event occurred August 3rd, and we
20 notified the NRC informally with a briefing on
21 August 6th, the next working day, on Monday.

22 However, there were also formal reporting
23 requirements that there's some criteria specified,
24 in this case 10 CFR Part 72, for the dry cask
25 storage system. We read that, we did not

1 interpret it correctly that this required a formal
2 report, which is submitted to the NRC
3 headquarters, and that report allows a couple
4 things: one, it alerts the NRC so they can decide
5 an appropriate response; and, secondly, it alerts
6 the rest of the industry that the event occurred
7 and at least with the initial information.

8 Although we may have provided the NRC appropriate
9 information on a courtesy basis, we did not meet
10 the formal reporting requirement, because we
11 misinterpreted the regulation.

12 We discussed that with the NRC when they
13 were on site in September, and ultimately they
14 convinced us that we were interpreting it wrong,
15 and we filed the required formal report on
16 September 14th; however, it was late. Okay,
17 there's a specified time period and that was late.
18 So as a result of that -- I'm not going to talk
19 about the enforcement action, that's been
20 communicated I think effectively, but we had to
21 take corrective action.

22 So why did we not understand the
23 regulation well enough around reporting? We've
24 reviewed and revised our procedures. We've
25 provided additional training; we've gone back and

1 looked at other activities to say did we
2 misinterpret something that may have hit the
3 threshold for formal reporting. After the
4 training we've tested our people, and we will
5 retrain regularly on this.

6 The other thing you've seen since then,
7 again, with what we learned out of this, we have
8 now made several other reports basically adopting
9 a better attitude that if we're in doubt, we're
10 going to report it, we can always retract it if it
11 doesn't meet the criteria. So we have fixed this
12 issue, but that's what was behind the failure to
13 make the formal report.

14 So basically everything I've covered, I
15 covered on November 28th so I just briefly
16 recapped. So let me talk about some important
17 things, and I want to take some time on this
18 because we've continued through some of the
19 corrective action reviews to find some issues at
20 varying levels of significance but it's important
21 in the effort to be transparent that we talk about
22 those. I think we're a little long in time, but
23 I'll try to be brief here.

24 So we've done a broad review, so we
25 Edison, Holtec, our contractor, our third-party

1 vendor, and we Edison and the NCR through their
2 inspection activities have identified some other
3 issues, some of which have needed corrective
4 actions. I'm going to talk about three in
5 particular: canister wear assessments and what
6 are its effect on corrosion resistance. This is
7 the question the canister scratching or rubbing.
8 Secondly, one of the reports we made was related
9 to this HI-PORT Crawler transporter haul path, and
10 I'll explain that, and another report we made, and
11 the last one we'll retract, is seismic
12 qualification of the vertical cask transporter,
13 that crane that you saw a picture of.

14 So canister wear assessment this has
15 gotten a lot of interest both from us, from the
16 NRC, and I think from the public. What happens
17 when these canisters are downloaded there are some
18 incidental contact that will create wear marks or
19 scratch on the outside of a canister as its
20 downloaded. This canister weighs 50 tons, it's
21 downloaded, it has tight tolerances, not just the
22 shield at the top but in the seismic strength and
23 it will make some slight contact as it slides
24 down. The question is, are those significant and
25 what do they mean in terms of the safety

1 capability of the canister in the long term
2 corrosion resistance.

3 So we have done multiple analyses of
4 this. We've done wear analysis and we've had
5 expertise from our third-party engineering firm,
6 Holtec did a wear analysis, we've done a very
7 sophisticated finite element analysis. We've also
8 done some factory testing where we took a sample
9 of the material, a stylus and mocked up side loads
10 to see what scratching might occur, what depth of
11 scratching, and the other thing where we just
12 completed the first round of we've actually
13 inspected three canisters that are loaded with
14 fuel and downloading.

15 We've talk a bit about aging management.
16 So what we did is we accelerated some of the work
17 we're doing. One of the advantages of this Holtec
18 vertical system we can examine virtually probably
19 95 percent of the canister surface. We take the
20 lid off, and I'll show you a picture of that in a
21 minute. So we've got those results and the bottom
22 line is we will write up a paper on this, we're
23 reviewing the results and providing it to the NRC
24 for their review; we have found basically wear
25 marks that are insignificant. They are not deep

1 scratches that would threaten the integrity of the
2 canister, its physical capability for strength,
3 they don't create a corrosion problem because this
4 type of stainless steel the passive oxide layer
5 reforms very quickly. So we have concluded that
6 these are insignificant, there is no current issue
7 with the canister, no long term issue, and this
8 will be monitored on our aging management program.

9 I want to show you this -- the canister
10 inspections, this is new. We've just done this
11 over the last week and a half, and we have put a
12 page on our website where you can see a little bit
13 of this. What we did is we've been working with
14 various vendors to develop robots. You've heard a
15 lot of discussion about canisters cannot be
16 inspected, can be inspected, you've heard me say
17 the industry is now inspecting canisters. What we
18 did, this is a robot, it's got actually silicone
19 magnetic wheels, it rides on the divider shell,
20 that's the canister, that's the divider shell. We
21 take the lid off, you see the worker standing far
22 enough back. The radiation levels here are such
23 that we can be at that distance. That's a tool
24 that basically is articulated, places the robot on
25 the wall. Since the divider shell is carbon

1 steel, the magnetic robot just rides up and down.
2 It's got a very high resolution camera, which
3 allows us to take a good visual exam of all the
4 sides of the canister as well as with the 3D
5 capability actually size scratches. So we've
6 completed that on three canisters, and basically I
7 will tell you that the results of that will
8 show you that -- let me go back one -- what we've
9 seen is nothing that is basically any depth not
10 even as thick as a credit card. We're all
11 familiar with a plastic credit card. These are
12 wear marks. They are not any risk to the canister
13 in the short term or the long term. We've
14 provided that information to the NRC, and they are
15 reviewing our inspection results. And I believe
16 they made a comment about the scratches on the
17 webinar on Monday.

18 We will now enter this into our aging
19 management program. We are not finished with this
20 yet. We want to make sure we've done enough to
21 the look at the canisters.

22 But a summary on the canister wear: it's
23 a robust design, 316L stainless steel, very good
24 corrosion resistant. The standard canister Holtec
25 and others use is a half inch; ours are an eighth

1 of an inch thicker. That's one thing we did with
2 our first system and this system. I've talked to
3 you before about how we laser peened the welds to
4 improve their corrosion resistance and other
5 things we've done.

6 The conclusions we've drawn is that the
7 wear is incidental. There is no safety
8 significance. The oxide layer reforms, and we
9 will continue to monitor this through the upcoming
10 inspection and maintenance program. This is
11 important so let me see if there's a question.

12 DR. VICTOR: Just want to pause for a
13 moment. I'm mindful of the time but I just want
14 to see if there are any questions about this
15 because there have been two issues in the news a
16 lot, one of them is about the drop risk.

17 MR. PALMISANO: Right.

18 DR. VICTOR: And one of them is about the
19 scratches or gouges or incidental contact or
20 whatever word people want to use, but that's what
21 this wear assessment is about.

22 So are there any comments? Ted Quinn.

23 MR. QUINN: Yeah. Tom, can you
24 inspect -- you inspected three canisters?

25 MR. PALMISANO: I'm sorry?

1 MR. QUINN: You inspected three
2 canisters?

3 MR. PALMISANO: Yeah, we inspected the
4 one on the August 3rd event, the one on the
5 July 22nd similar issue, and then a third one.

6 MR. QUINN: Okay. So you -- I was
7 interested in how you picked the three canisters
8 out of the --

9 MR. PALMISANO: So that's how, the one
10 that got hung up, okay, the one on July 22nd that
11 had multiple attempts to download before it was
12 successful, and then a random third canister.

13 MR. QUINN: Okay. Were you planning on
14 inspecting any others?

15 MR. PALMISANO: We haven't made that
16 decision yet. We're evaluating the data. Realize
17 for the Holtec system we're going to put in place
18 an inspection maintenance program the fall of
19 2020. That will identify periodic canister
20 inspections.

21 MR. QUINN: Will this equipment be used
22 in that --

23 MR. PALMISANO: This is better equipment.
24 This is stuff we've developed over the last year.
25 We have not had an opportunity to come in and show

1 you --

2 MR. QUINN: With EPRE?

3 MR. PALMISANO: -- the capability.

4 MR. QUINN: With EPRE or with --

5 MR. PALMISANO: Working directly with GE.
6 EPRE was on site observing this. We had -- at a
7 future meeting I'll give you a full discussion of
8 this development of inspection and some day
9 mitigation, but we've worked with EPRE, we've
10 worked with both vendors, Holtec and Transnuclear,
11 which is the horizontal system as well as other
12 utilities.

13 DR. VICTOR: I want to say two more
14 things about this, one is that what you call the
15 aging management program is what we've also called
16 in this room the defense-in-depth.

17 MR. PALMISANO: Right, part of the
18 defense-in-depth.

19 DR. VICTOR: Which is something that's
20 going to be at least one meeting a year, it's
21 going to be about how do we know how these things
22 are aging and how they're going to be inspected,
23 and now you're demonstrating the capacity to
24 inspect, except for the bottom plate, the entire
25 canister by robot.

1 MR. PALMISANO: Right.

2 DR. VICTOR: I think that's incredibly
3 important.

4 The other thing is that one of the
5 purposes for this work was to calibrate the
6 models, to make sure the models are accurately
7 depicting --

8 MR. PALMISANO: To confirm --

9 DR. VICTOR: -- what kinds of scratches,
10 and the depth of those scratches. So it seems to
11 me that once you've reported all this information
12 back to the NRC and the NRC has looked at it and
13 accepted it, then you've got your own analysis and
14 Holtec's analysis, plus an independent third set
15 of eyes on it from MPR, and then now the NRC
16 looking at this, and then we're going to make an
17 English language version of --

18 MR. PALMISANO: Right.

19 DR. VICTOR: -- translated from engineer
20 to English available to the public for both of
21 these analyses so that people can also see what's
22 happened here.

23 MR. PALMISANO: Yes.

24 DR. VICTOR: It's really important.

25 MR. PALMISANO: So let me summarize, so

1 we've taken the engineering analysis, we've taken
2 the factory testing, and now the field examination
3 are all three correlate very well. Basically the
4 factory testing and the field examination tell us
5 the engineering analysis is reasonably accurate in
6 predicting what may have happened during this
7 incidental contact and where scratching.

8 Let me just elaborate so everybody is
9 clear, aging management program is required after
10 the first 20 years by the NRC as part of the
11 license renewal for the system. We are preparing
12 that for the AREVA system, which is coming out at
13 its 20-year point. The inspection maintenance
14 program will go in place in 2020 for the Holtec
15 system, a commitment we made to the Coastal
16 Commission for an early program. All these
17 programs basically sample canisters to monitor
18 them over time. That's what you'll hear more
19 about in the future.

20 DR. VICTOR: We should let you go on.

21 MR. PALMISANO: Thank you.

22 Okay. The HI-PORT Crawler Transporter
23 Haul Path, this initially we found in doing some
24 of what we would call an extended condition
25 review. Once we looked at the difficulty we had

1 with downloading and the problems with the
2 procedures and the training, we asked ourselves
3 what else may be out there in the system that we
4 have not looked at thoroughly. What we identified
5 here, what you're looking at here is called a
6 HI-PORT Transporter. This canister load here
7 you're looking at something if the canister inside
8 is 50 tons, you've got the transfer cask around
9 it, so you're looking at a significant heavy load
10 that has to be moved from the spent fuel building
11 over to the base where it's picked up by the
12 crane.

13 This has to be seismically monitored and
14 analyzed if an earthquake were to occur while this
15 is moving to make sure it doesn't tip over. Well,
16 it's operated within the parameters so it doesn't
17 tip over, but what we found is Holtec had assumed
18 you kept 30 inches away from any side obstruction
19 like a light pole, something, you know, or a
20 building. That was not translated well in the
21 procedures and training and we may have violated
22 that 30-inch assumption a couple times, so we made
23 a report to the NRC that we may not have been
24 within the design basis.

25 We then reanalyzed this, first of all,

1 and the real number that's important is 12 inches
2 roughly, now 30 inches, then we importantly marked
3 the haul path and trained all the operators and
4 practiced with our test canister to make sure we
5 can navigate from the building, the grade changes,
6 you've got to go around some obstructions to make
7 sure we can maintain the appropriate distance.

8 So this is an NRC report we made, we
9 understand it now, we've corrected it, and that
10 system is ready to go. So what I've talked about
11 transport to haul path, we identified that, we
12 made the report to the NRC in December, we've now
13 analyzed it, we've completed the corrective
14 actions, we've practice this numerous times, and
15 we're satisfied with this. And the NRC has a had
16 chance to field their inspection activities to
17 observe this, review this, and concluded that what
18 we've done is acceptable.

19 The next one is a related issue. This is
20 a close-up picture of the vertical cask
21 transporter. So this now suspends this load, this
22 50-ton canister with its overpack from a crane.
23 And this has to crawl up a ramp, move over, and
24 then lower it down. So while this is in place,
25 there's a cask restraint strap, think of that as a

1 seismic strap, that should a seismic event occur,
2 the crane is designed for it and analyzed. You
3 want to make sure the canister doesn't swing
4 excessively. So this strap is put in place and
5 the canister is lifted off as it's moved.

6 So what we found, it's typical practice,
7 not just by us but by others, at some point as you
8 get close to where you're going to put it on the
9 mating device, you disconnect the strap. And we
10 asked the question -- the NRC is the first one
11 that asked the question, are you still seismically
12 analyzed with that strap disconnected for that
13 short period of time?

14 You know, our gut feel was, you know, the
15 crane is capable of this and the strap may not be
16 needed but we made a formal NRC report, again,
17 erring on the side of caution from the lesson we
18 learned, let's report it. If we find out it's not
19 an issue, we can retract that.

20 So we've now done analysis that
21 demonstrates the VCT, the vertical cask
22 transporter while it's carrying that load without
23 the strap, there's no adverse effect on the design
24 basis earthquake, in other words, the cask doesn't
25 swing sufficiently, the crane can handle that

1 response, and this is really a nonissue in that
2 sense.

3 We have strengthened the procedures.
4 We'll maintain the strap until as long as we need
5 to, a little longer than we had been until we're
6 ready to monitor the mating device, and we will
7 retract the NRC report since we've concluded that
8 we were always in an analyzed condition, a little
9 technical but --

10 DR. VICTOR: And the design basis is the
11 ground acceleration for the most extreme event per
12 what Neil Driscoll presented a year and a half
13 ago?

14 MR. PALMISANO: Yeah. Again, to refresh
15 your memory, our two dry cask storage facilities
16 are designed for an earthquake much greater than
17 the power plant or the spent fuel pools were
18 designed for. This was done back in the early
19 2000s. We've really upped the seismic criteria
20 for the system.

21 DR. VICTOR: I think that's one of the
22 reasons why done safely and properly, it's
23 important to get the spent fuel into the --

24 MR. PALMISANO: Into the dry cask
25 storage.

1 DR. VICTOR: -- into the dry cask
2 storage.

3 MR. PALMISANO: It's a more robust
4 facility than even the power plant was built.

5 Okay, with that, yes, Donna?

6 DR. VICTOR: Donna Boston.

7 MS. BOSTON: Does the design basis
8 earthquake for the process of loading match the
9 spent fuel storage?

10 MR. PALMISANO: The dry cask storage,
11 yeah, yeah.

12 MS. BOSTON: The loading process.

13 MR. PALMISANO: So the earthquake we used
14 for the whole loading process once it leaves the
15 spent fuel building is the higher criteria that --

16 MS. BOSTON: Okay.

17 MR. PALMISANO: -- that the dry cask
18 storage facility is built to.

19 MS. BOSTON: Okay.

20 MR. PALMISANO: Yes, sir.

21 MR. TAYLOR: What would be the level of
22 that earthquake, you know, 7.5?

23 MR. PALMISANO: It's well above 8. I
24 mean, it's tough to go from ground motion
25 acceleration. To give you a number, the power

1 plant, the reactor the spent fuel pools were
2 designed for 0.67G acceleration, okay. This is
3 system is designed for 1.5G horizontal and 1G
4 vertical, and this is logarithmic relationship.
5 That is an extremely intense earthquake.

6 MR. TAYLOR: So somewhere around 8, you
7 think?

8 MR. PALMISANO: I can't correlate to a
9 Richter Scale.

10 MR. TAYLOR: Okay.

11 MR. PALMISANO: All this is done in terms
12 of acceleration.

13 DR. VICTOR: You know, we should get you,
14 because you weren't on the panel when we had a
15 briefing on new seismic analysis of the most
16 potential extreme events, let's get you -- let's
17 circulate it to the panel again, let's get you
18 that information plus some of the work that was
19 done to translate that into the numbers that
20 really matter, which are the peak ground
21 acceleration.

22 MR. PALMISANO: Let me pause here. I'm
23 about to wrap up. I know I've gone a little long,
24 but I appreciate the patience.

25 DR. VICTOR: Anything else people -- Dan,

1 Dan Stetson.

2 MR. STETSON: Tom, with reference to the
3 camera, is it actually filming it? And is it --
4 and you mentioned that the thickness of -- the
5 depth of the scratches are about the depth of a --

6 MR. PALMISANO: You're talking about the
7 camera we inspect at the site?

8 MR. STETSON: Right.

9 MR. PALMISANO: Yes, we capture that for
10 analysis.

11 MR. STETSON: Okay.

12 MR. PALMISANO: Because the analysis is
13 done on a computer so you capture the analysis.

14 MR. STETSON: Or so you're taping it and
15 then you can go back and from that you --

16 MR. PALMISANO: Right.

17 MR. STETSON: -- can determine the depth
18 of the scratches?

19 MR. PALMISANO: Right, right.

20 DR. VICTOR: Anyone else?

21 MR. PALMISANO: Very simply charting the
22 path forward, so we have remobilized staff. It's
23 important to train them on the new procedures, so
24 we've remobilized the key core group of staff.
25 We've re-qualified the staff. The NCR held their

1 webinar on the 25th, and I'll defer any comments
2 about that to the NRC. We're discussing the
3 incident today at the CEP meeting. The NRC,
4 remember back as early as August and November, we
5 will not restart until we're absolutely satisfied
6 and we're using multiple ways to confirm we are
7 satisfied, and until the NRC has a chance to
8 complete their inspection activities.

9 They still have some open items they're
10 concluding, so we are not resuming fuel operations
11 and we won't until, number one, the NRC has a
12 chance to complete and conclude they have no
13 remaining issues, and then we will complete our
14 final reviews.

15 DR. VICTOR: Okay.

16 MR. PALMISANO: And we will continue to
17 communicate with the CEP and the public through
18 the CEP.

19 DR. VICTOR: Great. Thank you.

20 Any other comments or questions to Tom
21 before I give the floor to Scott Morris?

22 I want to say in the interest of time,
23 there's six or seven slides set for after the
24 break --

25 MR. PALMISANO: Right.

1 DR. VICTOR: -- that are updates. We
2 will not have time to go through those. Dan in
3 his overview on the reef expansion project and on
4 the CEQA process --

5 MR. PALMISANO: Right.

6 DR. VICTOR: -- covered many of those
7 items. There's one item I would like you to say a
8 couple words about what is Edison doing which is
9 with regard to making publically available data
10 about the radiation monitoring at the site
11 parameter.

12 MR. PALMISANO: As I mentioned, we've
13 committed to putting in realtime red monitors
14 around the dry cask storage facility. We have
15 them in now for our loading activities. We will
16 put in a permanent system when we complete that.
17 We are working with an appropriate local agency
18 such as Orange or San Diego County to feed the
19 data to so they have realtime access to that and
20 working on some frequency of reporting to the
21 public.

22 DR. VICTOR: Thank you. I think you
23 almost sent the regional administrator to the
24 floor --

25 MR. MORRIS: That would have been

1 embarrassing.

2 DR. VICTOR: -- with his chair being
3 broken which would have been bad for him.

4 With that, I'd like to give the floor to
5 Scott Morris.

6 Scott, your organization had a very
7 informative webinar, and the slides from that
8 webinar we circulated to the CEP and are posted
9 also on songscommunity.com. Tell us about a
10 little bit about what you've see and what we
11 should expect going forward.

12 MR. MORRIS: Okay. Well, thanks again
13 for having me. For those of you who were here on
14 November 28th, I happened to be here for that
15 meeting as well, so I'll just remind you, it's
16 good to be back. I'm from this area. I went to
17 San Dieguito High School. I graduated in 1981,
18 and I still have friends here, and we come here to
19 vacation. It's great to be back. Glad the Padres
20 won, 2 to zero. They've had a tough couple of
21 years. So, yeah, good start.

22 I don't have any slides. I just want to
23 go through this verbally over the next 10 to
24 15 minutes. Hopefully help clarify what we've
25 done, where we're at, and where we're going, and

1 then I know there's an opportunity perhaps to
2 answer some questions, so I want to make sure we
3 leave time for that.

4 The other thing I want to mention before
5 I get into too much detail here is that in the
6 interest of communications and public outreach, we
7 have also not only done webinars and had
8 opportunities to come see you at that these
9 meeting, I've also taken the opportunity to meet
10 with Congressman Levin, and we -- I met with him
11 personally in his office in D.C. two weeks ago
12 today, I guess. I also met with the staff from
13 Senator Feinstein and Harris' office and, again,
14 this morning I met with Kyle and the team in the
15 congressman's district office here in Oceanside.
16 I think the idea there is to make sure that the
17 NRC's independent judgments are being heard and
18 understood, and enable there to be an active and
19 important, clear, and effective dialog between
20 those who represent you and you. So that's --
21 this is just another good opportunity for us to be
22 able to do that.

23 Couple other things I want to explain
24 very briefly, Linda and I -- Linda is our deputy
25 director for our division who looks over the

1 nuclear material safety in our region, Region 4 is
2 a very big region, it's essentially everything
3 west of the Mississippi River all the way up to
4 Hawaii and into Alaska. We -- so we have a big
5 geographical territory. We only have a handful of
6 inspectors who do ISFSI related work, and we've
7 been all in on this issue. The staff that Linda
8 has in our Region 4 office, which we're based out
9 of the Dallas, Fort Worth area, have been all in
10 on the San Onofre since the August event, so much
11 so that we've relied on our other three regional
12 offices, two in particular, to help do the other
13 ISFSI related inspection work that we have to do
14 at the other 11 power reactor sites, actually more
15 than that, because there's other decommissioning
16 sites in our region.

17 So I just want to assure you that we the
18 NRC have been very, very, very focused on this
19 issue, dedicated resources, working not only with
20 our folks in our regional office, but also our
21 technical experts back in our headquarter's
22 office. And just a note on that, the
23 headquarter's office that we have, which is in
24 Rockville, Maryland, just outside of D.C., they're
25 the ones that set the policy; they're the ones

1 that make the rules, period, end of sentence.

2 Next paragraph, the regional offices of
3 which I am the administrator for our Region 4,
4 we're the ones who do the inspection, the
5 oversight, and the enforcement. So we don't make
6 the rules; we enforce the rules. So if anybody
7 has a concern about the adequacy of our rules,
8 there's an absolutely well-defined process to get
9 that input into the agency and get it considered,
10 but that's not our office; that's the headquarter's
11 office. And if anybody has an interest in doing
12 so, please see me after.

13 Essentially, to follow up on the baseball
14 analogy, we're essentially the umpires, right,
15 we're calling balls and strikes. We don't make
16 the rules of the game, we enforce the rules of the
17 game. We strive very much to be -- to share the
18 information as clearly and as timely as we
19 possibly can, and that's why we have actually
20 leaned forward. That webinar that we had, that
21 was the first of a kind. We had never done that
22 before. That webinar that we did back in November
23 was a first for us. So it was a trial run, but it
24 was important that we did that because we wanted
25 to get what we learned from our special inspection

1 in your hands to know -- so you know what we know
2 and what we think about it as soon as we possibly
3 can.

4 That's why we did the webinar. It turned
5 out, I think, to be pretty successful. We'll
6 probably keep doing it. We have not foreclosed on
7 having a town hall meeting here, just our meeting,
8 not a Community Engagement Panel, with you all.
9 We have not foreclosed on that. It's logistically
10 difficult. I've talked to the congressman about
11 it. We'll probably make it happen but -- so be on
12 the lookout for that.

13 In the meantime we have a very large
14 amount of information about this August 3 incident
15 and a lot of tangential information about the
16 Holtec canister and the Holtec certificate of
17 compliance for this ISFSI system on our website,
18 so much so that it's on our main home page for
19 NRC.gov. It's right there on the left-hand side
20 in the spotlight column and SONGS Canister
21 Downloading Incident is the first item on the
22 list, and if you hit that, you can drill down and
23 get a ton of information, a web cast archives,
24 transcripts, slides I mentioned, inspection
25 reports, you name it. It's all there. We get it

1 there as quickly as we possibly can within the
2 constraints of the laws.

3 Okay. So I just want to be clear, we're
4 trying to be as open and clear as we possibly can.
5 We do inspections, obviously, and they're never
6 actually done. We don't stop inspecting. As long
7 as this facility has a license to possess nuclear
8 material, we're coming, we're inspecting, and we
9 won't stop until that license is terminated. When
10 you say NRC inspection is completed, we're talking
11 about around a certain period of time, then that
12 just starts a new clock and we'll do another.
13 Every periodically when we do inspections, we'll
14 stop the clock, finish our assessment, we'll
15 document it, we'll put in the public domain, and
16 then we'll start all over. We'll do more
17 inspections, stop, assess it, document it, so
18 we're never done. I want to -- and we're not done
19 with this issue either. The reason that we had on
20 the webinar when we said we're not ready to say
21 that the licensee, Edison in this case, that we're
22 confident that it's appropriate for them to resume
23 fuel handling is because that scratching issue
24 that Tom talked about, that issue is not resolved,
25 okay, it's just not.

1 The ball is in Edison's court right now
2 today. We are waiting for the results of the
3 technical assessment, the inspections that they're
4 doing with the new camera system, which I think is
5 great; I think it's wonderful that they've taken
6 that step to do that, but that's new to us too.
7 So we're going to take the time it takes for us to
8 assess whatever it is they deliver to us and their
9 assessment of the technical adequacy of that
10 issue.

11 In addition to that, there are regulatory
12 matters associated with how that technical
13 analysis gets reviewed, and is it appropriate to
14 make that analysis without prior NRC approval or
15 is it something that they can do legally without
16 prior NCR approval but for which we would
17 subsequently inspect and assess. So there's the
18 technical issues, and there's those regulatory
19 process issues. I will say, and Linda said this
20 at the webinar, I don't believe, we collectively
21 don't believe this is a safety issue; we just
22 don't.

23 We do think and do know, however, it is a
24 regulatory compliance issue and until that
25 regulatory compliance issue is resolved, we're not

1 going to stand here and say it's appropriate to
2 continue to move fuel, period. That's where we're
3 at. I'm trying to be -- I'm not going to
4 equivocate on that at all.

5 I want to point out we have also worked,
6 again, with our folks back in headquarters who
7 actually issued the certificate of compliance for
8 the Holtec canister system, because that system is
9 in use, as Tom pointed out, at another plant in my
10 region, in Missouri, but it's also the fundamental
11 basis for the consolidated interim storage
12 facility that David mentioned earlier that's going
13 to be sited in New Mexico. It's fundamentally the
14 same system.

15 So we're also working closely with them
16 to share that information so that we're all on the
17 same page technically to make sure that, you know,
18 this is -- whatever is learned here at San Onofre
19 is transmitted effectively to the rest of the
20 fleet and particularly to the licensed application
21 that's inhouse by Holtec now for the interim
22 storage facility, okay. So I wanted to emphasize
23 that.

24 Back on inspection reporting, when Linda
25 led the webinar on Monday, one of the things she

1 talked about in addition to the enforcement
2 activities was the fact that we had been doing
3 these ongoing inspections, and there are things
4 that we have identified subsequent to the
5 pre-decisional enforcement conference, that one of
6 which is the scratching piece, but there are other
7 pieces, other issues, some of the ones that Tom
8 mentioned that they reported to us that were
9 subject to inspection, and we shared results of
10 that during the webinar, but we have yet to
11 document the report of our findings.

12 So you don't have an artifact in your
13 hands that you can point to right now that
14 explains how we identified, assessed, reviewed,
15 and dispositioned those issues. We talked about
16 them, but there's no report yet. It takes time to
17 process that, get concurrence, get the lawyers,
18 you get it, right? I mean, it takes time. We are
19 a federal agency, so that report -- I'll put Linda
20 on the spot -- I think that report will be out
21 sometime in mid-April.

22 MS. HOWELL: Mid-April.

23 MR. MORRIS: Okay. Be looking for that.

24 In addition, the scratching issue, that
25 won't really be closed out in that report. Why?

1 Because we still don't have the information we
2 need. And we're not -- we have to cut off the
3 reporting period and issue a report, because we
4 want to get that information in your hands as soon
5 as we can. So there will be additional documented
6 information to address the scratching piece, but
7 as soon as we render a position on that, we will
8 reach out; we will be proactive in sharing what we
9 learned and what we believe and what our final
10 judgment on that matter to you as soon as we
11 possibly can.

12 Back on the enforcement, for those of you
13 who weren't on the webinar, or haven't seen the
14 documents on our website about the enforcement
15 action. I want to make one point very clear, we
16 have a well-established enforcement policy, the
17 severity level 1, 2, 3, and 4 violations we can
18 issue. Some of which -- the more significant of
19 which we can issue civil penalties, right, fines.
20 There were five key violations issued during the
21 special inspection we did back in September, three
22 of which were our lowest severity level; they were
23 level 4s; they were documented in the inspection
24 report as such, right.

25 And the licensee has obliged, Edison has

1 obliged to address those issue to our satisfaction
2 and subject to our future inspections, which we
3 have done, okay. The remaining two issues were
4 much more -- or potentially much more significant,
5 and that's why we had a pre-decisional enforcement
6 conference in January, again, publically
7 observable, documented and archived on our
8 website. You can go back and watch it tonight, if
9 you want. And that was Edison's opportunity to
10 explain to us, A, do you agree with these
11 violations and, if so, why did they happen, and
12 what are you going to do to fix them, right?

13 And so that was the point of the January
14 enforcement conference. We then take our time to
15 consider the information we've gathered through
16 our inspections, through the information gleaned
17 from Edison during that meeting and rendered a
18 final enforcement decision consistent with that
19 policy, and where we came out, frankly, was
20 unprecedented. For an interim storage, spent fuel
21 storage installation, this agency, to my
22 knowledge, has never issued a violation of
23 severity level 2 violation ever, period. So this
24 was a big -- this was a big deal, and that's also
25 why -- and the civil penalty that went along with

1 it, just further affirms the significance of this
2 matter.

3 You might ask, well, why wasn't it a
4 severity level 1? Well, that's because there was
5 no actual consequence, right, the canister didn't
6 actually drop. It could have, the potential was
7 there, but it didn't happen. If it had, you know,
8 I'd bet my next paycheck it would have been a
9 severity level 1, which would have been much more
10 significant. But, again, the violations that we
11 issued were unprecedented in their severity level
12 for an ISFSI, okay. I want to make that point.

13 When it comes to scratching, I talked
14 about it a little bit, and I just want to kind of
15 follow up with a couple points on that. Scratches
16 are not uncommon, in fact, they're expected to a
17 certain degree. Scratches occur during a
18 manufacturing process, they occur during
19 operations, they occur in maintenance, so it's
20 expected that scratches will occur. The question
21 is -- one of the questions is, how much scratching
22 is okay, and what's the technical basis for why
23 that's okay?

24 And, again, that's what we're -- there
25 are standards out there. I won't bore you with

1 what they all are. If you really want to know,
2 you can come up after and ask me, but there are
3 industry standards, not just nuclear industry
4 standards, I'm talking about mechanical --
5 American Society of Mechanical Engineering
6 Standards, codes, if you will, that dictate how
7 much scratching is permissible during the
8 manufacturing and in the operation phase. I'm
9 just telling you it's not uncommon for there to be
10 scratching.

11 The problem in this particular case is
12 quite simply that the safety analysis report that
13 was prepared by Holtec, right, and for which
14 Holtec received a certificate of compliance to our
15 regulations, basically, you know, a hall pass, you
16 know, it's okay to use this design because we --
17 you've shown -- we've reviewed your design and
18 satisfied ourselves that it's safe and it meets
19 all of our requirements. In issuing that
20 certificate of compliance, we rely on the safety
21 analysis report that's supplied to us by Holtec
22 and for which we review against our requirements.
23 That safety analysis report said unequivocally
24 that there will be no scratches on the canisters,
25 okay, that's what it said. It's -- when you --

1 when the NRC relies and makes a safety decision to
2 issue a license, or in this case a certificate of
3 compliance, we expect that the documentation in
4 there to, A, be accurate and to be, you know,
5 appropriate and technically justifiable, right.
6 What we learned was that that -- what we know now
7 is that that FSAR document that was issued by our
8 friends and colleagues in headquarters and now
9 we're out here, you know, being the umpires and
10 enforcing those requirements, what we found is is
11 that was an inconsistency. The safety analysis
12 said one thing but reality was something
13 different. Now we know in reality scratches can
14 and will happen, and that's okay up to a point,
15 but what we don't know is what -- how much -- what
16 the actual scratches were, what actually gouging
17 or wear marks actually were incurred on the 29
18 canisters that have been downloaded already, we
19 don't know, formally we don't know. We've had
20 some informal dialog. We don't know formally. We
21 haven't done an independent technical judgment of
22 that yet.

23 The jury is out, so to speak, on whether
24 or not that technical basis for why scratching is
25 okay. To change that safety analysis report

1 language from no scratching to some scratching,
2 that needs to get rectified, that needs to get
3 resolved, remediated, addressed, whatever word you
4 want to pick before -- so that -- to our
5 satisfaction before we're prepared to say, You're
6 now in compliance, you can move forward.

7 That's where we're at, that's
8 fundamentally where we're at. So Linda and I
9 effectively are sitting back in our offices with
10 our arms crossed waiting for that information so
11 that it can be reviewed. And we will work with
12 our folks, our colleagues in headquarters because
13 they're the ones that ultimately approve the
14 design so we obviously need to work closely with
15 them.

16 So, again, until this compliance issue is
17 resolved, the fuel handling is not going to
18 happen.

19 DR. VICTOR: Thank you very much. That's
20 enormously helpful. I want to make sure there's
21 time for members in the panel to ask questions.
22 I've got a few, but I'm sure there are others.

23 Ted Quinn.

24 MR. QUINN: Scott, I would like to
25 understand what was a question for Linda, I think

1 on Monday, and it had to do with your future path
2 of increased -- what do you call it? -- increased
3 oversight --

4 MR. MORRIS: Yes.

5 MR. QUINN: -- from the staff, I think
6 everyone in this room wants to know what you're
7 going to do to provide more assurance that this
8 won't happen again?

9 MR. MORRIS: Thank you for that question.
10 I appreciate it. I meant to cover that.

11 So we do periodic inspections all the
12 time on a specific frequency at all of our
13 licensed facilities, right. We have limited
14 resources, obviously, nobody has infinite
15 resources. So we -- but we have enough resources
16 to do periodic inspections of these facilities
17 across our region, okay. When things happen, when
18 we get reports from licensees about things that
19 happen, we will ramp up and do more inspections.
20 There's a, what I'll call -- it's not the right
21 terminology -- but there is a baseline inspection
22 program that we always do, then there are reactive
23 inspections that we do when things go -- when
24 things happening, we meet certain criteria, which
25 is what we did in September when we had the

1 special inspection team, and with -- when there
2 are special evolutions happening or special focus
3 areas like this one clearly is, we will dedicate
4 and find ways to spend more time and energy and
5 resources to be here when safety significant
6 activities are ongoing, right.

7 So that's why I said we're diverting
8 resources from other regions to cover our other 11
9 sites while our guys are focused on this. And
10 we're going to keep -- if and when the fuel
11 handling resumes, we'll be there, we'll be
12 watching, we will do not only planned and
13 announced inspections, but we will do unannounced
14 inspections. We'll just show up randomly. That's
15 not something we typically do, by the way, but we
16 will do that.

17 DR. VICTOR: Dan Stetson.

18 MR. STETSON: Thank you.

19 Scott, I know before Southern California
20 Edison started actually moving spent fuel, they
21 went through a number of dry runs --

22 MR. MORRIS: They did.

23 MR. STETSON: -- that you inspected and
24 approved, and all of these improvements from going
25 from --

1 MR. MORRIS: Let's just be clear, we
2 didn't approve it, we inspected it to make sure
3 that what they were doing was consistent with
4 their procedures and our requirements. It
5 wasn't -- we don't approve it like -- that's
6 not -- I'm just being picky about the words, I'm
7 sorry.

8 MR. STETSON: Well, maybe that would help
9 me to understand, I mean, any of these new
10 improvements which have just been established,
11 some of them seem pretty obvious, and I wonder why
12 none of those were required by you previously?

13 MR. MORRIS: Good question. Thanks for
14 that. I appreciate that.

15 So we -- our fundamental the way we
16 operate -- it's a poor analogy, but I think it's
17 helpful in this case is everybody has a driver's
18 license or most of you do and you make an
19 application with the DMV, right, and you
20 demonstrate that you have the knowledge of the
21 rules, you know the rules of the road, you know
22 how to operate a motor vehicle safely, you take a
23 written test, et cetera, but you also have a
24 performance test, somebody gets in the car with
25 you, you drive around, they watch how you operate.

1 Well, it's the same thing, right. It's
2 fundamentally what we do. When you get the
3 license, it's fundamentally your responsibility as
4 a motor vehicle operator to operate that vehicle
5 safely and in a manner that's consistent with the
6 rules of operating, you know, on roads and
7 highways, right.

8 Where -- so that -- where the analogy
9 breaks down is the difference in our case is,
10 you -- in the analogy, you don't have policemen
11 coming in and sitting in the back of your car
12 occasionally checking up and seeing how you're --
13 but we do do that.

14 To your specific question, we do what's
15 called performance-based inspections. What does
16 that mean? And I don't mean to confuse people.
17 We don't do compliance-based inspections, which
18 is, okay, here's a list of all of our
19 requirements, I'm going to go down this check list
20 and I'm going to make sure every one of these
21 things are -- that's not how we do inspections.
22 We do performance-based inspections. What does
23 that mean? That means we go out and watch people
24 do stuff. We watch them build things, fix things,
25 operate things, and if at the end of the day it's

1 done in a manner that doesn't present a safety
2 issue, and it meets -- nominally meets all of our
3 requirements, that's it. It's only when there's a
4 performance issue, a challenge, an incident,
5 that's when we come dig deep, because the
6 responsibility is on the owner, operator, licensee
7 to operate in a manner consistent with the license
8 we issue.

9 So we have a graded approach; we do
10 baseline inspections; and then we dig in deep when
11 we find out -- that's why that reporting violation
12 that Tom talked about is so critical because we
13 don't know what we don't know.

14 DR. VICTOR: John Taylor.

15 MR. TAYLOR: Scott, the Holtec has been
16 doing this for a while, I guess out of Missouri as
17 well. Have you ever had any other reports of
18 scratching on any of the other canisters?

19 MR. MORRIS: I'm going to let Linda take
20 that.

21 MS. HOWELL: Thank you.

22 MR. TAYLOR: And then the other question
23 will be, I'm just trying to understand what was so
24 different about the San Onofre incident that there
25 was scratching there but maybe not ever reported

1 in any other facility? I'm not sure.

2 MR. MORRIS: So just to be clear,
3 this Holtec UMAX system is only being used at one
4 other site in the United States, and that's at the
5 Callaway facility near Columbia, Missouri, which
6 is also in my region, and I'm going to let Linda
7 finish the rest of it.

8 MS. HOWELL: Thank you.

9 We did look at the potential for
10 scratching to have occurred in the UMAX system
11 that's in Callaway. We've had a lot of attention
12 focused on Southern California Edison, but we
13 reached out directly to the plant to ask them what
14 their experience was, whether they had any
15 instances that they were aware of where canisters
16 were hung up or where they had difficulties
17 downloading them. We did not see any of that in
18 the inspections that we performed. But they went
19 back through all their records and took a look at
20 it, and reported back to us that they didn't
21 believe that they had difficulties downloading
22 canisters. So that's one level of effort. The
23 proof is in the pudding. We will be doing an
24 inspection in the upcoming months that will focus
25 directly on that, in other words, my inspectors

1 will go out and take a close look at the
2 inspection and downloading records themselves,
3 perform that independent review, and see if there
4 are other reasons to question what might have
5 happened.

6 MR. TAYLOR: Because I thought maybe that
7 some of that information about scratching and what
8 the effect is on the canister might be something
9 we could use here as well.

10 MR. MORRIS: I will say -- I won't speak
11 for Doug Bauder, but I'm pretty confident Doug and
12 his team have been interacting with the owners and
13 leadership at the Callaway plant about this issue
14 as well.

15 Tom.

16 MR. PALMISANO: Let me add, we're part of
17 the Holtec users group with all of the Holtec
18 systems, we've shared all of the relevant
19 information and, again, in our experience with
20 other systems, contact does occur, so we shared
21 this so other people can be aware of this. Again,
22 it's built into aging management to monitor the
23 condition of canisters in the longer term.

24 DR. VICTOR: So I want to just as action
25 item, as you learn more about what's happening at

1 the other site, it would be great for us, and
2 Edison can hopefully -- not hopefully -- will
3 share with the CEP. We need to make sure we
4 understand the full picture not the just the
5 picture here.

6 So I wanted to -- I don't see any other
7 questions. I wanted to make a comment and ask a
8 question, the comment is that over the last few
9 months it has been exceptionally valuable to know
10 when the NRC is finally satisfied with an
11 analysis, like the drop analysis or once you look
12 at all the data, the scratch analysis, or whatever
13 it's going to be called -- it won't be the simple
14 term scratch, but I'll call it scratch.

15 MR. MORRIS: It's a good surrogate for
16 now.

17 DR. VICTOR: It's really important for us
18 to know when you're -- the state of your
19 assessment of this because, otherwise, we have
20 information from Holtec and from Edison --

21 MR. MORRIS: Right.

22 DR. VICTOR: We have their independent
23 assessments, but there's also proprietary
24 information there, and to have an independent
25 government agency look at this is enormously

1 valuable. And one example of this is there was a
2 news cycle in early January about some studies
3 that were released about extreme events in
4 San Onofre and possible catastrophic economic
5 consequences, and it was enormously helpful to
6 have the NRC say, we've looked at the underlying
7 data here, and this scenario is not a realistic
8 scenario.

9 MR. MORRIS: It's simply not credible. I
10 had a long conversation with the congressman and
11 his staff about that very information today.

12 DR. VICTOR: And I appreciate it, because
13 it's otherwise kind of a black box, and it's
14 really helpful to have --

15 MR. MORRIS: No, I think it's very --
16 your point is well taken. Again, we want to --
17 our goal is to share what we know and our
18 assessment as timely in a manner -- but it's
19 equally important to do it in a clear way because
20 this stuff can get complicated pretty quick, and
21 we're scientists and engineers, so it's hard for
22 us to communicate sometimes clearly so --

23 DR. VICTOR: So let me ask the
24 question --

25 MS. HOWELL: If I could also add to

1 Scott's comments here, we understand that all of
2 you here in the room are very interested in
3 hearing what the results are of our independent
4 assessment of some of the work being done by
5 Holtec, by Southern California Edison, and to the
6 extent that we can, we do try and include
7 discussions of that in our inspection reports in
8 as plain a language as I could possibly force a
9 group of engineers to do. We talked about it at
10 the webinar. And one of the other things that --
11 and I personally lead this effort -- in our
12 discussions and our continuous interaction with
13 the Southern California Edison management team, we
14 are constantly reminding them of the importance to
15 have Holtec or their engineering staff produce
16 reports and analyses that can be placed in a
17 public docket to the fullest extent possible.

18 I even go through and I identify what
19 points I'd like to have emphasized in some of the
20 reports that they are developing, so we're very
21 sensitive to that. It can't always be done, say,
22 when Southern California Edison has to rely on
23 Holtec product, but that is not lost on us.

24 DR. VICTOR: Let me just -- I want to
25 pick up on exactly this and ask looks like the

1 last question, will they need to release -- Holtec
2 needs to provide some more information in some way
3 other than, Aren't we awesome, we're Holtec,
4 because there's an attitude there that makes me
5 concerned about the quality of their management,
6 and that was revealed here, and I think it is very
7 important to learn tonight from Tom and Doug and
8 your oversight process the extent in which
9 Southern California Edison is stepping in and
10 providing its more aggressive form of its own
11 management, to nuclear culture, transparent with
12 your own procedures so it's all one system, and
13 I'm just wondering, how does the NRC know how
14 Holtec operates as a management organization and
15 to what degree can you, maybe off line, help share
16 some of that information with us because most of
17 these problems fundamentally end up being
18 management problems.

19 MR. MORRIS: Let me start but I want
20 Linda to complete my thought. So Holtec -- we
21 don't -- we, Region 4 -- I'm not trying to mince
22 words here, right -- but Region 4's responsibility
23 is inspection, oversight, enforcement, et cetera.
24 Our licensee, the one that we provide oversight of
25 is Southern California Edison, not Holtec, okay.

1 The certificate of compliance that was issued to
2 Holtec was issued by the regulatory licensing
3 staff in our headquarter's office.

4 So most of the conversations that
5 happened with Holtec, happened with the folks at
6 headquarters, because they're the ones that review
7 the license applications and those documents.
8 That's not to say I haven't met with senior Holtec
9 management; I did, in fact, recently as two weeks
10 ago.

11 I don't want to say I share your concern
12 but I do understand your concern, and I think it's
13 an issue that needs to be addressed. I will say
14 that Holtec has invited I myself and other
15 regional administrators in the other three
16 regions, we've been invited to the Holtec
17 facilities in Camden, New Jersey. We're going to
18 sit down and meet with their management I think
19 it's in July, early July is what we have planned.
20 So there's going to be ongoing -- they're also a
21 current applicant for the consolidated interim
22 storage facility.

23 So there's always active ongoing dialogue
24 with the NRC and Holtec. I'm not necessarily, and
25 Linda is not necessarily, party to those specific

1 conversations.

2 Do you want to just finish that thought?

3 MS. HOWELL: Sure. I'll be happy to add
4 to that.

5 This has been a learning opportunity and
6 as you know in a technical organization like the
7 Nuclear Regulatory Commission we're constantly
8 performing lessons learned. So we have learned a
9 lot about the Holtec management and their approach
10 to actually becoming an NRC licensee and not
11 merely a certificate holder.

12 I personally invest a lot of time with my
13 counterpart at NRC headquarters to make sure that
14 that individual is aware of some of the perceived
15 weaknesses, perhaps some of the gaps and so that
16 those things do not get overlooked by the folks
17 who are actually doing the licensing activity for
18 Holtec. That also informs the headquarters vendor
19 inspection program. Because Holtec is a vendor,
20 we do do biannual inspections of Holtec.

21 So as we're learning things, we're
22 factoring that into the areas that are reviewed
23 when we actually go out and do a vendor inspection
24 for Holtec so we're trying to address that.

25 DR. VICTOR: And so before I go to Dan

1 Bane, he'll have the last question, I just want to
2 say, this is not my concern, just my concern, this
3 is people are concerned and I don't know whether
4 to have a concern or not have a concern here, but
5 I think feel like as an action item in addition to
6 all the things that Edison is doing to really lean
7 in and make this work and make it perfectly safe,
8 we need to know from Holtec more what they're
9 doing in terms of management, oversight, and
10 rigor.

11 MR. MORRIS: So your point is very well
12 taken. Linda and I will take that on board. We
13 can have an offline conversation, which you're
14 happy to share whenever. So we'll do that.

15 MS. HOWELL: I'll also note that the NRC
16 and Holtec are going to be holding a public
17 meeting. It's currently scheduled for April 10th.
18 The meeting notice is already out there. I think
19 a few of you in the room have already indicated
20 that you do plan on participating at least by
21 telephone. That will be another opportunity. And
22 the purpose of that meeting is to discuss some of
23 the changes that Holtec has made in their
24 licensing design basis, but it will be an open
25 dialog in public forum.

1 MR. MORRIS: There's some important
2 issues that need to get done there.

3 DR. VICTOR: Dan Bane.

4 MR. BANE: Thanks, Chair.

5 Following up on Mr. Taylor's question,
6 and I appreciate that information. I suspect the
7 reason that Callaway plant we don't know if
8 there's scratching because we only recently had
9 the ability to go down and actually inspect the
10 canisters --

11 MR. MORRIS: They're not in the middle of
12 an active campaign right now. In an operating
13 unit, you know, it's typically only every, I don't
14 know, couple of years maybe that there's an active
15 ISFSI loading campaign, so that process right now
16 is dormant.

17 MR. BANE: Sure. So I suspect now that
18 we have the ability to inspect those with the
19 cameras, will that be done so we can look at, for
20 example, things like corrosion, scratches to
21 compare that?

22 MR. MORRIS: I mean, I think the short
23 answer is yes, but there's a lot more to that
24 answer, and I don't that we have time. It's --
25 we're all over that, believe me, and I've talked

1 to the site vice president at Callaway about that
2 issue.

3 DR. VICTOR: Okay. And, Tom, I see that
4 you want to say something about this?

5 MR. PALMISANO: Just, again, we share
6 information across utilities regularly so
7 everything we've learned and everything we're
8 doing has been shared with the Callaway plant in
9 Missouri and will continue to be.

10 DR. VICTOR: Okay. Thank you.

11 So we're going to take a 10-minute now
12 and then we're going to go straight to public
13 comment. So if you want to make a public comment,
14 and you haven't filled out one of these lovely
15 cards, please do so at the back door there, and
16 we'll begin in 10 minutes.

17 (Recess taken from 7:21 until 7:29.)

18 DR. VICTOR: We're going to get started
19 here, and Joe Moross from Safecast is first.

20 Joe?

21 MR. STETSON: Where did he go? There he
22 is. You've got three minutes.

23 MR. MOROSS: People are going to settle
24 down, but why don't you just stand over there, and
25 we'll get started -- by the microphone.

1 (Off the record discussion held.)

2 DR. VICTOR: So we're going to have the
3 public comment period now. We're going to begin
4 with Joe Moross from Safecast.

5 And, Joe, the floor is yours.

6 MR. MOROSS: For you.

7 DR. VICTOR: Okay. Am I -- am I --
8 you're thinking I'm radioactive?

9 There you go, Dan, you're radioactive.
10 There you go.

11 You broke it.

12 Okay. Joe Moross, the floor is yours.

13 MR. MOROSS: Thank you, David.

14 I would like to thank the panel for doing
15 this. This is my first attendance at one of these
16 meetings. I've been following them online for a
17 while but since I'm based in Tokyo, I don't get to
18 California on a regular enough schedule to attend
19 these meetings.

20 The question I wrote on my card is
21 whether Southern California Edison and around the
22 San Onofre Nuclear generating station and the
23 ISFSI are planning to cooperate with independent
24 groups that want to do realtime radiation
25 monitoring? Safecast is one of those groups, and

1 we have designed and tested systems we think are
2 appropriate for testing around the system. We are
3 not a company that sells this equipment. We're
4 not trying to make a profit; we're not trying to
5 sell something other than public awareness and
6 knowledge and generally transparency in all things
7 nuclear.

8 The device that I've got sitting over
9 there by -- between David and Dan is one of those
10 devices we've recently designed specifically for
11 projects like this. It was actually intended for
12 the Hanford nuclear processing facility up in
13 Washington, but we're also looking to put it
14 around places like ISFSI.

15 The key point of it is to monitor
16 radiation in realtime and report it to the public
17 in realtime. Now realtime doesn't mean every
18 millisecond, every second, but that device sends
19 it every five minutes. That's a lot more often
20 than is currently being reported and has a
21 potential to reassure people who are concerned any
22 time there's an issue. You know, when there's an
23 earthquake, we don't wait a month to find out what
24 the seismic reading on that was. We want to look
25 online and find out in minutes, and this is the

1 same kind of thing.

2 With the current state of the internet
3 and online communities and social media, this kind
4 of thing is going to happen, and whether or not
5 the operator of the facilities and stuff cooperate
6 with us or resist us, it's still going to happen.
7 We think it would be a lot better if they
8 cooperated with us and allowed us to place these
9 sensors in places that are optimum for monitoring,
10 not the places we can get closest to it without
11 their permission.

12 DR. VICTOR: Thank you very much for you
13 comment.

14 Next is Amy Foo and then Mandy Sackett.
15 And we have 29 cards for tonight, so we'll
16 hopefully we'll get through as many, if not, all
17 of them.

18 Amy, floors is yours. F-o-o.

19 MS. FOO: I'm Amy Foo with the Surfrider
20 Foundation. One of Surfrider's top priorities in
21 Southern California is to ensure the safe
22 relocation of the 3.6 million pounds of spent
23 nuclear waste fuel rods at SONGS. Surfrider
24 presented comments last week at the State Lands
25 Commissions meeting on the final EIR for

1 decommissioning SONGS. And we appreciate that the
2 Commission and Edison incorporated many of our
3 requests.

4 In particular we would like to thank
5 Edison for committing to the following three
6 things: One, conducting annual sea level rise
7 vulnerability analyses of the Coastal storage
8 facility, combined with multiple storm and tide
9 scenarios including an extreme sea level rise
10 scenario of H++; two, conducting ground water rise
11 level -- ground water level rise monitoring to
12 address Surfrider's concern that the ISFSI may be
13 subject to flooding under future sea level rise
14 scenarios.

15 While Edison did not incorporate our
16 request to include ground water as part of the H++
17 analysis, we believe the annual ground water
18 monitoring and reporting will help gage ISFSI
19 safety from coastal hazards; and three, expanding
20 radiological sampling at coastal recreation sites
21 by including three additional ocean and shoreline
22 monitoring locations at key nearby recreational
23 sites; two north of SONGS and one to the south
24 near the surf zone; plus agreeing to make the data
25 publically available in an interactive map on the

1 SONGS community forum and notifying the public at
2 least 48 hours in advance of any batch releases of
3 effluent. We believe these will be helpful safety
4 and accountability measures, so thank you.

5 However, we remain concerned about the
6 lack of a readily available onsite method of
7 transferring waste or fixing a canister in case a
8 canister's integrity is comprised. We continue to
9 request measures such as retaining a cooling pool
10 onsite, developing a hot cell or other method
11 pre-approved by the canister manufacturer, Holtec
12 and NRC.

13 Given the high risks to human health,
14 please ensure that the communities bordering
15 SONGS, the millions of beach goers who visit
16 adjacent beaches at San Onofre and the Pacific
17 Ocean will be protected, and that the waste
18 contained in the ISFSI will remain intact, safe,
19 and transportable. Thank you.

20 DR. VICTOR: Thank you for your comment.

21 Next is Mandy Sackett.

22 And as Mandy is coming up, if you've
23 written your comments down, and you would like to
24 make the full comments part of the record, just
25 send them to us at that e-mail address and we'll

1 include them in the full record.

2 Mandy Sackett and then Denise Erkeneff.

3 MS. SACKETT: Hi, Mandy Sackett with the
4 Surfrider Foundation as well. We really
5 appreciate the Nuclear Regulatory Commission and
6 their diligence in reviewing Southern California
7 Edison's violation with respect to the August 3
8 near drop incident at SONGS. And we thank the NRC
9 as well for carefully assessing the significant
10 weakness in Edison's initial corrective actions,
11 such as claiming certain pieces of equipment
12 weren't classified as necessary for safety when
13 they were, procuring equipment that was not in
14 accordance with requirements, and then having them
15 tested by an unqualified vendor, and also missing
16 contingency steps especially regarding seismic
17 protection and not updating maintenance
18 procedures, and the list goes on.

19 So we look forward to seeing how these
20 weaknesses have been -- since been addressed and
21 we hope that the new corrective actions are
22 robust.

23 Last week Edison started physically
24 inspecting canisters with camera equipment as
25 we've heard here tonight and hopefully that will

1 give us a better understanding of the level of
2 scratching that occurred.

3 We encourage Edison to select and inspect
4 canisters that are knowingly scratched more
5 severely than others in their physical scratch
6 assessments. The Holtec is aware of the depths at
7 different severities, and this process should be
8 transparent.

9 As is Holtec's final safety analysis
10 report specifies that no scratching of canisters
11 is supposed to take place, Edison and Holtec are
12 trying to update the FSAR to allow for minor
13 scratches as we've also heard during downloading
14 and the NRC is in the process of reviewing this
15 request. We appreciate these efforts to ensure
16 scratching of canisters is very carefully
17 assessed. The community deserves answers and
18 transparency on this.

19 And, lastly, we ask that while
20 downloading is already on hold, Edison make
21 repairs to the ISFSI's guide rings to guide the
22 canisters as intended and have them actually reach
23 the edge as opposed to just catching them and
24 contributing to additional scratches. With that
25 design flaw, the UMAX ISFSI is not being used in

1 accordance with the FSAR, the original design
2 specifications and we would like to see this fixed
3 now while we can.

4 So thank you all for your time moving
5 forward we really hope that Holtec and Edison will
6 take their safety obligations seriously instead of
7 cutting corners and employ the precautionary
8 principle because the stakes are really too high
9 here. Thank you.

10 DR. VICTOR: Thank you very much for your
11 comments.

12 Next is Denise Erkeneff and then Tara
13 Covington.

14 MS. ERKENEFF: Good evening. Denise
15 Erkeneff. I'm with Surfrider Foundation, South
16 Orange County Chapter. In Surfrider Foundation's
17 membership, we have over 30,000 members in
18 California, over 500,000 supporters throughout the
19 United States, and within our chapter footprint
20 over 3,000 members.

21 Earlier this month we -- Surfrider, South
22 Orange County, and about a hundred of our other
23 chapter leaders and advocates visited district
24 offices throughout the United States and also had
25 our annual hill day where we visited over 100

1 senate and congressional offices and federal
2 agencies, and SONGS was at the top of our list on
3 our advocacy day and days regionally and then on
4 the hill.

5 We stress that we need legislation that
6 will ensure there's meaningful action to locate
7 and implement appropriate long term siting and
8 final resting place. This will take bipartisan
9 collaboration, as you all know, between states and
10 the federal government. In order to address the
11 current failure to give effected states and native
12 nations meaningful regulatory authority in the
13 maintenance and transportation of nuclear waste,
14 this new legislation should also grant affected
15 communities consultation and authority relating to
16 the terms on which they would host a nuclear waste
17 facility, and they should be able to adopt
18 additional safety requirements as they see fit.

19 Surfrider believes to address
20 environmental and safety concerns, states and the
21 EPA should have environmental review authority for
22 the siting process and the NRC should be amended
23 to allow for environmental review under current
24 laws; finally, to address the lack of
25 accountability for movement of the nuclear waste,

1 legislation should require a strict timeline for
2 permanent storage of the waste and mitigation
3 requirements if there are deviations from the
4 timeline.

5 We hope that Edison and the CEP and
6 others will keep our points in mind. Thank you
7 very much, and as always, we will collect our
8 collective and send it to you electronically.

9 DR. VICTOR: Thank you very much. Let me
10 also ask if you have information about your hill
11 day, news accounts and so on, that would be very
12 helpful to know about that.

13 Next is Tara Covington and then Roger
14 Johnson.

15 MS. COVINGTON: Hi. I've long time been
16 very concerned about the nuclear industry. Here
17 in California we got a moratorium that said until
18 they solve the nuclear waste issue, no more
19 building nuclear reactors. I'm very concerned
20 that there's two reactors about to go online in
21 this country and there's several others going
22 through the licensing process. To start up, it
23 appears to me that we're going backwards.
24 Specifically to our current issue here at San
25 Onofre, I'm very concerned about the seeds that we

1 are planting in the sand. How long are these
2 canisters supposed to protect us from releasing
3 the radioactive content that they have inside
4 them, and what is that in comparison to the life
5 expectancy of the radioactive contents?

6 Some of this stuff has a half life of
7 200,000 years. We haven't got anything on this
8 planet that man built that is going to exceed that
9 kind of life expectancy. So it seems to be that
10 we keep talking about a lot of little details, but
11 we're missing the big picture. I would like to
12 plant a few seeds of education, because I believe
13 that we need to build up a public mandate to
14 really get people in this country to acknowledge
15 the horrendousness [sic] of what we have.

16 We have millions of thousands of pounds
17 of this stuff that's going to be around for
18 200,000 years all over our country right here in
19 our neighborhood and all over the world. We're
20 going to reach a tipping point, and there's no one
21 actually doing the education that's needed so that
22 the public is making fully-informed decisions
23 about what we really should be doing, and our time
24 is running out. I remember when I was first
25 hearing about this stuff, they talked about, oh,

1 how we have all these safety things in place, no
2 accidents are going to happen. Then I remember
3 3-Mile Island, Chernobyl, Fukushima, we've got all
4 these Hanfords leaking, New Mexico is leaking,
5 there's all these leaks happening, all of this was
6 never supposed to happen.

7 These canisters were not the best
8 canisters that could have been chosen in the first
9 place. So we already shortened our life
10 expectancy for protecting us from this stuff. Our
11 children are going to inherit this world. We have
12 to take a bigger picture and do something much
13 more drastic than these slow little procedures.
14 Stop building plants that are going to continue
15 the problem and do something about it now. And
16 education is one of the things.

17 One of the places that I think that this
18 educational effort could take place is at school
19 board meetings and elementary, middle, and high
20 schools all over the place. We don't have
21 adequate evacuation measures, even for our school
22 children. The kids in the classroom, if we have a
23 shelter in place order, they don't have the
24 supplies needed to shelter in place. We don't
25 even have enough information and supplies out

1 there to do something about an adverse event right
2 now. But if people had to be educated about those
3 things and had to practice them like we do active
4 shooter drills on our campuses, maybe the public
5 awareness would increase enough to where we would
6 have enough people marching in the streets to shut
7 this stuff down.

8 Thank you.

9 DR. VICTOR: Thank you very much for your
10 comment.

11 Next is Roger Johnson and Ray Lutz.

12 Roger Johnson, the floor is yours.

13 MR. JOHNSON: Roger Johnson, good evening
14 everyone. Tonight I'm reminded of the Swedish
15 teenage girl, I think everybody's heard of her,
16 Greta Thunberg, studied climate change in high
17 school, became very upset, and said why isn't
18 everybody else upset, what are we doing about it.
19 She made up posters, she walked up and down in
20 front of Parliament building in Stockholm. They
21 finally invited her to come and address them, and
22 she lambasted them. She said, Why aren't you in a
23 state of panic? What are you doing, you have all
24 these middle-aged people who talking about short
25 term consequences and money, and our generation is

1 going to be going down the toilet. A scientist
2 tells us we have 12 years to figure it out.

3 So I think there's some relevance here
4 tonight. This is a very serious situation, and I
5 don't think we're conveying a sense of urgency.
6 It's not getting through. The people in the room
7 of course are here because they're concerned, but
8 if you look at the -- I don't sense a sense of
9 urgency from Edison I don't get a sense of energy
10 from the NRC, the nuclear industry at all. But
11 also the public, I don't get it from the public
12 either, and I don't get it from the media.
13 They're not paying attention.

14 I think one of the reasons is partly
15 Edison's public relations arm where they keep
16 telling everybody is perfectly safe, nothing can
17 possibly go wrong. We have these displays out
18 here trivializing radiation. So if it's all safe,
19 then what's the problem? Why worry?

20 I think we need to communicate a sense of
21 urgency. We have to get rid of this stuff. And
22 we have to communicate it to the members of
23 congress, to the communities, to the people, the
24 politicians, to the media, and that's just not
25 happening. I would like to see Edison use the

1 same resources that they use for public relations
2 to convey the sense of urgency and get the public
3 more involved.

4 I was happy to see David mention the
5 possibility of a third quarter meeting on these
6 issues. Some of the issues almost all meetings
7 have been devoted to internal issues. I would
8 like to see external events and some of them are
9 terrible. I would like to hear about worst case
10 scenarios; I would like to hear about extreme
11 events. These can happen.

12 The bomb that was dropped on Nagasaki had
13 9 pounds of plutonium. The Hiroshima bomb was
14 uranium, had a few more pounds. What we have here
15 is 1800 pounds. And it was not highly enriched
16 fuel, like a bomb grade fuel, but if you were to
17 enrich it, you could make 17,000 Hiroshima bombs
18 from what's right up the road here. This is
19 pretty serious, and the longer it sits, the harder
20 it's going to be to move.

21 I think you need a moon shot or
22 something, or some kind of -- we need a little bit
23 of panic. This is serious. Get this stuff
24 moving. We want a plan to get it out of here, and
25 I would like you to -- everybody to contribute to

1 conveying this urgency to the public. Thank you.

2 DR. VICTOR: Thank you very much for your
3 comment.

4 Next is Ray Lutz and then George Allen.

5 MR. LUTZ: Hello, Ray Lutz with Citizens
6 Oversight. So we almost dropped a canister
7 18 feet into the hole by only a quarter of an inch
8 after a lot of planning and preparation saying
9 everything would be fine. Well, we've lost a
10 little bit of trust here, if I can just be a
11 little bit bold. I don't see any corrective
12 actions on how the planning was done. Are you
13 going to correct how you did it to begin with, or
14 just now that you know there's a problem, oh, now
15 we're going to correct the problem that we have.
16 We need to back up one more level.

17 SCE showed a slide of things that could
18 be done and has all kinds of things such as
19 changes in personnel, equipment, but one thing was
20 missing, the design; the design changes. The
21 reason for this is because the poor design of the
22 Holtec system. It's hard to put in and it adds a
23 whole bunch of scratches. Well, way to fix that
24 maybe is to change that mating device. Put wheels
25 on it so it can go in nicely. This design sucks,

1 and no one even addresses that. There isn't even
2 an item on the slide that says design changes.
3 Why not?

4 I want to see the detailed model of this
5 canister drop open-sourced. Forget this
6 proprietary crap. Our whole area is on the line
7 here and we're hearing proprietary concerns. Oh,
8 what happened? Those are proprietary designs.
9 Forget about it. We need that open-sourced out in
10 the public, I want to see it myself. I'm an
11 engineer. I don't want some boiled down sentence
12 or two that says, we tested it, and the NRC
13 checked it, so now we're safe. No. Get it
14 open-sourced. I want to see it out there.

15 Now it's been a year since this expert
16 team started. We sued the Coastal Commission, got
17 the expert team set up, I sent a letter like a
18 month ago, what the hell have they done? No
19 response. Have they had any meetings? No report
20 here.

21 They won't even talk to me, and I'm the
22 guy that sued them. You guys don't even care
23 about what the expert team has done apparently.
24 No questions about it, no reports. They won't
25 talk to me. That's great.

1 Well, SCE says these canisters are a
2 logical first step in any future location. I just
3 seen a new deep bore hole technology that needs
4 smaller canisters that go way down then horizontal
5 using fracking-type technology. Those are smaller
6 canisters, and it's not to correct to say this is
7 always a first step.

8 So, again, my request is open-source that
9 thing, and I want to see design put into your
10 slide. I want to see that the detailed model is
11 available, and back up one more step, how did you
12 develop your procedures? Something was missing
13 there, folks. Thank you.

14 DR. VICTOR: Thank you for your comment.
15 Next is George Allen, then Mike Aguirre.
16 George Allen, the floor is yours.

17 MR. ALLEN: Thank you for letting me
18 speak. I was looking at the article in the
19 newspaper, and Donna Gillmore came up with a
20 question, and we had some good expertise say there
21 is no credible way that nuclear material will come
22 off San Onofre, that's why her emergency plan
23 shrunk, and also there is no credible way we can
24 have explosion, and for sure there's no credible
25 way to have 25-mile radius, 10-mile radius, so I

1 believe that's true from what I have observed and
2 studied, but Donna said that you guys are not
3 telling the truth because there's no
4 documentation.

5 So I was looking for documentation, and
6 it seemed like New Reg VR0528, which is safety of
7 spent fuel does go over that quite well, and it
8 seems there that there is documentation and maybe
9 people are understanding what used to have
10 emergency drills, sirens, and now we don't have
11 that risk. So maybe, among other things, so that
12 people do understand the risk has totally changed,
13 that we don't have that risk so people can
14 actually relax, it could not credibly happen, so
15 that was a good point by Donna and I agree that
16 with that consensus. Thanks.

17 DR. VICTOR: Thank you very much for your
18 comment.

19 Next is Mike Aguirre and Elijah Gaglio.

20 MR. AGUIRRE: In law when a witness lies
21 in a material part of his testimony, the jury is
22 told that they can disregard his testimony as a
23 whole, and, Tom, on August the 9th you lied twice.
24 You told the audience that the downloading had
25 stopped to give a crew a rest, give the crew a

1 rest, and then when the whistleblower came
2 forward, you lied again and you said the reason
3 that you hadn't reported it that night because it
4 wasn't that big of a deal, but you had already
5 made the agreement with NRC it was big deal and
6 that SCE wasn't going to do anymore downloading.

7 You really need to go, Tom, you really
8 need to go. And you need to do this because
9 there's too much at stake, and we can't trust you
10 anymore in light of your lies.

11 For the two NRC people, we have lost
12 complete confidence in you and the NRC. The two
13 of you can't even get your stories straight.
14 Linda says, Oh, the reporting is no big deal,
15 reporting violation is no big deal. Scott says,
16 oh, that's why the reporting is such a big deal.
17 That's what you said, you said it -- you said it
18 at the hearing on the 25th, and then Scott tonight
19 said the opposite.

20 There's five reasons why we cannot trust
21 you and the NRC with the safety of our community:
22 Number 1, you allowed Edison to use a too small
23 practice canister; you allowed Edison to download
24 a pin supported shim canister that wasn't even
25 approved by the NRC; you allowed SCE not to report

1 the August 3rd event for over three weeks, even
2 after the whistleblower had come forward; you kept
3 it secret with them and kept it from the public.
4 You are refusing to produce documents under the
5 Freedom of Information Act, and you have been
6 sued.

7 And I want to ask both of you please do
8 not destroy any of your e-mails, texts, or any
9 other records of communications because your
10 depositions will be getting taken out here in
11 San Diego.

12 And, finally, how disgraceful of you to
13 only present yourself to the public at a SCE
14 controlled event. You have never presented
15 yourself to the public. You are federal
16 regulators. We are paying your salaries. You've
17 taken an oath to our country, and now you're here
18 as an appendage of this private corporation that
19 has breached the trust of the people of this
20 community.

21 DR. VICTOR: Thank you for your comment.
22 Next is Elijah Gaglio and then Torgen
23 Johnson.

24 Am I pronouncing your name, G-a-g-l-i-o
25 for the record?

1 MR. GAGLIO: Yeah, Gaglio.

2 DR. VICTOR: Gaglio, thank you.

3 MR. GAGLIO: Good evening. I would like
4 to ask a question about something that
5 Mr. Palmisano said earlier this evening. He
6 stated that Edison had misinterpreted the actual
7 reporting requirements and it was the NRC who had
8 to convince them that they had to file a formal
9 report. I would like to ask the NRC officials
10 today what exactly did Edison misinterpret and
11 what did the NRC have to do in order for them to
12 file a formal report?

13 DR. VICTOR: What we do is we ask all the
14 questions and we get as many responses as we can,
15 so thank you very much for you comment.

16 Next is Torgen Johnson and David Whiston,
17 I think is the last name.

18 MS. JOHNSON: Torgen Johnson, Samuel
19 Lawrence Foundation. The issue at San Onofre can
20 be boiled down to one thing right now in dealing
21 with the waste, which is containment. And we have
22 an elephant in the room that's not being
23 addressed, instead we're being told to talk about
24 long term storage, which we know in 75 years
25 hasn't been established, and we now from experts

1 who worked at Yucca Mountain analyzing it that
2 it's decades away, but we do have the issue of
3 containment here.

4 I want to say that the August 3rd event,
5 near drop accident, was a blessing in disguise for
6 all us, if we look at it that way. It's like
7 having a window into the Boeing crash before the
8 crash. And if the regulator is too close to the
9 licensee, I don't think we're going to get the
10 tough questions that are needed to get the
11 public's trust back and to get to the right
12 answers.

13 The whole discussion I heard today was
14 really these are light questions. The industry
15 knows that chloride induced stress corrosion
16 cracking is a serious issue. And they know that
17 scratches initiate these things. You know the
18 cameras that you're dangling in that space, I just
19 want to hold this up for you and the public to
20 see. This is subsopic. You probably never saw
21 stainless steel like this, but it's granular when
22 it's corroding, and it cracks along these lines.
23 You can't see that with this camera, so that's not
24 being forthright by telling the public you've got
25 a system. That system should have been in place.

1 There should have been backup plans; there should
2 have manuals on site; there should have been
3 worker training to deal with a dropped canister.
4 None of that existed when that near drop happened.

5 All those things are like landing gear on
6 a plane and you know flying a plane you have a
7 landing gear system, because you don't just take
8 off without a way to get back down or a way to
9 reverse out of a problem. This is basic.

10 My training is in architecture and
11 planning and I see two things glaring. You've got
12 metal to metal scraping. In anything that I put
13 together if there's metal to metal scraping, it's
14 a problem; it's defective, and we stop the
15 project, assess, and we call the element. Your
16 system is only as good as the weakest part,
17 whether it's the de Havilland Comet or the Space
18 Shuttle Challenger, or Discovery, or the Boeing
19 737s, we have the gift of seeing the weak spot in
20 this system. All dry canister systems are
21 subjected to chloride induced stress corrosion
22 cracking that you cannot see from that camera.

23 Containment is the most important issue.
24 Let's get that right. We can talk about long term
25 storage later, but let's focus on the containment

1 and really drill down on tough questions on
2 Holtec. Holtec has done a number of things that I
3 think have completely lost the public's trust.
4 And I think the tough questions are the
5 appropriate thing to do right now to get to those
6 correct lessons that you talked about learning.
7 The public has learned a lot of lessons in this.
8 One of them is we've got to ask the right
9 questions upfront. We're not asking them right
10 now. Thank you.

11 DR. VICTOR: Thank you very much for your
12 comment.

13 Next is David Whiston and Christa
14 Gostenhoffer.

15 And am I pronouncing your name correctly?
16 David I understand, but Whiston?

17 MR. WHISTON: That's right.

18 I attended the meeting in October, and we
19 were told that the scratches on the canisters were
20 going to be okay, and that you could put them down
21 but they would self-heal is what I remember you
22 saying. But we just heard that in the permit
23 there was supposed to be no scratches on any of
24 them. So why did Holtec go ahead and load them in
25 there?

1 I mean, this is the company that
2 manufactures the canisters. Aren't there
3 incredible safety procedures on the deadliest
4 substance in the world? It baffles me how you can
5 go ahead and put a canister that's been
6 scratched -- but we just heard that they said, oh,
7 it's okay, they will be all right. But now we
8 just heard that, no, the permit said not a scratch
9 on it. So who would be inspecting the canisters
10 for scratches before they lowered them into a
11 canister?

12 I would also like to know what's the
13 seismic protection of those -- of the enclosure
14 the canisters are in, and how are they positioned,
15 and how do you check the bottom of them for any
16 cracking down there? The camera said they would
17 go around, but how do you get underneath them?
18 We're talking about 40, 50 years they might be
19 there, that's I would like to know. And it just
20 doesn't seem clear -- the seismic he said maybe 8,
21 a protection of about 8, but we don't know that
22 for sure. It could be 8 and a half, could be 7.
23 So I would like more details. It's important.

24 If something happened here, not just the
25 economy in Orange County and San Diego, but around

1 the whole country would be devastated. But like
2 other people said, I don't see the importance
3 here. This is one of the most serious issues I
4 could imagine in Orange County and San Diego, and
5 there needs to be more information, more detailed
6 information on what's going to happen long term.
7 That's all I have to say.

8 DR. VICTOR: Thank you very much for your
9 comment.

10 Christa Gostenhoffer and Rich Van Every.

11 MS. GOSTENHOFFER: Hello. I find it
12 worth noting that Edison loaded 29 canisters
13 before the problem of damaged canisters was
14 discovered. My question is, did Edison make any
15 reports regarding that damage in metal-to-metal
16 contact and the problem with centering the
17 canisters? It's only because of that near drop
18 that the NRC did their special inspection, and
19 thankfully the NRC was forthright in telling the
20 public about the problem.

21 The NRC basically stated that all the
22 canisters likely had metal-to-metal contact
23 because of the design of the system. Quote, "The
24 clearance space between the canister and the
25 divider shell is quite small, so canisters tend to

1 bump up against the shell while being loaded into
2 the vault."

3 But as was noted in your reports,
4 Holtec's final safety analysis report explicitly
5 stated there was to be no scraping or gouging
6 during the download." So because, literally,
7 quote, "The MPC, the multipurpose canister,
8 insertion and withdrawal occurs in the vertical
9 configuration with ample lateral clearances.
10 There is no risk of scratching or gouging of the
11 MPC's external surface."

12 That's from Holtec. So then in Monday's
13 webinar, the NRC informed us that Edison has
14 submitted a 72.48 variance to this Holtec final
15 safety analysis report to allow scraping and
16 gouging of the canisters.

17 So I'm a little bit -- I just want to
18 reiterate that, Holtec's official statement says
19 there will be no scraping or gouging because
20 there's ample room. Edison loads 29 canisters
21 without reporting the problems of centering the
22 canisters in the metal-to-metal contact, the NRC
23 discovers the Holtec canisters are scraped and
24 gouged, and now Edison's remedy is to simply
25 change the regulation requirement to allow

1 scraping and gouging.

2 Changing or weakening safety regulations
3 is not the way to solve this problem. The
4 canisters are damaged because the Holtec system
5 does not have a precision loading system. These
6 canisters have to fit through the guide ring with
7 only a quarter of an inch on each side of the
8 canister. They're unavoidably scraped, and
9 Edison's improved procedures will certainly not
10 fix the problem, and it certainly won't fix the
11 problem that we have 29 damaged canisters. This
12 is unacceptable.

13 The Holtec system was supposed to deliver
14 canisters without scraping or gouging. We're not
15 talking about cans of soup. Each of these
16 canisters holds a Chernobyl disaster worth of
17 ionizing radiation. Southern California deserves
18 an intact nuclear waste storage system. The only
19 warranty Holtec has on these canisters is for a
20 manufacturer's defect. Damaged canisters is a
21 result of manufacturer's defect, poor engineering.

22 I see my time is up.

23 DR. VICTOR: Yeah.

24 MS. GOSTENHOFFER: These things cost
25 \$4 million including the ISFSI and the labor, \$4

1 million per canister. So it's up to the NRC to do
2 the right thing and do their job, and so we're
3 asking that you deny that 72.48 change for sure,
4 and this system needs to be recalled and replaced.

5 DR. VICTOR: Thank you very much.

6 MS. GOSTENHOFFER: Because it's
7 fundamentally flawed.

8 DR. VICTOR: Thank you very much. Thank
9 you for your comment.

10 Rich Van Every and then Charles Langley.

11 Rich Van Every, are you here?

12 MR. VAN EVERY: Thank you for the
13 opportunity to speak tonight. I appreciate the
14 NRC coming out to be with us in person. It really
15 means a lot.

16 There is something I would like to
17 address very clearly, and it is what's actually
18 going on here, which I feel is a failure in
19 communicating that the current storage system that
20 is being implemented doesn't prepare the waste for
21 transport. That sounds like a really big waste of
22 energy and time and money and risk of an incident.
23 So once all this waste gets loaded into these
24 thin-walled casks that are welded shut,
25 pressurized vessels with no release valve, then

1 we'll figure out later what to do? How much
2 later, 20 years? Just hand the potato off to
3 somebody else?

4 This is what I'm very much not feeling
5 good about with the way policy has gone in the
6 nuclear industry, for waste especially.

7 Yucca Mountain failed. I don't know why
8 we had to focus on it for so long before we
9 realized it wasn't a good idea. And I know we
10 have a lot of problems to consider here and a lot
11 of things to figure out, but it's really important
12 to me that we pause now, reassess, and then
13 redirect, because the Holtec system is not only
14 flawed fundamentally in its design, it's just
15 setting us up to having even more problems down
16 the road. That doesn't sound like a good plan.
17 We don't want more problems.

18 We need to get a hot cell on site as long
19 as there's waste on that property, in my opinion.
20 So I really want to know how and why Edison hasn't
21 already started that process, because my
22 understanding is the fuel is too hot to go back
23 into the fuel pools, storage pools. The fuel is
24 too hot right now is my understanding. If
25 that's not true, I would love to hear about that.

1 So knowing that there's some contingency
2 plan if the canister is dropped. I have a tough
3 time believing a hundred thousand pound canister
4 wouldn't rupture from 18 feet, really having a
5 tough time with that one.

6 And one other comment I would like to
7 make is in regards to the scratching. You know, I
8 would imagine that most of the damage is on the
9 bottom of the canisters, so it's funny that that's
10 the one area that you can't look right now. So I
11 hope you guys somehow find a way in the near
12 future to get an inspection on those bottom part
13 of the canisters.

14 You know, there's really a story
15 unfolding here for the history books, one to learn
16 from and to never repeat, and, you know, right now
17 I'm working on a documentary film, and you all get
18 to be part of the cast. So you got to ask
19 yourselves if you want to be on the good side as a
20 hero, or do you want to be portrayed as a villain,
21 but one way or another the story is going to get
22 told, and everybody is going to get seen clearly,
23 so thank you.

24 DR. VICTOR: Thank you for your comment.
25 Charles Langley and Nina Babiar.

1 Charles Langley, the floor is yours.

2 MR. LANGLEY: Greetings. I'm Charles
3 Langley with Public Watch Dogs, and, Mr. Morris,
4 you said something rather interesting, you said
5 that you don't get to make the rules, but you are
6 responsible for enforcing the rules in your
7 capacity.

8 MR. MORRIS: In our region.

9 MR. LANGLEY: So I'd just like to make an
10 observation and important distinction is that, you
11 know, a lot of us when we think of rules we make a
12 distinction between rules and the rule of law, and
13 the Code of Federal Regulations is regulatory law.
14 These are more than rules. And many of these laws
15 have criminal penalties, and when you don't
16 enforce the law what happens is that it increases
17 the probability that the law will be broken. For
18 example, fining \$116,000, which I think is the
19 maximum you're allowed to charge on a \$5 billion
20 project seems kind of silly. It's like you
21 demanding a nice shiny new dime from me or anyone
22 else in the audience. It's a pittance to Southern
23 California Edison, so it creates the potential for
24 more hazard.

25 But more importantly is when a regulatory

1 agency doesn't enforce really important laws, and
2 one of the really important laws is 72.75 Code of
3 Federal Regulations. This law required Southern
4 California Edison to report that unsecured load
5 event that happened on August 3 and to do it
6 within an hour. They waited 42 days, not
7 24 hours, okay, 42 days. So they were 41 days
8 late.

9 There was a July 22 event, no report
10 made. I've looked at these event reports, I look
11 at them almost every day, and I've seen people
12 reporting Kambucha in the company refrigerator in
13 a nuclear power plant because it had 1 percent
14 alcohol and was an alcoholic beverage and,
15 therefore, had to be reported, and yet we have a
16 near miss of 100,000 pounds, and it's not
17 reported. And not only that, what's really
18 terrifying, what's really, really horrifying is
19 that the NRC has chosen not to enforce the law.
20 They said we're not going to enforce 72.75,
21 Because Southern California Edison wasn't aware of
22 the law.

23 Now Southern California Edison has 189
24 attorneys on its staff, and one of the fundamental
25 premises of the law is that ignorance of the law

1 is no excuse.

2 So I'm asking you now, please, do your
3 job, enforce the law and impose criminal penalties
4 when criminal laws are violated. Thank you.

5 DR. VICTOR: Thank you for your comment.
6 Nina Babier and then Madge Torres.
7 Nina Babier, the floor is yours.

8 MS. BABIER: Hi, my name is Nina Babier.
9 I'm a board member of Public Watchdogs, and
10 40 years ago today I was an engineering news
11 reporter in Pittsburgh during the 3-Mile Island.
12 And so today brought back a whole rush of memories
13 and emotion. And it's hard, you know, when you
14 can't forget when Walter Cronkite comes on the
15 evening news and states that a day like none other
16 in our country's history, you can't forget that
17 when you picked up the phone to make a call out,
18 not only did you not get a dial tone, but you got
19 an emergency warning sign -- sound, no calls out.

20 And it's really hard to forget that an
21 outraged Pennsylvania lieutenant governor quoted
22 in a press conference, called Edison liars, not my
23 term, the lieutenant governor of Pennsylvania
24 called Edison liars, and, quote, "It is
25 unconscionable that a private company would have

1 complete control over an emergency evacuation
2 situation."

3 Why am I bringing up 3-Mile Island today
4 because Edison's shenanigans during the initial
5 notification and finally two days later the
6 evacuation well demonstrates 40 years of bad
7 behavior and a deception pattern of communication
8 that still exists today.

9 So let's fast forward to the NRC's
10 preliminary report 3/18, page 9. Let's go there
11 to the present. Page 9 indicates a weakness that
12 was identified but never brought into the final
13 report, and I quote, "a potential weakness
14 included a perception of retaliation, a reluctance
15 to report issues of concern and timely resolution
16 of issues through the condition reporting
17 process." What was that from? An employee
18 concerns program. A potential weakness, a
19 perception of retaliation for employees.

20 When we talk about the August 3rd event,
21 the only saving Grace that we had was that some
22 guy had the courage to come forward and report it
23 when Tom Palmisano couldn't tell the truth. And
24 so we go to another -- another quote within the
25 NRC report of the 25th, that the can wouldn't be

1 damaged but the fuel assemblies would be. I
2 believe you quoted that as a significant safety
3 concern, that's your terms.

4 And so I see that my time is up, but I
5 ask you, please, the NRC, would you please stop
6 using the language that was passed in federal law
7 to continue to do Edison's bidding, because you
8 know what, public is paying for all of this, and
9 we're being short-changed. And the fact that you
10 couldn't come up with here today with the laymen's
11 version of this drop analysis report is just
12 another demonstration of how out of touch you guys
13 are and how the bad behavior and deceptive
14 communication continues today.

15 DR. VICTOR: Thank you for your comment.
16 Next is Madge Torres and then Burt
17 Muldow.

18 Madge Torres, the floor is yours.

19 MS. TORRES: My name is Madge Torres.
20 I'm with Citizens Oversight. I'd like to ask that
21 you keep -- that you ensure, NRC, Scott and Linda,
22 I'd like you to ensure that the pool and the hot
23 cell, I mean, are maintained on the premises of
24 San Onofre until the last nuclear waste is off the
25 site. And I understand that you're interested --

1 as the NRC is interested in having the CEP in
2 other areas, and you would like to know about the
3 CEP. The CEP just congratulated a person named
4 Bill Horn who never came to the meetings, not even
5 once; they thanked him for his service; there was
6 none, never here.

7 And when we first were coming to these
8 meetings sometime ago, they used to serve a meal
9 to all the members of the CEP panel, but I'd like
10 you to know that the people that volunteer to come
11 here on their own time are intelligent, hard
12 working, they probably spent the entire day, not
13 even taking time to have breakfast, lunch, or
14 dinner and drive probably 75 miles one way to
15 attend these meetings, because they're all over
16 the place and we live far away. There's no
17 consideration -- there was not even a bottle of
18 water. You all received waters. We didn't get
19 water even when we came here.

20 Finally, they were shamed into providing
21 us water because one of the groups that
22 participates here started providing water to all
23 of the people that came to comment, but I don't
24 know if you noticed, but they make sure that we
25 still know our place by providing us with half

1 size bottles. So they provide you all with
2 full-sized, big boy bottles, and we get little
3 mini bottles. Why make that make effort to
4 diminish us? I don't know why it's so important
5 for them to diminish us, but it is.

6 First they have a banquet that they
7 actually posted guards to make sure we didn't get
8 a piece of pizza, if there were any left over, and
9 then now they provide us with mini bottles,
10 because we're not quite big boys.

11 The next thing they did or do, actually,
12 the fact that Linda and Scott are here is a change
13 because typically Tom Palmisano rambles on around
14 and around and around in circles about something
15 that he's decided he can talk about for the most
16 time possible, and he and his friend David Victor
17 make sure that the time has all run out, and then
18 these people who have driven 75 miles and worked
19 all day on presentations and boards to demonstrate
20 their points are given three minutes each and it's
21 cut off. This time they are being a little more
22 generous and they don't actually cut off the mics,
23 but they make sure every other time when you and
24 Linda aren't here, Scott, they make sure that the
25 time is enforced strictly.

1 And so I just want you to know it's
2 not -- it's not a good experience to come to the
3 CEP.

4 DR. VICTOR: Okay. Thank you very much
5 for your comment.

6 Next is Burt Muldow and then Christine
7 Gorman.

8 And Mr. Muldow is number 18 of 29, so we
9 will go for a bit longer. We probably won't get
10 through all 29 tonight, but Mr. Muldow, the floor
11 is yours.

12 MR. MULDOW: Thank you. More and more we
13 read about known but ignored problems that create
14 life-threatening issues. The latest was the
15 Boeing 737 Max, okay. And -- which caused
16 fatalities of a few hundred lives. Boeing and the
17 government represented there's tasks to protect
18 the public, knew of this problem, but they failed
19 to require spending the money needed to provide a
20 proper solution.

21 What we are discussing here today is the
22 same type of failure except a scale infinitely
23 larger. The failure of the nuclear waste storage
24 problem at San Onofre will not result in a few
25 hundred fatalities. It has the potential of

1 impacting the lives of more than 8 and a half
2 million people and destroying the fifth largest
3 economy in the world.

4 It befuddles the imagination to try to
5 understand why our government and energy company
6 insist on implementing a questionable nuclear
7 waste storage system when a failure of waste
8 containment could result in a loss of trillions of
9 dollars, disrupt the lives of so many people, and
10 is really capable of destroying the entire economy
11 of the United States. That's how serious this is.

12 The inability of our government to locate
13 an interim or permanent waste storage site in any
14 reasonable time frame highlights the importance of
15 providing an effective, long term, in place
16 nuclear waste storage system. This is just being
17 realistic. We've already worked on this for 70
18 years and we're no closer today to having a sound
19 permanent storage site.

20 So we are facing, in my opinion, a
21 threatening human disaster of cataclysmic
22 proportions. Here today we are discussing the
23 ongoing Holtec storage system and the potential
24 damage that has resulted due to a lack of
25 precision downloading design that cause scraping

1 and gouging of canisters. Even without gouging
2 and scraping, these canisters have a limited life
3 and the ones that have been selected have a far
4 limited life, more limited life than the potential
5 other canisters that are available in the world
6 today.

7 Not only that, but the canisters that we
8 have selected are non-repairable whereas those
9 that are available elsewhere are repairable, and,
10 therefore, even the life can be extended further,
11 and so what we are facing is a disaster, and I
12 don't understand why we are not looking at other
13 alternative solutions, other alternative
14 containment manners than the one that we have
15 selected. Thank you.

16 DR. VICTOR: Thank you for your comment.

17 Next is Christine Gorman and then Donna
18 Gillmore.

19 Christine Gorman, the floor is yours.

20 MS. GORMAN: Good evening. Tom, when you
21 were speaking tonight you mentioned that with this
22 vertical download design, inevitably there's going
23 to be misalignments. I'm very concerned about
24 that because you say it like this is inevitable
25 and it's going to keep going on and this is

1 supposed to be okay. The misalignment to me that
2 means that there will be scraping. I still do
3 think that there's a problem with that inner ring,
4 the design, the machining of it that really hasn't
5 been addressed.

6 You also mentioned, Tom, tonight and you
7 mentioned it in a previous meeting too, and I
8 don't know why it was never brought up again and
9 discussed, you said, yes, we have damaged fuel,
10 correct?

11 DR. VICTOR: No, please, continue with
12 your comment, and we'll have responses later.

13 MS. GORMAN: Okay. I believe you said,
14 yes, we have damaged fuel. That would probably be
15 in one of the old videos if anybody wants to look
16 through the archives. Okay. I would like to know
17 what are the consequences of that? Where is that
18 damaged fuel? What happens to that damaged fuel
19 when it's time to make an attempt to move this to
20 some other more permanent storage?

21 When there are delays because of
22 difficulty sometimes with the alignment, that
23 extends the time that the -- that there's more
24 radiation exposure, you didn't even mention that.
25 As the canister gets lowered, the lower it gets,

1 the less radiation is coming out of the top, so,
2 therefore, when it's delayed because of these
3 misalignment problems, that means more extended
4 time of that radiation coming out of the top.

5 And the incident that you mentioned, the
6 way I calculate the minutes, it wasn't actually
7 45 minutes to an hour. From 1 o'clock until 2:22
8 is actually an hour and 27 minutes.

9 And in the past too you've mentioned how
10 there's a lot of turnover in the workers, and --
11 but what was never discussed is why is there a lot
12 of turnover. What I wonder about I would like to
13 know if how many of those had to leave the
14 profession because of overexposure? Do we have
15 those figures? I think we really need to know why
16 there was so much turnover. I don't think that's
17 ever been addressed. I think the whole vertical
18 design is a problem to begin with, and as well as
19 storing it in the sand, and rather than even
20 trying to redesign the inside and continue with
21 the vertical method of bringing these down, maybe
22 we need to look at a whole different approach,
23 something different, not vertical. Use a
24 different approach, and even with this where you
25 talked about extra things installed for earthquake

1 protection in case one occurred, meanwhile you're
2 going through this process, I don't think that's
3 covered every step of the way. I would like to
4 see a diagram from the time that it actually
5 leaves the wet storage until it gets fully sealed
6 and underground. I think there's probably many
7 places along the line there where it wouldn't be
8 safe during an earthquake.

9 DR. VICTOR: Thank you very much for your
10 comment.

11 We're going to have time for three more
12 tonight, because I want to make sure we have --
13 we're going to run over, way over actually, but I
14 want to make sure we can take advantage of the
15 folks from the Nuclear Regulatory Commission here
16 with us tonight to get more questions answered on
17 the spot.

18 So we're going to take three more, Donna
19 Gillmore and Gary Headrick.

20 MS. GILLMORE: Let's cut to the chase
21 here. You're trying to put lipstick on a pig.
22 This system is a lemon; you know it; everybody in
23 here knows it. It was bad from the point of
24 design and you know it. Our only option is to
25 replace this system with thick-walled casks,

1 proven thick-walled casks that are proven to be
2 inspected, maintained, and monitored and have a
3 plan in a place to keep this thing maintenance --
4 you know it's not going anywhere.

5 Tom, you're not even looking here. Now
6 Holtec, why is not Holtec being held accountable
7 for their crappy design? This design is -- you
8 dot not -- you don't load a nuclear missile, you
9 know, like this. I mean, well, it might scratch
10 on the sides. You got to be -- this is
11 ridiculous. It needed to be a precision
12 downloading system. If this system isn't a
13 precision downloading system that you need a guide
14 ring, what about the aboveground Holtec canisters?
15 Do they have a precision system, or do they have a
16 guide in there and those are scraping too?

17 We need a full investigation on every
18 Holtec system in the country. The whistleblower
19 did us a favor and alerted us to a major problem
20 in this country, and yet Holtec is not being cited
21 for anything on this issue when they created the
22 problem. Edison just weren't smart enough to pick
23 a good system, and all they cared about is getting
24 the fuel out of the pool so they could save on
25 overhead costs and get their hands on that \$5

1 billion. They have the worst safety record in the
2 country. The steam generators were lemons; this
3 system is a lemon. We need solutions here. We
4 don't need people just trying to cover their rears
5 here. We need solutions. We need the systems
6 replaced.

7 I would like to know from Linda and Scott
8 who do we have to go to get Holtec's, Edison's
9 line yanked and to really do a serious -- they're
10 not qualified to run a -- run anything really.
11 They're not qualified to run a nuclear plant. Why
12 do they still have a license? You know, anyway,
13 our only option is to replace the system with
14 thick-walled casks and nothing else short is going
15 to save Southern California.

16 And regarding explosion risks, show me
17 any document that you have that addresses a high
18 burn up fuel. And so far I've seen no evidence
19 from anybody that we can't have explosion risks.
20 The Nuclear Waste Technical Review Board is
21 concerned with hydrogen gas explosion in these
22 canisters. I have lots of evidence. None of you
23 have shown me any evidence to the contrary.

24 And that company, that independent expert
25 they relied on, they recommended that a destroyed

1 hot cell. The hot cell was destroyed in 2007 and
2 that was a recommendation for a leaking canister.

3 DR. VICTOR: Thank you very much for your
4 comment.

5 Next is -- am I going to get another
6 lemon? I'll take it this time.

7 MS. GILLMORE: You'll take it? I don't
8 think you deserve it this time.

9 DR. VICTOR: We've got -- Gary Headrick,
10 the floor is yours and then Jeff Steinmetz.

11 Gary Headrick.

12 MR. HEADRICK: Well, good evening. I'm
13 Gary Headrick, San Clemente Green, and I would
14 first like to acknowledge that people that are
15 still here tonight and that have made the effort
16 to come out. It's a remarkable commitment to be
17 here, and without you, our voices would mean
18 nothing. And I appreciate all the prior speakers,
19 and I appreciate that the NRC is here tonight, and
20 I even appreciate that Tom has tried to be more
21 transparent about, you know, the mistake of
22 misrepresenting what happened. And I hope we can
23 continue to build on the integrity of this
24 process, but I'm of the mind that we seriously
25 need to replace the system that we're using. I

1 agree with Donna's assessment, and I'm not
2 claiming to be an expert, but I do expect the
3 experts to look into these things and analyze
4 these things. So tonight as I listened, I was
5 more concerned about the questions that came to
6 mind with the system we have, and one of them
7 would a drop result in a distorted canister that
8 would be impossible to remove? What would
9 Edison's response be should the canister have
10 dropped? And even if it maintained its integrity,
11 if it destroyed it, how would we ever get it out
12 of the ground again? What is the contingency plan
13 for that?

14 That's just another sign of weakness in
15 the design. We have a dummy that I understood in
16 the webinar the other day, it's three inches more
17 clearance because they were concerned a canister
18 of that weight in the same kind of configuration
19 might bulge out just from the weight so they had
20 to make it smaller to make sure it would go up and
21 down inside the vault.

22 I also wondered would more NRC oversight
23 have prevented this incident in the first place?
24 Could we have caught it sooner? Is the NRC
25 looking at your own processes to understand that?

1 If the fuel is damaged as everyone seems
2 to agree would happen in a drop, isn't there a
3 risk of hydrogen gas build-up. I've done some
4 research on that with the Nuclear Waste technology
5 Review Board, and there's an event that occurs
6 even without the damage that we have to be
7 planning for. Again, we have to have a system
8 that works in that regard.

9 And then the 25-foot drop analysis done,
10 I understand that analysis was done with the
11 transport cask around it, so it was somewhat
12 protected by the transport cask, I would just like
13 some clarification if that's the case or not,
14 makes a big difference. And I'm almost out of
15 time, so I'll skip a couple. We just need more --
16 we need the NRC and others to demand further
17 analysis of damaged fuel. What are the
18 consequences, what are the possibilities here,
19 because people say, oh, nothing could happen, and
20 then hydrogen gas explosion reminds me of
21 Fukushima, so we need answers to this. We need a
22 different system, and we need your help to get
23 down to a reasonable solution.

24 DR. VICTOR: Thank you very much. And
25 the ones you skipped, please send them to us so we

1 can get the answers to those as well.

2 Jeff Steinmetz, you have the floor.

3 MR. STEINMETZ: Good evening, everybody.
4 Can you hear me okay? Good. My name is Jeff
5 Steinmetz. I'm a concerned citizen from San
6 Clemente, California. I just want to be able to
7 live in San Clemente, and raise my family in
8 San Clemente, and continue to work in San
9 Clemente. I honestly don't think that's really
10 something that we'll be able to do. And I think
11 it's because Southern California and the Nuclear
12 Regulatory Commission regularly lies to us.

13 On August 9th, excuse me, Tom Palmisano
14 came up here and lied to every one of us in the
15 audience but also lied to every one of you on the
16 panel. Each and every one of you was lied to if
17 you were here on August 9th. And you've had two
18 sessions of the CEP meeting and none of you has
19 asked one question about it. None of you have
20 questioned whether anything he actually says is
21 viable. That's not right.

22 Do you remember saying this?

23 (Mr. Steinmetz playing his phone:

24 "We've made good progress. We do
25 periodically stop. We stopped over the week

1 of Memorial Day to rest the crews. We
2 stopped for crew rests to do maintenance on
3 our equipment, and we're in one of those
4 stops at this point when we completed number
5 29 last week. I expect we'll restart loading
6 in a week or two. During this time...")

7 That's Tom Palmisano up here deliberately
8 lying to you trying to convince you that there was
9 a different reason for why they actually stopped
10 work. We all know basically what came up at 2:20
11 in the same presentation, which is on video.
12 David Fritz stood up and said the real reason as
13 to why this happened.

14 Why isn't that the CEP panel, the panel
15 that says it is supposed to protect the
16 communities doing anything or saying anything to
17 Southern California Edison? That's ridiculous.

18 Now, as far as the blind-lift analysis,
19 it's good that Tom finally admitted that it is a
20 blind lift. I'm glad you said that, Tom, a little
21 but surprised, especially since the August 9th
22 meeting. But the only reason why you need a hokey
23 rope system is because you don't have a precision
24 downloading system. And you have no way of
25 knowing if a canister is being gouged or not.

1 The entire industry is now aware that
2 Holtec doesn't have a precision downloading
3 system, and worse than the public even knowing,
4 now their competitors know. And southern
5 California Edison is pretty much the laughing
6 stock of the industry because they selected this
7 lemon.

8 I mean, if you go -- I'm a salesperson, I
9 go to my competition, if I know I have a major
10 defect in my product like that, I move onto
11 another job. You can't sell crap like that when
12 your competition has got the goods on you like
13 that. But here is it is Southern California
14 Edison, the Nuclear Regulatory Commission, and
15 Holtec still trying to sell us that this system is
16 good; it's not.

17 DR. VICTOR: Thank you very much for your
18 comment.

19 We're going to go over about 15 or
20 20 minutes. I want to make sure we have a chance
21 to get some of these questions answered tonight,
22 and everything that's not answered tonight will be
23 documented and answered in writing, put on the
24 website, and all of the seven or eight people who
25 did not get a chance to speak, I think six or

1 seven people who did not get a chance to speak
2 tonight, we'll do the same thing with the
3 questions you put in your cards here.

4 I'm going to give the floor over to Dan
5 Stetson and Jerry Kern who are going to lead this
6 next segment of the meeting.

7 MR. STETSON: Thank you, David.

8 This question is for Scott or Linda, and
9 the question is, is the NRC relaxing or changing
10 the rules to accommodate what's happened at SONGS?
11 Are you enforcing the law, and connected to with
12 that, how did you come up with the amount of the
13 \$116,000 fine?

14 MR. MORRIS: I'll start with. Good
15 questions. Thanks for that. There were three
16 questions in there, and I want to make sure I hit
17 them all. The first one had to do with -- why
18 don't you remind me.

19 DR. VICTOR: Relaxed --

20 MR. STETSON: Are you relaxing --

21 DR. VICTOR: -- the scratching.

22 MR. MORRIS: No, we're absolutely not,
23 not relaxing the requirements. The short answer
24 is no.

25 MR. STETSON: Are you enforcing the law?

1 MR. MORRIS: Absolutely.

2 MR. STETSON: And how did you come up
3 with the \$116,000 fine?

4 MR. MORRIS: The NRC -- the commission
5 approved, NRC enforcement policy, which is
6 reviewed and approved by the five presidentially
7 appointed senate-confirmed commissioners approved
8 the policy that states how, when enforcement
9 actions are to be taken, including civil
10 penalties, right. So that document, which is also
11 available on our website, I invite you to look at
12 it, clearly articulates -- you can take the same
13 of set of fact pattern that we've documented and
14 discussed in our webinar, plug it into that policy
15 and come out exactly where we came out. So it's
16 completely in alignment.

17 Now, some -- and I know think it was
18 Mr. Langley who said the civil penalty itself
19 was -- I don't remember the exact words -- it
20 seemed trivial in the light of the assets and
21 whatever that Edison has. And I'm not -- all I'm
22 telling you is that fact, that factor, that civil
23 penalty amount is consistent with the policy. If
24 you don't like the policy, or if you want to
25 change the policy, there's ways to get that -- the

1 Commission's interest in doing that, and I'm happy
2 to share how to do that, but what I also try to
3 emphasize is our role, my role, Linda's role is to
4 implement the Commission-approved policy. I can't
5 deviate from that policy.

6 MR. KERN: I guess this was kind of the
7 theme throughout was the reporting period, and
8 there was a misinterpretation of when it should
9 have been reported, and so I guess between Tom and
10 you, what was -- I guess what was the wording of
11 the misinterpretation as far as timing?

12 MR. MORRIS: I'm going to let Linda --

13 MS. HOWELL: Yeah, let me elaborate on
14 that, and then I'll offer Tom the opportunity.
15 When the NRC, and primarily the regional office,
16 was notified on --

17 MR. MORRIS: Monday the 6th.

18 MS. HOWELL: -- Monday following the
19 incident, our initial take on reportability was
20 that it was reportable, and we did inform Southern
21 California Edison representatives of that.

22 We continued to inform them that our
23 position was that it was reportable up through
24 initiation and the last onsite day of the special
25 inspection. But the inspection team informed

1 Southern California Edison that for specific
2 reasons we felt that it fit into the 24-hour
3 reporting criteria. The misunderstanding as it
4 was explained to us, and I'll have to let Tom
5 speak for himself, had to do with one clause of
6 that reporting requirement and what Southern
7 California Edison's understanding was for whether
8 or not the redundant drop protection features for
9 the lifting and rigging equipment were there to
10 mitigate an accident. They turned around, came,
11 to our understanding, and subsequently reported on
12 September 14th.

13 MR. PALMISANO: Yeah, the issue was not
14 our understanding of the time frame; we knew the
15 time frame. We judged it did not meet the literal
16 criteria to be reported. We had dialog with the
17 NRC, and the NRC eventually when the onsite team
18 was onsite convinced us where we were
19 misinterpreting this and it's legitimate. That's
20 why we have not contested the violation.

21 MR. MORRIS: And I -- if I could just
22 quickly add, so someone talked about why wasn't
23 previous events or incidents reported, like the
24 July 22nd, it's simply because the circumstances
25 and the facts surrounding that day and what

1 happened on that day don't meet the criteria in
2 our reporting requirement, they just don't. They
3 have to capture in their corrective action
4 program, it's available for us to inspect, but
5 they don't -- our requirement -- they don't --
6 they didn't meet the requirements of the reporting
7 rule for that incident.

8 MR. PALMISANO: Let me add --

9 DR. VICTOR: Very briefly because I do
10 want to get through something other than
11 reporting, reporting is incredibly important, but
12 a lot of other things have been said tonight.

13 MR. STETSON: Could you please explain
14 the status of the expert panel and their work,
15 where do we stand with them?

16 MR. PALMISANO: Yeah. The expert panel
17 has formed. We provide a monthly, now a quarterly
18 report under the lawsuit settlement that describes
19 the current activities. The panel has been
20 formed; we're preparing to develop a strategic
21 plan, which we have committed to under the lawsuit
22 settlement, and I can provide a broader update at
23 the next meeting.

24 DR. VICTOR: Should we be asking them at
25 the next meeting? Let's see where we are at the

1 next meeting, but should we be asking them to come
2 give a report and discussion?

3 MR. PALMISANO: We can certainly do that.
4 I can have the chair of the panel provide a
5 report, but we meet -- we have monthly phone
6 calls, quarterly meetings and we've regularly used
7 them to advise us on development of the strategic
8 plan.

9 MR. KERN: And the next one is, is the
10 waste ready for transport?

11 MR. PALMISANO: Well, we'd really have to
12 explore what the commentators [sic] are talking
13 about. The Holtec system, and I've heard all the
14 criticisms, so I'm not going to try to go to each
15 of the comments about the Holtec, but the Holtec
16 system is licensed for both storage and transport.
17 The San Onofre fuel assemblies are capable of
18 being transported. We have three systems on site:
19 The two AREVA systems are both licensed for
20 storage and transport, as is the Holtec system;
21 both vendors are building the transportation
22 overpass for other clients.

23 So there's a lot more to -- is there a
24 question about the fuel in 10 years or 20 years?
25 There's a lot more that we need to delve into

1 there, but the systems are designed and licensed
2 for storage and transport. The fuel assemblies
3 are capable of being stored and transported.

4 MR. VAN EVERY: That's not true, Tom.
5 You can't inspect the internal elements of the
6 canisters --

7 DR. VICTOR: Please.

8 MR. PALMISANO: As I said, we really need
9 to discuss this more.

10 DR. VICTOR: Jerry, did you want to --

11 MR. KERN: No, that was the question
12 about the transporter fuel.

13 MR. STETSON: For Scott or Linda, as
14 Holtec has been the subcontractor, are there any
15 alternatives available to hold Holtec responsible
16 for some of the actions that are taking place?

17 MR. MORRIS: Do you want to take that?

18 MS. HOWELL: Not that -- to hold Holtec
19 responsible for what type of actions? It's
20 just -- I'm unclear on the question.

21 MR. STETSON: There's been -- Holtec
22 has --

23 MR. MORRIS: So this is the same issue
24 that they are going to be held accountable for
25 that. We haven't reached a final decision. I say

1 "we," the NRC. Our NRC headquarters, colleagues
2 because they work with Holtec, there was a
3 pre-decisional enforcement conference with Holtec
4 on the shim issue, it's a 7248 issue, not to get
5 bogged down but that's still in process. There
6 will be -- our final determination on that issue
7 will be made in the next, I don't know, month, few
8 weeks. I'm not exactly sure. But the short
9 answer is there are mechanisms to hold licensees
10 and vendors who hold a certificate to hold them
11 accountable, absolutely.

12 MS. HOWELL: So I see another couple of
13 distinct areas possibly in that question: One
14 would be for the design changes that were made to
15 the Holtec final safety analysis report, and,
16 again, I mentioned a little while ago that we're
17 holding a public meeting with Holtec on April 10th
18 on that. So I already noticed you can find out
19 how to dial in by just going to the NRC's web
20 page, but that will be one opportunity for the NRC
21 to talk with Holtec as a vendor and certificate
22 holder about the appropriateness of their design
23 change process.

24 So that's one element. When it comes to
25 holding Holtec responsible for any of the

1 activities that they're performing at SONGS as a
2 contractor, that is not something that we would
3 reach out to separately. I'll be very clear,
4 Holtec is not the licensee for the downloading
5 activities that they are performing under contract
6 with Southern California Edison. Southern
7 California Edison is the licensee. And so --

8 MR. MORRIS: And as such are responsible
9 for the activities of their contractors and
10 vendor.

11 MS. GILLMORE: Why no notice of violation
12 for the download, the engineering download? The
13 FSAR didn't agree with what they did.

14 MS. HOWELL: Donna, that's a good
15 question. I'll take it very briefly.

16 MR. MORRIS: It's still in progress.

17 MS. HOWELL: It's still in progress.
18 Those inspection activities are still ongoing.
19 That was the report that Scott referred to in his
20 discussion that would likely be coming out in
21 mid-April.

22 DR. VICTOR: Dan.

23 MR. STETSON: I think it's Jerry.

24 MR. KERN: Part of this, I think, was
25 partly addressed was misalignment and design

1 changes. One of the questions was, is there
2 anything you can do to that inner ring to change
3 the design so it lines up better? Can they go
4 back and change that inner ring so it doesn't hang
5 up?

6 DR. VICTOR: And related to that is Ray's
7 comments about why there isn't a slide on design
8 changes? That's to you, Tom.

9 MR. PALMISANO: I didn't hear the --

10 DR. VICTOR: Why there isn't a slide or
11 set of comments about the design changes as part
12 of the overall strategy?

13 MR. PALMISANO: It's a good comment.
14 Holtec is not proposed a change of the design.
15 Based on the dry runs we've done, this can be
16 aligned and downloaded with minimal contact, but
17 there is some contact, and I understand the
18 comments on that. I'll be glad to come in at the
19 next meeting to talk more about what potentially
20 could be done. So I've taken a lot of notes about
21 the comments.

22 MR. STETSON: Tom, there was a couple of
23 questions with reference to inspections
24 particularly about inspecting the bottom. Could
25 you make any comments on that, please?

1 MR. PALMISANO: Yeah, the concern -- so
2 canister inspection, in general, the concern about
3 stress corrosion cracking in the canisters
4 particularly is in the welds in the canister wall,
5 not the bottom head. The bottom head is three
6 inches thick of steel. That's not where the
7 cracking is going to be an issue; that's not where
8 the primary concern to look underneath it. The
9 canister wall is 5/8th inch thick, and I won't get
10 into the debate of thin-walled versus thick-walled
11 canisters, I recognize the comments there, but the
12 concern about the stress corrosion cracking is
13 particularly in the welds and the heat-affected
14 zones along the welds in the canister walls.
15 That's what's particularly important.

16 I've talked quite a bit in the past about
17 everything we've done to strengthen the welds, to
18 peen the welds, et cetera. That's why it's
19 important to be able to inspect the sides of the
20 canister, not the bottom.

21 DR. VICTOR: Jerry.

22 MR. KERN: This has to be do with the
23 drop. This is Gary Headrick's, if a drop
24 occurred, hopefully it doesn't, and the canister
25 is distorted, is there any way to extract the

1 canister if it's damaged, basically not cracked,
2 just distortion?

3 MR. PALMISANO: So the analysis shows the
4 canister would not be distorted to the point that
5 it could not be retrieved. But I should comment,
6 we checked on the break, we do have the laymen's
7 version of the drop analysis posted on the
8 website. That may not be sufficient for some
9 people. So let me come back and talk about the
10 more detailed conclusions of the drop analysis in
11 terms of how much the canister might be distorted.

12 MR. MORRIS: If I could add, we the NRC
13 when our colleagues in headquarters who are
14 licensed to issue the certificate on the system,
15 didn't ask the vendor to produce that type of
16 analysis because they delivered to us a single
17 failure-proof design that wouldn't -- that it
18 could not happen. That is why the violation that
19 we issued is so important because that assumption,
20 that fundamental assumption that this event can't
21 happen because we have a single failure proof
22 design, was invalidated on August 3rd. That is
23 why the enforcement is what it is, fundamental.

24 MR. KERN: And I think probably this
25 might be something we do in the extreme events

1 workshop that we're talking about as one of those
2 events that may happen, so we'll wait to that time
3 and we'll bring it all together.

4 DR. VICTOR: Well, we're going to get a
5 lot more information from Holtec well before that.

6 MR. PALMISANO: Yeah, I would focus on
7 the canister itself and the good questions about
8 distortion, et cetera, and how you would retrieve
9 a dropped canister.

10 DR. VICTOR: Dan, did you have a couple
11 more? I've got a couple at the very end.

12 MR. STETSON: Yeah. Tom, this is for
13 you. There was a question about the number of
14 staff turnover why was it so high, and was any of
15 this due to radiation exposure?

16 MR. PALMISANO: No. The radiation
17 exposure to the crews is very low in this system
18 and most systems. It's not an issue of radiation
19 exposure for the crew. When Scott was talking
20 about a typical campaign at Callaway, you load six
21 canisters every two years, the people who do this
22 work travel around the country. They're used to
23 fairly short duration assignments, one or two
24 months. So our plan was a 12-month assignment and
25 we and Holtec did not properly judge there would

1 be some turnover. So these are basically
2 contractors who travel that were here for one or
3 two months and moved onto another job, had to be
4 replaced.

5 MR. MORRIS: And all those exposure
6 records are required to be maintained and reported
7 to the individuals themselves, and that's an NRC
8 requirement.

9 MR. PALMISANO: Yeah, so there's no
10 radiation exposure here at all. The crew is well
11 protected; the exposures are low more. This is
12 more the pattern the way these folks work around
13 the country. That was really the cause of the
14 turnover.

15 MR. STETSON: Thank you. A final
16 question that I have for Scott or Linda, what can
17 the public to do expedite the transfer of the
18 spent nuclear fuel out of San Onofre?

19 MR. MORRIS: Well, I mean, I think you
20 need to work with your congressmen and your
21 elected officials, and you need to engage every
22 opportunity you can to get your message to those
23 folks who ultimately will dictate whether or not,
24 you know, the fuel gets moved to a central
25 location or deep geologic repository.

1 Ultimately it's activism, right, and working with
2 your elected officials to get it done. I mean,
3 working with us isn't going to help simply because
4 we are regulators. We're not promoters; we're not
5 deniers; we're agnostic. If you're going to use
6 it, you're going to do it safely. That's our job.
7 The policy piece, that's your elected officials.

8 DR. VICTOR: Thanks. I want to ask a
9 question to Tom and then a question to Scott and
10 Linda.

11 Tom, Mike Aguirre, Gary, some others
12 tonight talked about -- Mr. Steinmetz talked about
13 what you said on the 9th of August using fairly
14 strong language, and I would like you to tell us
15 what you think you said and why you said it, so
16 that at least the record is fuller as to what
17 people thought was going on.

18 MR. PALMISANO: I appreciate the
19 comments, and I appreciate the frustration. As I
20 said, we did not take the opportunity to really
21 disclose the event. It wasn't, quite frankly,
22 motivated to hide it. We didn't see it as
23 reportable. We thought we would be delayed a
24 couple weeks, you know, with what we knew at the
25 time. This is before we had done the detailed

1 causal analysis and understood the depth of issues
2 with training and staffing and procedures.
3 There's no excuse. We didn't disclose it, and
4 that's it.

5 DR. VICTOR: So I want to ask a question
6 to Scott and Linda about the scratches. A lot of
7 people are concerned about the scratches, the
8 lemon question, and they're concerned -- I guess,
9 help us understand what to expect. There is this
10 analysis, new inspections that have been done,
11 when you guys look at all that, you digest it, and
12 if you decide the analysis is right, is that your
13 statement that the scratches are okay because of
14 chromium oxide reformation, or how should we
15 interpret that action?

16 MR. MORRIS: Okay. So I didn't have
17 enough time to talk about this at length. There's
18 a much fuller, richer story to be told behind all
19 of this.

20 DR. VICTOR: Let's do it in between.

21 MR. MORRIS: I'll try to do it in
22 between, okay.

23 So fundamentally these canisters are
24 manufactured using what's called the American
25 Society of Mechanical Engineers Boiler and

1 Pressure Vessel Code, okay, that's a lot. But the
2 ASME code is really a set of standards that
3 dictate how pressure metals, such as this canister
4 and reactor vessels and the hot water heater in
5 your house, if it's a pressure-retaining vessel,
6 there's probably a stamp on it that says it's in
7 compliance with the ASME codes and standards,
8 okay. This canister isn't any different. The
9 codes, and these are not our codes; these are
10 domestic codes with experts on metallurgy and all
11 the things that are beyond my comprehension in
12 some respects. The point is that the re- -- I
13 think I said some scratching is going to -- is
14 expected during manufacturing, some scratching is
15 expected during operation and maintenance, et
16 cetera. During the life of that vessel, right,
17 is -- there are going to be scratches, right. The
18 ASME code recognizes that and it allows for that;
19 it's okay up to a point. And I'm not going to go
20 into all the details and the chapters and
21 subsections of the code. The code says it's okay
22 up to a point.

23 Our requirements recognize that code.
24 The license that we issue to Southern California
25 Edison recognizes that that code is in effect and

1 it's acceptable to use.

2 AUDIENCE MEMBER: It's not acceptable.

3 MR. MORRIS: Hold on a second. Hold on a
4 second. The ASME code up to a point says some
5 scratching is acceptable. The Holtec certificate
6 of compliance and specifically the safety analysis
7 report delivered to the NRC and ultimately to the
8 user, in this case Edison, said there will be no
9 scratches, right, and now Edison uses this and
10 they're in a conundrum, because they've got a
11 safety analysis report from the vendor that says
12 there's no scratches, and they've got a license
13 from us that says they can follow the ASME code,
14 which allows scratches.

15 Now, you can't just willy-nilly change
16 stuff without a technical basis. Where we're at
17 today to get to your question is we are waiting,
18 we are waiting with bated breath for the analysis
19 that we want -- we want to understand the results
20 of the canister inspections, right, the extent --
21 scope and the extent of the scratches that they
22 have found and they need to characterize them,
23 document them, and analyze them and demonstrate to
24 us to our satisfaction that the scratches that
25 they have observed are within ASME code

1 requirements, and if they can do that, and they go
2 through all the appropriate regulatory hurdles,
3 which I'm not going to go into here, then they can
4 make that -- they can unilaterally accept that
5 change to the safety analysis for scratching, but
6 Holtec has a bigger issue because this is --

7 DR. VICTOR: They have to deal with --

8 MR. MORRIS: They're the vendor. That's
9 basically where we're at.

10 DR. VICTOR: That's very helpful. Thank
11 you.

12 AUDIENCE MEMBER: -- ASME certified?

13 MS. HOWELL: No, within the certificate
14 of compliance and the Associated Technical
15 Specification documents, there are tables in there
16 that actually spell out what sections of the
17 American Society of Mechanical Engineering Code
18 applies to fabrication and also applies to the
19 operational phase. It is specific details, but
20 it's right there as part of the certificate of
21 compliance, and that is what Southern California
22 Edison --

23 AUDIENCE MEMBER: So you're not actually
24 totally ASME certified, right? There are
25 points --

1 DR. VICTOR: Please.

2 AUDIENCE MEMBER: -- of the ASME rules
3 that are not adhered to but yet you're actually
4 saying --

5 DR. VICTOR: Please.

6 AUDIENCE MEMBER: -- there's other places
7 that you are, is that correct or not?

8 DR. VICTOR: I think what she has said is
9 that the ASME standards are used and applied --

10 AUDIENCE MEMBER: I her asked a simple
11 question. Why can't she answer it, and why are
12 you talking for her?

13 MS. HOWELL: What I said is that --

14 DR. VICTOR: Excuse me, there's no need
15 to be unbelievably rude, okay?

16 MR. MORRIS: It's hard to have a public
17 discourse when we can't have a calm, impassioned
18 discussion.

19 AUDIENCE MEMBER: I think it's rude to
20 lie to people.

21 DR. VICTOR: Lie is a pretty strong word,
22 sir.

23 Why don't you have the last word on this,
24 Linda, and I do need to close the meeting.

25 MS. HOWELL: Right, right. So the

1 technical specifications, again, refer to the
2 appropriate sections of the ASME code, and that's
3 what the vendor as well as the endpoint user is
4 held to comply with. Portions of that code apply
5 to the manufacturing and fabrication, portion of
6 the lifecycle of the canister; other portions of
7 the code apply to its operability phase, and
8 that's really where Southern California Edison is
9 held.

10 DR. VICTOR: And the issue here is code
11 of compliance. I want to say --

12 AUDIENCE MEMBER: Why isn't it been held
13 to --

14 DR. VICTOR: I want to say one thing
15 before we close here, which is that Tom Isaac and
16 I have had repeated conversations with Edison
17 about the analysis that they're doing about the
18 scratches and raised a lot of technical questions
19 about this, and we are expecting that the public
20 document, the plain English document, is going to
21 have a huge amount of detail in it about actual
22 depth of scratches, about the actual ASME codes,
23 about compliance with this and what the road
24 forward looks like. And both Tom Isaac, who is
25 the chair of the expert panel that was referred to

1 earlier and I have spent a lot of time on this
2 question in the effort to try and make information
3 more transparent and more helpful to the public.

4 We've gone a half an hour over, which I
5 believe is a record for us, not a record I would
6 like to break, but this is an important topic. I
7 appreciate all of your patience. I appreciate
8 everyone's patience up here, and also I want to
9 thank, in particular, Linda and Scott for
10 traveling here and for spending time with us this
11 evening. It's been enormously valuable. Thank
12 you.

13 (The proceedings ended at 9:00 p.m.)

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[0.67g - accommodate]

0	200,000 107:7,18	42:20 43:3 45:19	7:21 96:17
0.67g 62:2	2000s 60:19	53:4 117:1 119:4	7:29 96:17
1	2007 144:1	132:20 161:22	7th 10:12
1 1:25 75:17 77:4 77:9 116:22 130:13 140:7	2019 1:15 172:22	4	8
1.5g 62:3	2020 53:19 56:14	4 2:8 26:18 68:1,8	8 61:23 62:6 122:20,21,22 137:1
10 3:20 40:20 45:24 66:23 96:11 96:16 114:25 155:24	21st 11:1	69:3 75:17 91:21 125:25,25	9
100 104:25	22 130:9	4's 91:22	9 111:13 132:10,11
100,000 130:16	22nd 42:21 43:2 53:5,10 153:24 172:22	40 122:18 131:10 132:6	95 49:19
10th 94:17 157:17	24 130:7 153:2	41 23:11 130:7	9:00 171:13
11 68:14 82:8	25 3:20 25:20 27:18 29:18 44:11 44:14 114:25 146:9	42 23:11 130:6,7	9th 28:13 115:23 147:13,17 148:21 164:13
116,000 129:18 150:13 151:3	25th 64:1 116:18 132:25	43 23:12	a
12 40:20 58:1 110:2 162:24	27 140:8	45 25:14 31:10 140:7	ability 95:9,18
12983 1:22 172:25	28 1:15 41:19	48 101:2	able 16:17 22:21 25:24 28:6 37:12 67:22 105:17 147:6,10 160:19
14th 46:16 153:12	28th 24:17 27:9,16 28:11 29:10 43:20 43:22 47:15 66:14	4s 75:23	aboveground 142:14
15 66:24 149:19	29 25:1 79:17 99:15 123:12 124:20 125:11 136:8,10 148:5	5	abreast 19:19
15014 172:24	3	5 129:19 142:25	absolutely 28:12 64:5 69:8 150:22 151:1 157:11
17 44:13	3 70:14 75:17 102:7 108:3 130:5 131:11 132:3	5/8th 160:9	accelerated 49:16
17,000 111:17	3,000 104:20	50 48:20 57:8 58:22 122:18	acceleration 60:11 61:25 62:2,12,21
172 1:25	3.6 99:22	500,000 104:18	accept 34:21 168:4
18 25:12,16 27:21 112:7 128:4 136:8	3/18 132:10	6	acceptable 32:19 58:18 167:1,2,5
1800 111:15	30 57:18,22 58:2	6th 26:17 45:21 152:17	accepted 55:13
189 130:23	30,000 104:17	7	access 65:19
1981 66:17	316l 51:23	7 122:22	accident 119:5 153:10
1g 62:3	3229768 1:23	7.5 61:22	accidents 108:2
1st 1:4 2:1	37 25:17	70 137:17	accommodate 150:10
2	3d 51:4	72 45:24	
2 2:8 66:20 75:17 76:23	3rd 24:24 25:19 36:9 40:18 41:18	72.48 124:14 126:3	
20 10:22 25:20 56:10,13 127:2 149:20 155:24		72.75 130:2,20	
		7248 157:4	
		73 33:23	
		737 136:15	
		737s 120:19	
		75 118:24 134:14 135:18	

[accountability - analysis]

<p>accountability 101:4 105:25</p> <p>accountable 142:6 156:24 157:11</p> <p>accounts 106:11</p> <p>accurate 36:18 56:5 79:4 172:16</p> <p>accurately 55:6</p> <p>acknowledge 107:14 144:14</p> <p>act 117:5</p> <p>action 5:6 12:10 32:1 33:1 39:7,9 39:11 41:14,15 42:4,11,18 43:5 46:19,21 47:19 75:15 87:24 94:5 105:6 154:3 165:15 172:18</p> <p>actions 3:12 24:10 24:11,11 28:8 31:14 32:8,16 39:21 48:4 58:14 102:10,21 112:12 151:9 156:16,19</p> <p>active 67:18 92:23 95:12,14 109:3</p> <p>activism 164:1</p> <p>activities 9:18 13:9 23:12 24:19 32:17 33:21 34:8 36:7 47:1 48:2 58:16 64:8 65:15 74:2 82:6 154:19 158:1,5,9,18</p> <p>activity 31:16 32:20 93:17</p> <p>actual 77:5 79:16 118:6 170:21,22</p> <p>add 23:6 87:16 89:25 93:3 153:22</p>	<p>154:8 161:12</p> <p>added 35:2</p> <p>addition 9:11 38:1 43:16 72:11 74:1 74:24 94:5</p> <p>additional 46:25 75:5 100:21 103:24 105:18</p> <p>additionally 32:11</p> <p>address 5:17 28:10 75:6 76:1 93:24 100:12 101:25 105:10,19 105:24 109:21 126:17</p> <p>addressed 28:10 80:3 92:13 102:20 118:23 139:5 140:17 158:25</p> <p>addresses 113:1 143:17</p> <p>adds 112:22</p> <p>adequacy 69:7 72:9</p> <p>adequate 27:5,6,6 27:7 108:21</p> <p>adhered 169:3</p> <p>adjacent 101:16</p> <p>adjust 13:16</p> <p>administrations 8:19</p> <p>administrator 3:7 65:23 69:3</p> <p>administrators 92:15</p> <p>admitted 148:19</p> <p>adopt 105:17</p> <p>adopting 47:8</p> <p>advance 101:2</p> <p>advantage 141:14</p>	<p>advantages 49:17</p> <p>adverse 59:23 109:1</p> <p>advise 155:7</p> <p>advocacy 105:3</p> <p>advocates 104:23</p> <p>affirms 77:1</p> <p>afternoon 26:8,9</p> <p>aged 109:24</p> <p>agencies 105:2</p> <p>agency 65:17 69:9 74:19 76:21 88:25 130:1</p> <p>agenda 5:12,25 6:2</p> <p>agendas 4:16</p> <p>aggressive 91:10</p> <p>aging 49:15 50:8 51:18 54:15,22 56:9 87:22</p> <p>agnostic 164:5</p> <p>ago 8:9,18 9:4 16:9,13 17:21 33:19 60:13 67:11 92:10 113:18 131:10 134:8 157:16</p> <p>agree 76:10 115:15 145:1 146:2 158:13</p> <p>agreed 10:17,21</p> <p>agreeing 100:24</p> <p>agreement 116:5</p> <p>aguirre 114:15 115:19,20 164:11</p> <p>ahead 121:24 122:5</p> <p>airing 13:5</p> <p>alarms 38:25</p> <p>alaska 68:4</p>	<p>alcohol 130:14</p> <p>alcoholic 130:14</p> <p>alerted 142:19</p> <p>alerts 46:4,5</p> <p>alexander 14:7</p> <p>aligned 159:16</p> <p>alignment 44:5,21 45:3 139:22 151:16</p> <p>allen 112:4 114:15 114:16,17</p> <p>allow 36:19 37:8 39:6 103:12 105:23 124:15,25</p> <p>allowed 99:8 116:22,23,25 129:19</p> <p>allows 46:3 51:3 166:18 167:14</p> <p>alternate 7:9</p> <p>alternative 138:13 138:13</p> <p>alternatives 156:15</p> <p>ambiguous 12:17 12:19 13:19</p> <p>amended 105:22</p> <p>american 78:5 165:24 168:17</p> <p>amount 70:14 150:12 151:23 170:21</p> <p>ample 124:9,20</p> <p>amy 99:14,18,19</p> <p>analogy 69:14 83:16 84:8,10</p> <p>analyses 31:18 32:5 49:3 55:21 90:16 100:7</p> <p>analysis 9:14 27:5 28:1,17 29:14,16</p>
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[analysis - attitude]

<p>29:17,20,23 30:4,5 30:9,16,21 31:2 32:6,6,8 49:4,6,7 55:13,14 56:1,5 59:20 62:15 63:10 63:12,13 72:13,14 78:12,21,23 79:11 79:25 88:11,11,12 100:17 103:9 124:4,15 133:11 146:9,10,17 148:18 157:15 161:3,7,10,16 165:1,10,12 167:6 167:11,18 168:5 170:17 analyze 145:3 167:23 analyzed 27:17 30:24 57:14 58:13 59:2,12 60:8 analyzing 119:1 angeles 17:18 announced 82:13 annual 100:6,17 104:25 answer 22:22,24 33:4 67:2 95:23 95:24 150:23 157:9 169:11 answered 5:19,20 11:12 29:12 141:16 149:21,22 149:23 answering 22:8 answers 5:9,9,22 22:14 103:17 119:12 146:21 147:1 anybody 8:21 9:1 44:23 69:6,11</p>	<p>139:15 143:19 anymore 116:6,10 anyway 143:12 apparently 113:23 appear 5:13 appeared 26:12 27:2 appears 32:19 106:23 appendage 117:18 applaud 15:3 applicant 92:21 application 42:10 73:20 83:19 applications 92:7 applied 169:9 applies 168:18,18 apply 170:4,7 appointed 151:7 appreciate 62:24 81:10 83:14 89:12 95:6 100:1 102:5 103:15 126:13 144:18,19,20 164:18,19 171:7,7 approach 85:9 93:9 140:22,24 appropriate 33:9 43:5,6 46:5,8 58:7 65:17 71:22 72:13 73:1 79:5 98:2 105:7 121:5 168:2 170:2 appropriately 20:13 21:11 appropriateness 157:22 appropriations 14:6,24 20:5 approval 72:14,16</p>	<p>approve 11:14 44:5 80:13 83:2,5 approved 10:13 23:10 82:24 101:11 116:25 151:5,6,7 152:4 april 21:20 74:21 74:22 94:17 157:17 158:21 172:22 architecture 120:10 archived 4:22 76:7 archives 70:23 139:16 area 18:18 66:16 68:9 113:6 128:10 areas 32:25 82:3 93:22 134:2 157:13 areva 56:12 155:19 arisen 5:10 arm 110:15 arms 80:10 arrangements 13:18 article 114:18 articulated 50:24 articulates 151:12 artifact 74:12 asked 16:9,11 18:7 20:12 30:6,8 57:2 59:10,11 147:19 169:10 asking 121:9 126:3 131:2 154:24 155:1 asme 166:2,7,18 167:4,13,25 168:12,24 169:2,9</p>	<p>170:2,22 aspect 15:22 aspects 42:18 assemblies 25:18 27:23 34:25 133:1 155:17 156:2 assess 32:17 71:17 72:8,17 120:15 assessed 74:14 103:17 assessing 102:9 assessment 32:12 32:15 48:14 52:21 71:14 72:3,9 88:19 89:18 90:4 145:1 assessments 48:5 88:23 103:6 assets 151:20 assignment 162:24 assignments 39:18 162:23 associated 37:18 72:12 168:14 assumed 57:17 assumption 57:22 161:19,20 assurance 81:7 assure 68:17 attempt 13:6 139:19 attempts 53:11 attend 97:18 134:15 attendance 97:15 attended 121:18 attention 3:3 5:11 20:11 24:2 44:20 86:11 110:13 attitude 47:9 91:4</p>
---	--	---	---

[attorney - bold]

<p>attorney 172:19 attorneys 130:24 audience 115:24 129:22 147:15 167:2 168:12,23 169:2,6,10,19 170:12 august 21:2 24:24 25:19 26:17 28:13 36:9 40:18 41:18 42:20 43:3 45:19 45:21 53:4 64:4 68:10 70:14 102:7 115:23 117:1 119:4 130:5 132:20 147:13,17 148:21 161:22 164:13 auspicious 24:3 authority 105:12 105:15,21 authorization 13:2 14:2 automatically 19:9 available 3:25 4:14 30:18 31:6 40:1 55:20 65:9 100:25 101:6 114:11 138:5,9 151:11 154:4 156:15 aware 23:15,16 86:15 87:21 93:14 103:6 130:21 149:1 awareness 17:23 98:5 109:5 awesome 91:3</p>	<p>b</p>	<p>basic 120:9 basically 34:6 36:10,14 40:21 47:8,14 49:24 50:24 51:6,9 56:3 56:17 78:15 123:21 148:10 161:1 163:1 168:9 basis 9:23 46:9 57:24 59:24 60:10 61:7 73:11 77:22 79:24 94:24 167:16 basket 36:21 batch 101:2 bated 167:18 bauder 3:16 87:11 beach 8:12 101:15 beaches 101:16 beautiful 2:6 becoming 93:10 befuddles 137:4 behalf 41:10 behavior 132:7 133:13 believe 4:15,18 23:12 28:2 30:10 51:15 72:20,21 75:9 86:21 95:25 100:17 101:3 107:12 115:1 133:2 139:13 171:5 believes 105:19 believing 128:3 best 15:14 108:7 bet 77:8 better 2:23 15:13 20:18 45:6 47:9 53:23 99:7 103:1 159:3</p>	<p>beverage 130:14 beyond 166:11 biannual 93:20 bidding 133:7 big 68:2,4 76:24 76:24 107:11 116:4,5,14,15,16 126:21 135:2,10 146:14 bigger 20:1 108:12 168:6 bill 7:11 13:3,12 134:4 billion 129:19 143:1 biomass 10:19 bipartisan 105:8 bit 5:8,21 6:3 10:7 18:2 20:7 49:15 50:12 66:10 77:14 111:22 112:10,11 124:17 136:9 160:16 black 89:13 blessing 119:5 blind 44:15 148:18 148:20 board 7:7 9:3 94:12 108:19 131:9 143:20 146:5 boards 135:19 body 4:7 boeing 119:7 120:18 136:15,16 bogged 157:5 boiled 113:11 118:20 boiler 165:25 bold 112:11</p>
--	-----------------	--	--

[bomb - canisters]

<p>bomb 111:12,13 111:16</p> <p>bombs 111:17</p> <p>books 128:15</p> <p>booths 3:25 4:1,1 4:3</p> <p>bordering 101:14</p> <p>bore 77:25 114:3</p> <p>boston 61:6,7,12 61:16,19</p> <p>bottle 134:17</p> <p>bottles 135:1,2,3,9</p> <p>bottom 36:14 44:17 49:21 54:24 122:15 128:9,12 159:24 160:5,5,20</p> <p>boundary 29:19</p> <p>box 89:13</p> <p>boy 135:2</p> <p>boys 135:10</p> <p>breach 27:18</p> <p>breached 117:19</p> <p>breaching 29:19</p> <p>break 4:3 6:11 40:5 64:24 161:6 171:6</p> <p>breakfast 134:13</p> <p>breaks 84:9</p> <p>breath 167:18</p> <p>bridge 22:11</p> <p>brief 29:11 47:23</p> <p>briefed 26:18,19</p> <p>briefers 27:11</p> <p>briefing 45:20 62:15</p> <p>briefings 8:2</p> <p>briefly 33:2 47:15 67:24 154:9 158:15</p> <p>bring 28:20 36:2 162:3</p>	<p>bringing 132:3 140:21</p> <p>broad 47:24</p> <p>broader 14:16 21:15 154:22</p> <p>broke 97:11</p> <p>broken 66:3 129:17</p> <p>brought 32:11 43:10 131:12 132:12 139:8</p> <p>build 14:16 17:23 84:24 107:13 144:23 146:3</p> <p>building 26:11 57:10,20 58:5 61:15 106:19 108:14 109:20 155:21</p> <p>built 19:17 36:11 38:1,22 39:1,4 61:4,18 87:22 107:8</p> <p>bulge 145:19</p> <p>bump 124:1</p> <p>bunch 112:23</p> <p>burn 143:18</p> <p>burt 133:16 136:6</p> <p>business 16:19</p> <p>busy 13:7</p>	<p>102:6 104:18 106:17 125:17 129:23 130:4,21 130:23 143:15 147:6,11 148:17 149:5,13 152:21 153:1,7 158:6,7 166:24 168:21 170:8 172:6</p> <p>call 5:5 32:1 42:3 54:14 56:24 81:2 81:20 88:14 120:15 131:17</p> <p>callaway 33:19,20 33:21 38:12 86:5 86:11 87:13 95:7 96:1,8 162:20</p> <p>called 13:11 25:3 34:5 44:15 54:15 57:5 84:15 88:13 131:22,24 165:24</p> <p>calling 69:15</p> <p>calls 131:19 155:6</p> <p>calm 169:17</p> <p>camden 92:17</p> <p>camera 37:11,12 40:23 51:2 63:3,7 72:4 102:24 119:23 120:22 122:16</p> <p>cameras 95:19 119:18</p> <p>campaign 33:23 33:25 95:12,15 162:20</p> <p>campuses 109:4</p> <p>candid 31:20,21 32:18</p> <p>canister 2:12 24:25 25:4,5,6,7 25:11,12,13,17,25</p>	<p>26:1,3,10 27:12,15 27:17,18,21,21,24 29:17,24 30:4 31:10 34:5,6,25 35:1,11 36:12,13 36:22 37:2,5,9,13 37:15 38:10,13,15 38:18,20 39:2 40:9,12,24 42:22 44:12,17 45:2 48:5,7,14,19,20 49:1,19 50:2,7,9 50:20 51:4,12,22 51:24 53:12,19 54:25 57:6,7 58:4 58:22 59:3,5 70:16,20 73:8 77:5 87:8 101:7 101:11 112:6 113:5 116:23,24 120:3,20 122:5,11 123:24 124:7 125:8 126:1 128:2 128:3 139:25 144:2 145:7,9,17 148:25 160:2,4,9 160:14,20,24 161:1,4,11 162:7,9 166:3,8 167:20 170:6</p> <p>canister's 101:8</p> <p>canisters 33:23 41:19,21,24 48:17 49:13 50:15,17 51:6,21 52:24 53:2,7 56:17 78:24 79:18 85:18 86:15,22 87:23 95:10 102:24 103:4,10,16,22 107:2 108:7,8</p>
	c		
	<p>calculate 140:6</p> <p>calibrate 55:5</p> <p>calibrated 38:6</p> <p>california 1:14 3:18,21 4:10 9:15 10:7,13 11:2,10 16:10,12,16,19 22:12 82:19 86:12 90:5,13,22 91:9,25 97:18,21 99:21</p>		

[canisters - chromium]

<p>114:1,4,6 121:19 122:2,9,14 123:12 123:13,17,22,25 124:16,20,22,23 125:4,6,11,14,16 125:19,20 128:9 128:13 138:1,2,5,7 142:14 143:22 156:6 160:3,11 162:21 165:23 cans 125:15 capability 38:21 49:1 50:2 51:5 54:3 capable 59:15 137:10 155:17 156:3 capacity 54:23 129:7 capistrano 7:5 capture 43:1 63:9 63:13 154:3 car 83:24 84:11 carbon 50:25 card 51:10,11 97:20 cards 6:6,8 96:15 99:15 150:3 care 113:22 cared 142:23 carefully 102:9 103:16 carrying 59:22 case 30:23 45:24 71:21 78:11 79:2 83:17 84:9 101:7 111:9 141:1 146:13 167:8 cask 25:1,3,7 32:14 36:1 44:2,7 44:8,10 45:24</p>	<p>48:12 57:8 58:20 58:25 59:21,24 60:15,24 61:1,10 61:17 65:14 146:11,12 casks 126:24 141:25 142:1 143:14 cast 70:23 128:18 cataclysmic 137:21 catastrophic 89:4 catching 103:23 caught 145:24 causal 27:5 28:17 31:12 32:25 34:3 165:1 cause 32:7 137:25 163:13 caused 136:15 causes 26:21,25 31:19,23 caution 59:17 ceased 26:9 cell 101:10 127:18 133:23 144:1,1 center 25:25 centering 123:16 124:21 central 18:19 163:24 cep 4:5 6:23 7:2 16:11 18:11 19:20 21:13 22:11 23:5 24:4 64:3,17,18 66:8 88:3 106:5 134:1,3,3,9 136:3 147:18 148:14 ceqa 65:4 certain 33:10 38:25 41:9 71:11</p>	<p>77:17 81:24 102:11 certainly 10:1 36:18 41:10 125:9 125:10 155:3 certificate 70:16 73:7 78:14,20 79:2 92:1 93:11 157:10,21 161:14 167:5 168:13,20 172:1,25 certified 20:2 168:12,24 172:3,5 certify 11:13 172:7,17 cetera 32:20 40:24 83:23 91:23 160:18 162:8 166:16 cfr 45:24 chair 2:15 66:2 95:4 155:4 170:25 chairman 2:17 chairs 4:16,17 5:25 challenge 85:4 challenger 120:18 chamber 17:14 champions 14:8 chance 15:13 26:22 58:16 64:7 64:12 149:20,25 150:1 change 8:19 11:22 12:15,15 13:1,8 14:18 16:22 40:12 79:25 109:16 112:24 124:25 126:3 135:12 151:25 157:23 159:2,4,14 167:15</p>	<p>168:5 changed 13:23 36:2 115:12 133:9 changes 17:11 19:8 44:5 58:5 94:23 112:19,20 113:2 157:14 159:1,8,11 changing 125:2 150:9 chapter 104:16,19 104:23 chapters 166:20 characterize 167:22 charge 129:19 charles 126:10 128:25 129:1,2 charting 63:21 chase 141:20 check 84:19 122:15 checked 113:13 161:6 checking 25:21 84:12 chernobyl 108:3 125:16 chief 3:18 9:23 children 108:11 108:22 chloride 119:15 120:21 chosen 108:8 130:19 christa 121:13 123:10 christine 136:6 138:17,19 chromium 165:14</p>
---	--	---	---

[circles - communities]

<p>circles 135:14 circulate 62:17 circulated 17:19 66:8 circumstances 153:24 cited 142:20 cities 8:14,20,21 citizen 147:5 citizens 112:5 133:20 city 7:23 8:1,10,17 8:24 9:6 civil 75:19 76:25 151:9,18,22 claiming 102:11 145:2 clarification 146:13 clarify 66:24 clarity 12:22 classified 102:12 classroom 108:22 clause 153:5 clean 2:8 clear 26:5 28:12 28:22 56:9 67:19 71:3,4 75:15 83:1 86:2 89:19 122:20 158:3 clearance 123:24 145:17 clearances 44:18 124:9 clearly 29:23 69:18 82:3 89:22 126:17 128:22 151:12 clemente 10:15 144:13 147:6,7,8,9</p>	<p>click 22:23 clients 155:22 climate 13:8 109:16 clock 71:12,14 close 12:4 58:20 59:8 87:1 119:8 169:24 170:15 closed 74:25 closely 73:15 80:14 closer 137:18 closest 99:10 coalition 14:17 coastal 10:13 11:15,16 23:13 56:15 100:7,19,20 113:16 code 129:13 130:2 166:1,2,18,21,21 166:23,25 167:4 167:13,25 168:17 170:2,4,7,10 codes 78:6 166:7,9 166:9,10 170:22 collaboration 105:9 colleagues 79:8 80:12 157:1 161:13 collect 106:7 collective 106:8 collectively 31:17 72:20 colorado 23:22 columbia 86:5 column 70:20 combined 38:20 100:8 come 6:8 8:23 9:9 22:17 31:14 36:15</p>	<p>39:5 53:25 66:18 67:8 78:2 85:5 109:21 114:21 117:2 132:22 133:10 134:10 136:2 144:16 150:12 151:2,15 155:1 159:18 161:9 comes 3:2 77:13 131:14 157:24 comet 120:17 comfortable 34:11 coming 2:5,10 3:15 34:1 38:19 56:12 71:8 84:11 101:22 126:14 134:7 140:1,4 158:20 comment 5:15 6:5 6:14,15 28:20 51:16 88:7,8 96:13,13 97:3 99:13 101:20 109:10 112:3 114:14 115:18 117:21 118:15 121:12 123:9 126:9 128:6,24 131:5 133:15 134:23 136:5 138:16 139:12 141:10 144:4 149:18 159:13 161:5 commentors 155:12 comments 6:9,17 6:20 11:11 21:20 40:6 52:22 64:1 64:20 90:1 99:24</p>	<p>101:23,24 104:11 155:15 159:7,11 159:18,21,25 160:11 164:19 commercial 41:7,8 commission 3:8 10:8,13 11:2,5,13 11:15 16:10,12,16 16:20 21:16 23:10 23:13 30:3,20 56:16 93:7 100:2 102:5 113:16 141:15 147:12 149:14 151:4 152:4 commission's 152:1 commissioners 151:7 commissions 99:25 commitment 26:22 56:15 144:16 committed 26:19 65:13 154:21 committing 100:5 communicate 64:17 89:22 110:20,22 communicated 46:20 communicating 126:19 communication 132:7 133:14 communications 67:6 117:9 communities 4:9 16:7 17:8 18:15 20:12 99:3 101:14</p>
--	---	--	--

[communities - continuously]

<p>105:15 110:23 148:16</p> <p>community 1:4 2:1,16 4:1,6 6:4 6:23 12:10 17:22 18:10,16 21:17 22:12 28:13 70:8 101:1 103:17 116:21 117:20</p> <p>company 98:3 122:1 130:12 131:25 137:5 143:24</p> <p>compare 95:21</p> <p>comparison 107:4</p> <p>competition 149:9 149:12</p> <p>competitors 149:4</p> <p>complete 22:24 29:5 64:8,12,13 65:16 91:20 116:12 132:1</p> <p>completed 49:12 51:6 58:13 71:10 148:4</p> <p>completely 20:13 121:3 151:16</p> <p>complex 19:10</p> <p>compliance 70:17 72:24,25 73:7 78:14,20 79:3 80:6,16 84:17 92:1 166:7 167:6 168:14,21 170:11 170:23</p> <p>complicated 13:25 19:25 89:20</p> <p>compliment 28:21</p> <p>comply 170:4</p> <p>component 22:13</p>	<p>composed 11:5</p> <p>comprehension 166:11</p> <p>comprised 101:8</p> <p>computer 36:18 63:13</p> <p>concern 31:2 37:21 69:7 92:11 92:12 94:2,2,4,4 100:12 132:15 133:3 160:1,2,8,12</p> <p>concerned 30:22 91:5 94:3 98:21 101:5 106:16,19 106:25 110:7 138:23 143:21 145:5,17 147:5 165:7,8</p> <p>concerns 105:20 113:7 132:18</p> <p>conclude 64:12</p> <p>concluded 50:5 58:17 60:7</p> <p>concluding 64:10</p> <p>conclusion 28:3</p> <p>conclusions 52:6 161:10</p> <p>concrete 5:9 34:7</p> <p>concurrence 74:17</p> <p>condition 56:24 60:8 87:23 132:16</p> <p>conditions 10:16</p> <p>conducting 100:6 100:10</p> <p>conduit 4:8,8</p> <p>conference 18:6 18:21 45:15 74:5 76:6,14 131:22 157:3</p> <p>confidence 30:20 116:12</p>	<p>confident 71:22 87:11</p> <p>configuration 124:9 145:18</p> <p>confinement 29:19</p> <p>confirm 25:22 55:8 64:6</p> <p>confirmed 151:7</p> <p>confuse 84:16</p> <p>congratulated 134:3</p> <p>congress 9:19 12:6 17:11 110:23</p> <p>congressional 105:1</p> <p>congressman 9:22 15:4,4,6 67:10 70:10 89:10</p> <p>congressman's 67:15</p> <p>congressmen 163:20</p> <p>connected 38:5 150:11</p> <p>consensus 115:16</p> <p>consequence 77:5</p> <p>consequences 89:5 109:25 139:17 146:18</p> <p>consider 76:15 127:10</p> <p>considerable 35:2 42:23</p> <p>consideration 134:17</p> <p>considered 14:22 69:9</p> <p>consistent 76:18 83:3 84:5 85:7 151:23</p>	<p>consolidated 14:8 73:11 92:21</p> <p>constantly 90:14 93:7</p> <p>constraints 71:2</p> <p>constructed 18:11</p> <p>consultation 105:15</p> <p>consumed 21:4</p> <p>contact 42:24 44:22,25 45:2 48:18,23 52:19 56:7 87:20 123:16 123:22 124:22 159:16,17</p> <p>contacted 8:14</p> <p>contained 101:18</p> <p>containment 118:21 119:3 120:23,25 137:8 138:14</p> <p>contains 27:19</p> <p>content 107:3</p> <p>contents 107:5</p> <p>contested 153:20</p> <p>contingency 102:16 128:1 145:12</p> <p>continue 29:3 32:21 52:9 64:16 73:2 96:9 101:8 108:14 133:7 139:11 140:20 144:23 147:8</p> <p>continued 47:18 152:22</p> <p>continues 133:14</p> <p>continuous 90:12</p> <p>continuously 37:13 38:15</p>
---	---	--	---

[contract - cycle]

<p>contract 28:19 41:9 158:5 contractor 31:15 34:15,21 35:18 36:7 40:15 43:14 47:25 158:2 contractors 158:9 163:2 contrary 143:23 contribute 111:25 contributed 20:25 contributing 103:24 contributions 7:12 control 25:24 132:1 controlled 117:14 controller 11:7 conundrum 167:10 conversation 89:10 94:13 conversations 92:4 93:1 170:16 convey 111:2 conveying 110:5 112:1 convince 118:8 148:8 convinced 46:14 153:18 cooling 101:9 cooperate 97:23 99:5 cooperated 99:8 coordination 16:6 core 63:24 corners 104:7 corporation 117:18</p>	<p>correct 34:10 112:13,15 114:6 121:6 139:10 169:7 corrected 26:21 58:9 corrective 31:14 32:1,8,16 33:1 39:7,9,11 41:14,15 42:4,11,18 43:5 46:21 47:19 48:3 58:13 102:10,21 112:11 154:3 correctly 45:18 46:1 121:15 correlate 56:3 62:8 corroding 119:22 corrosion 48:6 49:2 50:3 51:24 52:4 95:20 119:15 120:21 160:3,12 cost 41:4,5 125:24 costs 41:11 142:25 council 8:17 9:7 councils 7:24 8:1 8:10,24 counterpart 93:13 country 106:21 107:14,18 117:17 123:1 142:18,20 143:2 162:22 163:13 country's 131:16 county 2:24 7:7 8:15,15 9:3 65:18 104:16,22 122:25 123:4 couple 10:11 11:3 17:5 18:1,21 33:19 46:3 57:22</p>	<p>65:8 66:20 67:23 77:15 95:14 146:15 157:12 159:22 162:10,11 164:24 coupled 35:15 courage 28:22 132:22 courageous 28:19 course 17:25 22:13 110:7 court 72:1 courtesy 26:17 46:9 cover 81:10 82:8 143:4 covered 27:9 47:14,15 65:6 141:3 covington 104:13 106:13,15 cracked 161:1 cracking 119:16 120:22 122:16 160:3,7,12 cracks 119:22 crane 25:4,4,11,12 25:24 36:10,13,14 37:8 38:2,9,19 39:3 40:11,19 48:13 57:12 58:22 59:2,15,25 crap 113:6 149:11 crappy 142:7 crash 119:7,8 crawl 58:23 crawler 48:9 56:22 create 48:18 50:3 136:13</p>	<p>created 4:8 142:21 creates 129:23 creating 11:22 credible 89:9 114:21,23,24 credibly 115:14 credit 51:10,11 crew 25:20 39:18 115:25,25 148:2 162:19 163:10 crews 33:10 34:11 41:19,25 148:1 162:17 criminal 129:15 131:3,4 criteria 45:23 47:11 60:19 61:15 81:24 153:3,16 154:1 critical 33:13 85:12 criticisms 155:14 cronkite 131:14 crossed 80:10 crucial 41:2 csr 1:22 culture 21:3 91:11 current 12:16 13:18 15:18 50:6 92:21 99:2 105:11 105:23 106:24 126:19 154:19 currently 16:1 94:17 98:20 customers 41:11 cut 75:2 135:21,22 141:20 cutting 104:7 cycle 89:2</p>
--	--	--	---

[d.c. - details]

d	130:6,7,7 132:5	del 8:12	describes 154:18
d.c. 18:22 67:11 68:24	de 120:17	delayed 140:2 164:23	deserve 144:8
dallas 68:9	deadliest 122:3	delays 139:21	deserves 103:17 125:17
damage 26:2,3 27:13 123:15 128:8 137:24 146:6	deal 13:8 76:24 116:4,5,14,15,16 120:3 168:7	deliberately 148:7	design 28:5,6 44:18 51:23 57:24 59:23 60:10 61:7 78:16,17 80:14 94:24 103:25 104:1 112:20,20 112:21,25 113:2 114:9 123:23 127:14 137:25 138:22 139:4 140:18 141:24 142:7,7 145:15 157:14,22 158:25 159:3,7,11,14 161:17,22
damaged 27:22 123:13 125:4,11 125:20 133:1 139:9,14,18,18 146:1,17 161:1	dealing 2:12 3:11 118:20	delighted 3:24 7:9	designed 27:17 59:2 60:16,18 62:2,3 98:1,10 156:1
dan 2:16 5:5 6:12 7:15,16,17 10:6 17:17 18:2 22:6 62:25 63:1 65:2 82:17 93:25 95:3 97:9 98:9 150:4 158:22 162:10	debate 160:10	deliver 72:8 125:13	designs 113:8
damaged 27:22 123:13 125:4,11 125:20 133:1 139:9,14,18,18 146:1,17 161:1	dec 39:25	delivered 161:16 167:7	desmond 7:6,6,9
dangling 119:18	decades 119:2	delve 155:25	destroy 117:8
data 53:16 65:9,19 88:12 89:7 100:24	december 58:12	demand 20:12 146:16	destroyed 143:25 144:1 145:11
date 172:21	deception 132:7	demanding 129:21	destroying 137:2 137:10
david 2:15 10:9 18:4 22:9 73:12 97:13 98:9 111:4 118:16 121:13,16 135:16 148:12 150:7	deceptive 133:13	demonstrate 83:20 135:19 167:23	detail 16:2 33:10 34:11,19 35:2,13 43:19 67:5 170:21
day 8:5,8 15:11 45:21 54:8 84:25 104:25 105:3 106:11 130:11 131:15 134:12 135:19 145:16 148:1 152:24 153:25 154:1 172:22	decide 46:4 165:12	demonstrated 45:4	detailed 31:2 35:14,15,21 113:4 114:10 123:5 161:10 164:25
days 5:17 14:23 18:22 28:14 105:3	decided 135:15	demonstrates 29:24 59:21 132:6	details 107:10 122:23 166:20 168:19
	decision 4:7 53:16 76:18 79:1 156:25	demonstrating 54:23	
	decisional 45:15 74:5 76:5 157:3	demonstration 133:12	
	decisions 107:22	deniers 164:5	
	decommission 13:24	denise 1:22 102:2 104:12,14	
	decommissioning 4:10 18:13 68:15 100:1	deny 126:3	
	dedicate 82:3	department 14:14	
	dedicated 68:19	depending 45:1	
	deep 49:25 85:5,10 114:3 163:25	depicting 55:7	
	deeper 27:4	depositions 117:10	
	defect 125:20,21 149:10	depth 24:17 27:9 31:18 33:4 49:10 51:9 54:16,18 55:10 63:5,5,17 165:1 170:22	
	defective 120:14	depths 103:6	
	defense 54:16,18	deputy 3:9 67:24	
	defer 64:1		
	deficiencies 31:19		
	defined 69:8		
	degree 77:17 91:15		

[determination - downloaded]

<p>determination 157:6</p> <p>determine 63:17</p> <p>devastated 123:1</p> <p>develop 10:17 19:16 50:14 114:12 154:20</p> <p>developed 53:24</p> <p>developing 42:8 90:20 101:10</p> <p>development 11:16 54:8 155:7</p> <p>deviate 152:5</p> <p>deviations 106:3</p> <p>device 44:13 59:9 60:6 98:8,18 112:24</p> <p>devices 98:10</p> <p>devoted 111:7</p> <p>diagram 141:4</p> <p>dial 131:18 157:19</p> <p>dialog 67:19 79:20 94:25 153:16</p> <p>dialogue 92:23</p> <p>dictate 78:6 163:23 166:3</p> <p>diego 7:7 8:14 9:2 65:18 117:11 122:25 123:4</p> <p>dieguito 66:17</p> <p>difference 84:9 146:14</p> <p>different 14:4 18:15 30:4 79:13 85:24 103:7 140:22,23,24 146:22 148:9 166:8</p> <p>difficult 70:10</p> <p>difficulties 41:25 86:16,21</p>	<p>difficulty 41:20 56:25 139:22</p> <p>dig 85:5,10</p> <p>digest 165:11</p> <p>diligence 102:6</p> <p>dime 129:21</p> <p>diminish 135:4,5</p> <p>dinner 134:14</p> <p>direct 37:1</p> <p>direction 2:14 172:15</p> <p>directly 38:7 54:5 86:13,25</p> <p>director 3:10 11:7 67:25</p> <p>disappointed 31:22</p> <p>disaster 125:16 137:21 138:11</p> <p>disclose 164:21 165:3</p> <p>disconnect 59:9</p> <p>disconnected 59:12</p> <p>discourse 169:17</p> <p>discovered 123:14</p> <p>discovers 124:23</p> <p>discovery 120:18</p> <p>discuss 23:14 24:21 28:15,18 29:1 43:19 94:22 156:9</p> <p>discussed 24:17 29:10 45:14 46:12 139:9 140:11 151:14</p> <p>discussing 64:2 136:21 137:22</p> <p>discussion 42:12 50:15 54:7 97:1 119:13 155:2</p>	<p>158:20 169:18</p> <p>discussions 90:7 90:12</p> <p>disgraceful 117:12</p> <p>disguise 119:5</p> <p>displays 110:17</p> <p>dispositioned 74:15</p> <p>disregard 115:22</p> <p>disrupt 137:9</p> <p>distance 40:9 50:23 58:7</p> <p>distinct 157:13</p> <p>distinction 129:10 129:12</p> <p>distorted 145:7 160:25 161:4,11</p> <p>distortion 161:2 162:8</p> <p>district 67:15 104:23</p> <p>diverting 82:7</p> <p>divider 50:19,20 50:25 123:25</p> <p>division 3:10,11 67:25</p> <p>dmv 83:19</p> <p>docket 90:17</p> <p>document 71:15 71:17 74:11 79:7 143:17 151:10 167:23 170:20,20</p> <p>documentary 128:17</p> <p>documentation 79:3 115:4,5,8</p> <p>documented 75:5 75:23 76:7 149:23 151:13</p> <p>documents 75:14 92:7 117:4 168:15</p>	<p>dodgers 8:6</p> <p>dogs 129:3</p> <p>doing 5:21 8:13 13:7,22 15:17 19:11,12 34:16 49:17 56:23 65:8 69:11 70:6 72:4 74:2 83:3 85:16 86:23 93:17 94:6 94:9 96:8 97:14 107:21,23 109:18 109:23 148:16 152:1 170:17</p> <p>dollars 137:9</p> <p>domain 71:15</p> <p>domestic 166:10</p> <p>donna 61:5,6 114:19 115:2,15 138:17 141:18 158:14</p> <p>donna's 145:1</p> <p>door 2:20 96:15</p> <p>doors 2:21</p> <p>doris 15:6 16:14</p> <p>dormant 95:16</p> <p>dorris 15:5</p> <p>dot 142:8</p> <p>double 10:22 15:10,12</p> <p>doubt 47:9</p> <p>doug 3:16,17 43:15 87:11,11 91:7</p> <p>download 33:15 36:9 37:19,24 38:25 39:6 40:7 40:11 44:8 53:11 116:23 124:6 138:22 158:12,12</p> <p>downloaded 35:1 48:17,20,21 79:18</p>
--	--	---	--

<p>159:16 downloading 2:13 3:13 24:9,25 37:16 38:11 42:24 49:14 57:1 70:21 86:17,21 87:2 103:13,20 115:24 116:6 137:25 142:12,13 148:24 149:2 158:4 dr 2:4 7:1,16,20 9:10 11:17 18:25 22:3 23:2,18 29:13,25 30:14 31:4 39:13 41:1 52:12,18 54:13,19 55:2,9,19,24 56:20 60:10,21 61:1,6 62:13,25 63:20 64:15,19 65:1,6,22 66:2 80:19 82:17 85:14 87:24 88:17 88:22 89:12,23 90:24 93:25 95:3 96:3,10,18 97:2,7 99:12 101:20 104:10 106:9 109:9 112:2 114:14 115:17 117:21 118:2,13 121:11 123:8 125:23 126:5,8 128:24 131:5 133:15 136:4 138:16 139:11 141:9 144:3,9 146:24 149:17 150:19,21 154:9 154:24 156:7,10 158:22 159:6,10 160:21 162:4,10</p>	<p>164:8 165:5,20 168:7,10 169:1,5,8 169:14,21 170:10 170:14 dramatic 10:14 drastic 108:13 draw 5:11 24:2 drawn 52:6 drill 70:22 121:1 drills 109:4 115:10 driscoll 9:13 60:12 drive 83:25 134:14 driven 135:18 driver's 83:17 drop 27:13,18 29:14,16,17,18 30:9,21 32:6 52:16 77:6 88:11 102:8 113:5 119:5 120:4 123:17 133:11 145:7 146:2,9 153:8 160:23,23 161:7 161:10 dropped 25:16 27:15,21 111:12 112:6 120:3 128:2 145:10 162:9 dropping 44:2 dry 25:1 32:14 36:1 45:5,24 60:15,24 61:1,10 61:17 65:14 82:21 120:20 159:15 due 21:20 137:24 162:15 dummy 145:15 duration 162:23</p>	<p style="text-align: center;">e</p> <p>e 5:16 16:18 19:20 22:19 101:25 117:8 earlier 73:12 104:21 118:5 171:1 early 28:16 32:2 33:16 56:16 60:18 64:4 89:2 92:19 earthquake 57:14 59:24 60:16 61:8 61:13,22 62:5 98:23 140:25 141:8 echo 17:14 economic 89:4 economy 122:25 137:3,10 ed 17:17 edge 103:23 edison 3:19,21 4:1 4:11 8:23 10:21 11:10 16:3 21:5 22:12 34:15 35:18 47:25 48:1 65:8 71:21 75:25 76:17 82:20 86:12 88:2 88:20 90:5,13,22 91:9,25 94:6 97:21 100:2,5,15 102:23 103:3,11 103:20 104:5 106:5 110:9,25 116:22,23 118:6 118:10 123:12,14 124:13,20 127:20 129:23 130:4,21 130:23 131:22,24 142:22 148:17 149:5,14 151:21</p>	<p>152:21 153:1 158:6,7 166:25 167:8,9 168:22 170:8,16 edison's 72:1 76:9 102:7,10 110:15 124:24 125:9 132:4 133:7 143:8 145:9 153:7 educated 109:2 education 107:12 107:21 108:16 educational 108:18 effect 48:6 59:23 87:8 166:25 effected 105:11 effective 9:15 36:6 67:19 137:15 effectively 36:25 39:12 42:3 46:20 73:19 80:9 effluent 101:3 effort 13:10 15:2 16:13 47:21 86:22 90:11 108:18 135:3 144:15 171:2 efforts 7:23 103:15 eight 149:24 eighth 51:25 eir 99:25 either 26:4 71:19 110:12 elaborate 27:8 56:8 152:13 elected 9:18,19 163:21 164:2,7 election 15:20</p>
---	---	--	--

[electronically - exactly]

<p>electronically 106:8</p> <p>element 28:5 49:7 120:15 157:24</p> <p>elementary 108:19</p> <p>elements 156:5</p> <p>elephant 118:22</p> <p>elijah 115:19 117:22</p> <p>embarrassing 66:1</p> <p>emergency 114:22 115:10 131:19 132:1</p> <p>emotion 131:13</p> <p>emphasize 73:22 152:3</p> <p>emphasized 90:19</p> <p>employ 104:7</p> <p>employee 28:20 132:17 172:19</p> <p>employees 132:19</p> <p>enable 67:18</p> <p>enclosure 122:13</p> <p>encounter 39:1</p> <p>encourage 103:3</p> <p>encouraged 15:9</p> <p>encouraging 13:14</p> <p>endeavored 28:24</p> <p>ended 25:11 171:13</p> <p>endpoint 170:3</p> <p>energy 14:14 16:10,12,16,20 17:25 19:7 82:4 110:9 126:22 137:5</p> <p>enforce 69:6,16 129:16 130:1,19 130:20 131:3</p>	<p>enforced 135:25</p> <p>enforcement 3:12 45:15 46:19 69:5 74:1,5 75:12,14,16 76:5,14,18 91:23 151:5,8 157:3 161:23</p> <p>enforcing 79:10 129:6 150:11,25</p> <p>engage 7:23 163:21</p> <p>engaged 24:19 32:4,9</p> <p>engagement 1:4 2:1,16 4:6,6 18:10 21:17 28:13 70:8</p> <p>engineer 44:2 55:19 113:11</p> <p>engineering 29:22 32:4 49:5 56:1,5 78:5 90:15 125:21 131:10 158:12 168:17</p> <p>engineers 89:21 90:9 165:25</p> <p>english 30:9,17 55:17,20 170:20</p> <p>enhanced 43:10</p> <p>enormous 14:8</p> <p>enormously 15:8 80:20 88:25 89:5 171:11</p> <p>enrich 111:17</p> <p>enriched 111:15</p> <p>ensure 34:9 99:21 101:14 103:15 105:6 133:21,22</p> <p>enter 51:18</p> <p>entire 54:24 134:12 137:10 149:1</p>	<p>environment 20:19</p> <p>environmental 11:4,14 23:9 105:20,21,23</p> <p>epa 105:21</p> <p>epre 54:2,4,6,9</p> <p>equally 31:11 89:19</p> <p>equipment 27:6 33:1,17 35:21 36:8 37:17 38:21 39:4 45:5 53:21 53:23 98:3 102:11 102:13,24 112:19 148:3 153:9</p> <p>equivocate 73:4</p> <p>erkeneff 102:2 104:12,14,15</p> <p>erring 59:17</p> <p>error 26:13 27:2 28:12</p> <p>errored 40:15,15</p> <p>errors 37:17</p> <p>especially 2:6 33:25 102:16 127:6 148:21</p> <p>essentially 21:5 68:2 69:13,14</p> <p>established 75:16 83:10 118:25</p> <p>et 32:20 40:24 83:23 91:23 160:18 162:8 166:15</p> <p>evacuate 2:19,19</p> <p>evacuation 108:21 132:1,6</p> <p>evaluating 53:16</p> <p>evaluations 32:10</p>	<p>evening 104:14 109:13 118:3,5 131:15 138:20 144:12 147:3 171:11</p> <p>event 24:25 26:6 26:12,15,18 28:14 28:15,16 31:9 35:10 41:17 42:8 42:22 43:3 45:13 45:19 46:6 53:4 59:1 60:11 68:10 109:1 117:1,14 119:4 130:5,9,10 132:20 146:5 161:20 164:21</p> <p>events 2:13 28:7 62:16 89:3 111:8 111:11 153:23 161:25 162:2</p> <p>eventually 11:25 29:5 153:17</p> <p>everybody 4:5 8:6 9:4 37:19 43:4 56:8 83:17 109:18 110:16 111:25 128:22 141:22 147:3</p> <p>everybody's 109:15</p> <p>everyone's 3:1 171:8</p> <p>evidence 143:18 143:22,23</p> <p>evolution 25:21 40:20</p> <p>evolutions 82:2</p> <p>exact 151:19</p> <p>exactly 23:24 38:10,23 90:25 118:10 151:15</p>
--	--	---	---

[exactly - figuring]

<p>157:8 exam 51:3 examination 56:2 56:4 examine 49:18 example 38:3 43:16 89:1 95:20 129:18 exceed 107:8 excellence 21:3 excellent 7:20 18:25 23:18 exceptionally 88:9 excessively 59:4 excuse 131:1 147:13 165:3 169:14 executive 43:16 executives 32:13 existed 120:4 exists 132:8 exit 2:21 expanding 100:19 expansion 10:8,14 65:3 expect 12:9 36:12 36:24 66:11 79:3 145:2 148:5 165:9 expectancy 107:5 107:9 108:10 expected 77:16,20 166:14,15 expecting 170:19 expedite 163:17 experience 3:21 32:14,15 36:1,3 42:14 43:11 86:14 87:19 136:2 experienced 33:10 35:25</p>	<p>expert 113:15,17 113:23 143:24 145:2 154:14,16 170:25 expertise 32:7 49:5 114:20 experts 68:21 118:25 145:3 166:10 explain 48:10 67:23 76:10 154:13 explained 27:16 153:4 explains 74:14 explicit 33:13 explicitly 23:14 124:4 explore 155:12 explosion 114:24 143:16,19,21 146:20 exposure 37:3,20 40:14 139:24 162:15,17,19 163:5,10 exposures 163:11 extended 56:24 138:10 140:3 extends 139:23 extensive 27:25 extent 90:6,17 91:8 167:20,21 external 111:8 124:11 extra 140:25 extract 160:25 extraordinary 2:7 extreme 60:11 62:16 89:3 100:9 111:10 161:25</p>	<p>extremely 62:5 eyes 55:15</p> <hr/> <p>f</p> <hr/> <p>f 99:18 fabrication 168:18 170:5 facilities 60:15 81:13,16 92:17 99:5 facility 25:1,14 61:4,18 65:14 71:7 73:12,22 86:1,5 92:22 98:12 100:8 105:17 facing 137:20 138:11 fact 74:2 77:16 92:9 133:9 135:12 151:13,22 factor 34:3 151:22 factoring 93:22 factors 31:12 32:25 factory 49:8 56:2 56:4 facts 153:25 failed 39:11 41:18 42:15 127:7 136:18 failing 29:6 failure 28:22,23 42:2 47:12 105:11 126:18 136:22,23 137:7 161:17,21 fairly 162:23 164:13 fall 13:6,9 20:24 53:18 familiar 24:23 51:11</p>	<p>family 147:7 far 40:16 50:21 134:16 138:3 143:18 148:18 152:11 farias 7:11 farther 37:19 fashion 11:24 fast 132:9 fatalities 136:16 136:25 favor 142:19 features 153:8 federal 11:22 12:15,16,16 13:1 14:18 16:22 17:11 18:23 19:8 24:5 74:19 105:1,10 117:15 129:13 130:3 133:6 feed 65:18 feedback 32:18 feel 21:23 59:14 94:5 126:18 feeling 127:4 feelings 8:7 feels 38:14 feet 25:8,12,16 27:18,21 44:11,13 44:14 112:7 128:4 feinstein 14:7 15:3 67:13 felt 41:25 153:2 field 34:22,23 56:2 56:4 58:16 fifth 137:2 figure 110:2 127:1 127:11 figures 140:15 figuring 10:4</p>
---	---	--	---

[file - fuel]

<p>file 118:8,12 filed 46:15 filled 6:10 34:7 96:14 film 128:17 filming 63:3 final 64:14 75:9 76:18 99:25 103:9 105:8 124:4,14 132:12 156:25 157:6,15 163:15 finalizing 30:12 finally 88:10 105:24 109:21 117:12 132:5 134:20 148:19 finance 11:8 financially 172:18 find 47:19 59:18 82:4 85:11 98:23 98:25 123:11 128:11 157:18 findings 74:11 fine 112:9 150:13 151:3 finer 75:19 fining 129:18 finish 71:14 86:7 93:2 finished 51:19 finite 49:7 firm 29:22 32:5 49:5 first 4:25 6:8,8,21 7:1,18 8:9 10:11 13:17 16:6 22:15 22:15 24:22 26:15 33:19 37:11 41:19 41:20 49:12 52:2 56:10 57:25 59:10 69:21,23 70:21</p>	<p>96:19 97:15 107:24 108:8 114:2,7 134:7 135:6 144:14 145:23 150:17 fit 41:21 105:18 125:6 153:2 fitting 11:20 five 5:17 8:17 17:2 75:20 98:19 116:20 151:6 fix 76:12 84:24 112:23 125:10,10 fixed 47:11 104:2 fixing 21:2 101:7 flag 5:1 flaw 103:25 flawed 126:7 127:14 fleet 73:20 flooding 100:13 floor 24:13 64:21 65:24 66:4 97:5 97:12 109:12 114:16 129:1 131:7 133:18 136:10 138:19 144:10 147:2 150:4 floors 99:18 flying 120:6 focus 18:24 21:11 82:2 86:24 120:25 127:8 162:6 focused 68:18 82:9 86:12 folks 35:25 68:20 73:6 80:12 92:5 93:16 114:13 141:15 163:12,23</p>	<p>follow 38:15 69:13 77:15 167:13 followed 5:6 13:3 following 95:5 97:16 100:5 152:18 foo 99:14,19,19 foot 2:8 29:18 146:9 footprint 104:19 force 9:20 10:2,4 90:8 foreclosed 70:6,9 foregoing 172:8 172:10,15 forever 13:21 forget 113:5,9 131:14,16,20 form 32:15 91:10 formal 45:18,22 46:1,10,15 47:3,13 59:16 118:8,12 formally 79:19,20 formed 154:17,20 fort 68:9 forth 22:11 172:10 forthright 119:24 123:19 forum 94:25 101:1 forward 2:14 30:15,17 63:22 66:11 69:20 80:6 102:19 104:5 116:2 117:2 132:9 132:22 170:24 found 32:25 45:3 49:24 56:23 57:17 59:6 79:10 167:22 foundation 99:20 102:4 104:15 118:19</p>	<p>foundation's 104:16 four 8:18 17:1 25:8 fracking 114:5 frame 137:14 153:14,15 frankly 2:23 42:14 76:19 164:21 freedom 117:5 frequency 65:20 81:12 frequently 44:24 friday 26:8 friend 135:16 friendly 36:17 37:8 friends 66:18 79:8 fritz 148:12 front 5:12 16:15 109:20 frustration 164:19 fsar 79:7 103:12 104:1 158:13 fuel 3:13 11:19,23 12:18,21,23 13:17 13:19,21,23 14:16 16:1,7,23 18:18 19:15 20:4 21:9 25:18 26:3,9,11,16 26:20,23 27:14,20 27:22 29:4,5 32:22 33:7 34:24 34:24 43:11 49:14 57:10 60:17,23 61:9,15 62:1 64:10 71:23 73:2 76:20 80:17 82:10 82:20 99:23 111:16,16 115:7 127:22,23,23</p>
---	---	---	---

[fuel - good]

<p>133:1 139:9,14,18 139:18 142:24 143:18 146:1,17 155:17,24 156:2 156:12 163:18,24 fukushima 108:3 146:21 full 14:24 22:24 30:8 34:6 54:7 88:4 101:24 102:1 135:2 142:17 fuller 164:16 165:18 fullest 90:17 fully 22:22 107:22 141:5 function 27:24 functioned 37:21 fund 14:13 fundamental 73:10 83:15 130:24 161:20,23 fundamentally 27:1 73:13 80:8 84:2,3 91:17 126:7 127:14 165:23 funded 12:20 funding 14:9,12 funny 128:9 further 32:20 77:1 138:10 146:16 172:15,17 future 24:12 54:7 56:19 76:2 81:1 100:13 114:2 128:12</p>	<p>gaglio 115:19 117:22 118:1,1,2,3 game 16:24 17:1 22:8 69:16,17 gaps 93:15 gary 141:19 144:9 144:11,13 160:23 164:11 gas 143:21 146:3 146:20 gathered 76:15 ge 54:5 gear 120:5,7 general 6:17,22 22:6 41:8 160:2 generally 98:6 generating 97:22 generation 109:25 generators 143:2 generous 135:22 geographical 68:5 geologic 163:25 george 112:4 114:15,16 getting 5:9 12:14 14:9 15:24 17:14 18:17 44:3 110:6 117:10 142:23 gift 120:19 gillmore 114:19 138:18 141:19,20 144:7 158:11 girl 109:15 give 6:3 9:20 12:7 24:8 32:18 38:20 54:7 61:25 64:21 66:4 103:1 105:11 115:25,25 150:4 155:2 given 12:3 101:13 135:20</p>	<p>gives 38:17 glad 3:21 9:9,25 33:4 66:19 148:20 159:18 glaring 120:11 gleaned 76:16 go 2:20,22 4:4 5:24 6:21 9:8 11:18 22:20,22 23:23 26:10 27:10 34:7 36:22 38:15 42:13 43:20 44:6 45:8,12 51:8 56:14,20 58:6,10 61:24 63:15 65:2 66:23 76:8 81:23 84:19,23 87:1 90:18 93:23,25 95:9 96:12,21 97:9,10 106:20 110:17 112:25 114:4 115:7 116:7 116:8 121:24 122:5,17 127:22 132:10,24 136:9 143:8 145:20 149:8,9,19 155:14 159:3 166:19 168:1,3 goal 18:7,17 89:17 goals 22:10 goers 101:15 goes 35:4 36:12 40:12 102:18 going 2:11 5:13 6:2,4,12 7:25 14:24 15:10,11,12 15:13,19 16:4,20 17:22 18:5,5,13,13 18:21 20:2,4,6 21:11 22:19 23:22</p>	<p>24:2,8,15,16,18 26:7,25 27:8,10 28:8 29:8,9,13 30:14,15,17 31:20 32:3 33:2 41:4,5 46:18 47:10 48:4 53:17 54:20,21,22 55:16 59:8 66:11 66:25 72:7 73:1,3 73:12 76:12 80:17 81:7 82:10,24 84:19,20 85:19 86:6 88:13 92:17 92:20 94:16 96:11 96:12,18,23 97:2,3 99:4,6 106:21,23 107:8,17,20 108:2 108:11,14 110:1,1 111:20 112:13,15 116:6 119:9 121:20 123:6 126:18 128:21,22 130:20 138:22,25 138:25 141:2,11 141:13,18 142:4 143:14 144:5 149:19 150:4,5 152:12 155:14 156:24 157:19 160:7 162:4 164:3 164:5,6,17 166:13 166:17,19 168:3 170:20 good 8:7 35:6 51:3 51:23 66:16,21 67:21 83:13 88:15 104:14 109:13 114:20 115:15 118:3 120:16 127:5,9,16 128:19 136:2 138:20</p>
g			
<p>g 117:24,24 gage 100:18</p>			

[good - held]

<p>142:23 144:12 147:3,4,24 148:19 149:16 150:14 158:14 159:13 162:7 goods 149:12 gorman 136:7 138:17,19,20 139:13 gostenhoffer 121:14 123:10,11 125:24 126:6 gotten 48:15 gouged 124:24 148:25 gouges 52:19 gouging 79:16 124:5,10,16,19 125:1,14 138:1,1 government 88:25 105:10 136:17 137:5,12 governor 11:6 131:21,23 grace 132:21 grade 58:5 111:16 graduated 66:17 grant 105:14 granular 119:21 graph 32:24 graphic 40:18,25 graphics 40:7 grated 85:9 grateful 2:9 gravity 19:24 great 7:20 11:17 23:2,18 64:19 66:19 72:5 88:1 113:25 greater 60:16</p>	<p>green 13:8 144:13 greetings 129:2 greta 109:16 ground 60:11 61:24 62:20 100:10,11,16,17 145:12 group 63:24 87:17 90:9 groups 19:6 97:24 97:25 134:21 guards 135:7 guess 15:9 21:8 67:12 85:16 152:6 152:9,10 165:8 guest 3:5 guidance 26:14 guide 103:21,21 125:6 142:13,16 guides 34:22 gut 59:14 guy 113:22 132:22 guys 10:3 82:9 113:22 115:2 128:11 133:12 165:11</p>	<p>hands 70:1 74:13 75:4 142:25 hanford 98:12 hanfords 108:4 hang 33:16 37:7 39:2 159:4 happen 12:17 15:2 19:9 20:15 24:3 70:11 76:11 77:7 79:14 80:18 81:8 81:17,19 99:4,6 108:2,6 111:11 115:14 123:6 146:2,19 161:18 161:21 162:2 happened 14:3 21:1 24:24 25:19 25:23 26:19 27:16 30:23 33:11 40:18 55:22 56:6 66:14 87:5 92:5,5 113:8 120:4 122:24 130:5 144:22 148:13 150:10 154:1 happening 5:8 23:6 24:1 81:24 82:2 87:25 108:5 110:25 happens 48:16 129:16 139:18 happy 22:2 93:3 94:14 111:4 152:1 hard 4:17 89:21 112:22 131:13,20 134:11 169:16 harder 111:19 harris 67:13 haul 48:9 56:23 58:3,11</p>	<p>havilland 120:17 hawaii 68:4 hayes 7:8 hazard 129:24 hazards 100:19 he'll 94:1 head 160:5,5 heading 9:17 headquarter's 68:21,23 69:10 92:3 headquarters 46:3 73:6 79:8 80:12 92:6 93:13,18 157:1 161:13 headrick 141:19 144:9,11,12,13 headrick's 160:23 heal 121:21 health 26:4 101:13 hear 9:6 21:3,23 21:23 28:25 41:22 56:18 111:9,10 127:25 147:4 159:9 heard 30:1 50:14 50:16 67:17 102:25 103:13 109:15 119:13 121:22 122:6,8 155:13 hearing 90:3 107:25 113:7 116:18 heat 160:13 heater 166:4 heavy 57:9 held 25:17 28:3 63:25 97:1 142:6 156:24 170:4,9,12</p>
	<p style="text-align: center;">h</p> <p>h 100:10,16 half 50:11 51:25 60:12 107:6 122:22 134:25 137:1 171:4 hall 70:7 78:15 hand 35:4,4 38:14 70:19 127:2 handful 68:5 handle 59:25 handling 26:9,16 26:20 29:4 43:11 71:23 80:17 82:11</p>		

[hell - important]

<p>hell 113:18 hello 112:5 123:11 help 18:17 19:8 66:24 68:12 83:8 91:15 100:18 146:22 164:3 165:9 helped 14:20 19:19 helpful 15:8 22:4 80:20 83:17 89:5 89:14 101:3 106:12 168:10 171:3 helping 16:20 herft 1:22 hero 128:20 hi 48:9 56:22 57:6 102:3 106:15 131:8 hide 164:22 high 21:12,13 51:2 66:17 101:13 104:8 108:19 109:16 143:17 162:14 higher 13:24 61:15 highlights 137:14 highly 111:15 highways 84:7 hill 104:25 105:4 106:10 hills 1:14 hiroshima 111:13 111:17 history 24:4 128:15 131:16 hit 15:10,11 47:2 70:22 150:16</p>	<p>hokey 38:17 148:22 hold 12:20 26:16 103:20 119:19 156:15,18 157:9 157:10,10 167:3,3 holder 93:11 157:22 holding 94:16 157:17,25 holds 125:16 hole 112:7 114:3 holtec 29:20 31:15 31:17 32:15 36:1 41:3,7 47:25 49:6 49:17 51:24 53:17 54:10 56:14 57:17 70:16,16 73:8,21 78:13,14,21 85:15 86:3 87:17,17 88:20 90:5,15,23 91:1,3,14,20,25 92:2,5,8,14,16,24 93:9,18,19,20,24 94:8,16,23 101:11 103:6,11 104:5 112:22 121:2,2,24 124:12,14,23 125:4,13,19 127:13 137:23 142:6,6,14,18,20 149:2,15 155:13 155:15,15,20 156:14,15,18,21 157:2,3,15,17,21 157:25 158:4 159:14 162:5,25 167:5 168:6 holtec's 55:14 103:9 124:4,18 143:8</p>	<p>home 5:3 70:18 honestly 147:9 hope 15:14 18:14 19:11 102:21 104:5 106:5 128:11 144:22 hopefully 8:7 16:17 66:24 88:2 88:2 99:16 102:25 160:24 horizontal 54:11 62:3 114:4 horn 7:12 134:4 horrendousness 107:15 horrifying 130:18 host 105:16 hot 101:10 127:18 127:22,24 133:22 144:1,1 166:4 hour 25:15 31:11 130:6 140:7,8 153:2 171:4 hours 101:2 130:7 house 12:5 13:3,4 13:6,7 14:22,25 17:21 166:5 howell 3:9 74:22 85:21 86:8 89:25 93:3 94:15 152:13 152:18 156:18 157:12 158:14,17 168:13 169:13,25 huge 170:21 human 26:13 101:13 137:21 hundred 104:22 128:3 136:16,25 hung 42:22 44:3 53:10 86:16</p>	<p>hurdles 168:2 hydrogen 143:21 146:3,20 hypothetically 25:16</p> <hr/> <p style="text-align: center;">i</p> <hr/> <p>idea 67:16 127:9 identified 31:23 48:2 57:4 58:11 74:4,14 132:12 identify 31:19 41:16 42:1 53:19 90:18 ignorance 130:25 ignored 136:13 imagination 137:4 imagine 123:4 128:8 impact 11:4,14 23:9 impacting 137:1 impassioned 169:17 implement 105:7 152:4 implemented 126:20 implementing 137:6 importance 2:11 18:9,16 37:4 90:14 123:2 137:14 important 10:10 10:25 13:18 14:13 14:19 16:5 20:17 22:13,17 23:15 24:18,19 27:12,19 28:5 30:21 31:11 39:8,22 45:3 47:16,20 52:11</p>
---	---	--	--

[important - instances]

<p>55:3,24 58:1 60:23 63:23 67:19 69:24 88:17 89:19 91:7 95:1 120:23 122:23 127:11 129:10 130:1,2 135:4 154:11 160:15,19 161:19 171:6 importantly 58:2 129:25 impose 131:3 impossible 145:8 impressive 39:17 improve 52:4 improved 37:25 38:21 45:4 125:9 improvements 82:24 83:10 inability 137:12 inch 51:25 52:1 57:22 112:7 125:7 160:9 inches 57:18 58:1 58:2 145:16 160:6 incident 24:10 27:1 64:3 70:14 70:21 85:4,24 102:8 126:22 140:5 145:23 152:19 154:7 incidental 44:25 48:18 52:7,19 56:7 incidents 153:23 include 90:6 100:16 102:1 included 132:14 including 13:16 30:19 100:9,21 125:25 151:9</p>	<p>inconsistency 79:11 incorporate 100:15 incorporated 100:2 increase 109:5 increased 81:2,2 increases 129:16 incredible 122:3 incredibly 55:2 154:11 incurred 79:17 independent 9:20 29:21 32:12 38:2 38:8 55:14 67:17 79:21 87:3 88:22 88:24 90:3 97:23 143:24 indicated 94:19 indicates 132:11 indication 36:11 indications 37:24 41:24 indicators 32:2 individual 93:14 individuals 11:6 163:7 induced 119:15 120:21 industry 3:20 17:9 17:12,22 19:3,4,6 30:19 46:6 50:17 78:3,3 106:16 110:10 119:14 127:6 149:1,6 inevitable 138:24 inevitably 138:22 infinite 81:14 infinitely 136:22</p>	<p>inform 152:20,22 informal 79:20 informally 45:20 information 4:2 7:14 8:2 9:21 19:20,22 21:17 22:25 23:1 29:3 30:17 33:12,13 46:7,9 51:14 55:11 62:18 69:18 70:14,15,23 73:16 75:1,4,6 76:15,16 80:10 87:7,19 88:20,24 89:11 91:2,16 95:6 96:6 106:10 108:25 117:5 123:5,6 162:5 171:2 informative 66:7 informed 107:22 124:13 152:25 informs 93:18 inherit 108:11 inhouse 73:21 initial 44:21 46:7 102:10 132:4 152:19 initially 26:12,14 27:1 56:23 initiate 119:17 initiation 152:24 inner 139:3 159:2 159:4 input 69:9 insertion 124:8 inside 12:11 14:22 25:6,9 27:23 44:12 57:7 107:3 140:20 145:21 insignificant 49:25 50:6</p>	<p>insist 137:6 inspect 26:22 52:24 54:24 63:7 72:17 95:9,18 103:3 154:4 156:5 160:19 inspected 49:13 50:16,16 52:24 53:1,3 54:22 82:23 83:2 142:2 inspecting 50:17 53:14 71:6,8 102:24 122:9 159:24 inspection 48:2 51:15 52:10 53:18 54:8 56:13 58:16 64:8 68:13 69:4 69:25 70:24 71:10 73:24 74:9 75:21 75:23 81:21 82:1 86:24 87:2 90:7 91:23 93:19,23 123:18 128:12 152:25,25 158:18 160:2 inspections 50:10 53:20 71:5,13,17 72:3 74:3 76:2,16 81:11,16,19,23 82:13,14 84:15,17 84:21,22 85:10 86:18 93:20 159:23 165:10 167:20 inspectors 68:6 86:25 installation 76:21 installed 140:25 instances 86:15</p>
--	--	---	---

[institute - kind]

<p>institute 17:25 19:7 intact 27:22 101:18 125:18 integrity 50:1 101:8 144:23 145:10 intelligent 134:11 intended 37:2 98:11 103:22 intense 62:5 intent 43:3 interacting 87:12 interaction 90:12 interactive 100:25 interest 17:7,13,13 19:10,12 48:15 64:22 67:6 69:11 152:1 interested 17:12 53:7 90:2 133:25 134:1 172:18 interesting 4:2 129:4 interference 41:22 44:22 interim 11:24 12:18 14:8 15:24 17:15,15 73:11,21 76:20 92:21 137:13 internal 111:7 156:5 internals 25:9 internet 99:2 interpret 45:17 46:1 165:15 interpreting 46:14 intimately 24:23 intricacies 18:8</p>	<p>invalidated 161:22 invest 10:21 93:12 investigate 26:12 26:15 investigation 142:17 invitation 9:5 invite 151:11 invited 92:14,16 109:21 involved 18:9 35:9 35:10,17 111:3 ionizing 125:17 isaac 170:15,24 isaacs 16:3 30:6 isfsi 68:6,13 70:17 77:12 95:15 97:23 98:14 100:12,18 101:18 103:25 125:25 isfsi's 103:21 island 108:3 131:11 132:3 issue 17:8,10 20:1 20:5,6,11 47:12 50:6,7 53:5 58:19 59:19 68:7,19 71:19,23,24 72:10 72:21,24,25 74:24 75:3,18,19 76:1 79:2 80:16 85:2,4 85:8 87:13 92:13 96:2 98:22 106:18 106:24 118:19 119:2,16 120:23 142:21 153:13 156:23 157:4,4,6 160:7 161:14 162:18 166:24 168:6 170:10</p>	<p>issued 73:7 75:20 76:22 77:11 79:7 92:1,2 161:19 issues 3:12 9:12 27:4 29:1 41:7,8 41:16 47:19 48:3 52:15 64:13 72:18 72:19 74:7,15 76:3 95:2 111:6,6 111:7 123:3 132:15,16 136:14 165:1 issuing 78:19 item 7:1 12:10,12 65:7 70:21 87:25 94:5 113:2 items 5:6 64:9 65:7 iv 3:7</p> <hr/> <p style="text-align: center;">j</p> <hr/> <p>january 17:18 76:6,13 89:2 jeff 144:10 147:2,4 jerry 2:17 5:5 6:12 7:24 8:3 17:17 150:5 156:10 158:23 160:21 jersey 92:17 jim 7:6,6,9 job 1:23 34:1 39:21 41:2 126:2 131:3 149:11 163:3 164:6 joe 96:19,20 97:4 97:5,12 john 7:2,4,5 85:14 johnson 20:9 106:14 109:11,12 109:13,13 117:23 118:16,18,18</p>	<p>join 3:22 joining 3:15 7:21 43:15 juan 7:5 juanita 7:8,8 judge 162:25 judged 153:15 judgment 75:10 79:21 judgments 67:17 july 21:2 42:21 43:2 53:5,10 92:19,19 130:9 153:24 jury 79:23 115:21 justifiable 79:5</p> <hr/> <p style="text-align: center;">k</p> <hr/> <p>kambucha 130:12 keep 70:6 82:10 106:6 107:10 110:15 133:21 138:25 142:3 keeping 10:16 kept 26:16 57:18 117:2,3 kern 2:17 6:12 7:24 8:4 150:5 152:6 155:9 156:11 158:24 160:22 161:24 key 34:2 36:25 40:21 63:24 75:20 98:15 100:22 kids 108:22 kind 15:11 16:5 19:24 30:4 69:21 77:14 89:13 99:1 99:3 107:9 111:22 129:20 145:18 152:6</p>
--	---	---	--

[kinds - licensees]

<p>kinds 55:9 112:18 knew 136:18 153:14 164:24 know 3:4,22 8:6 9:8,8 10:3 11:3 20:15,21 21:12,24 22:10 23:24 30:15 38:18,23 40:23 41:20 54:21 57:19 59:14,14 61:22 62:13,23 67:1 70:1,1,1 72:23 73:17 77:7 78:1 78:15,16 79:4,6,9 79:13,15,19,19,20 81:6 82:19 83:21 83:21 84:6 85:13 85:13 88:9,18 89:17 91:13 93:6 94:3,8 95:7,13,14 98:22 105:9 106:12 112:14 118:24 119:16,17 120:6 122:12,19 122:21 127:7,9,20 128:7,14,16 129:11 131:13 133:8 134:2,10,24 134:25 135:4 136:1 139:8,16 140:13,15 141:22 141:24 142:4,9 143:7,12 144:21 148:10 149:4,9 151:17 157:7 163:24 164:24 knowing 128:1 148:25 149:3 knowingly 103:4 knowledge 76:22 83:20 98:6</p>	<p>known 136:13 knows 119:15 141:23 kyle 9:24 67:14</p> <hr/> <p style="text-align: center;">I</p> <hr/> <p>I 117:24 lab 19:18 labeled 2:21 labor 125:25 lack 101:6 105:24 137:24 laguna 1:14 8:11 lambasted 109:22 landing 120:5,7 lands 10:7 11:2,5 11:12 23:10 99:24 langley 126:10 128:25 129:1,2,3,9 151:18 language 14:21 55:17 80:1 90:8 133:6 164:14 large 20:3 70:13 larger 14:17 21:18 136:23 largest 137:2 laser 52:3 lastly 103:19 late 20:24 46:16 46:17 130:8 lateral 124:9 latest 136:14 laughing 149:5 law 11:22 12:15 12:16,16 13:1 14:18 16:22 17:11 19:9 115:20 129:12,13,16,17 130:3,19,22,25,25 131:3 133:6 150:11,25</p>	<p>lawrence 118:19 laws 71:2 105:24 129:14 130:1,2 131:4 lawsuit 154:18,21 lawyers 74:17 layer 50:4 52:8 laying 8:25 laymen's 31:3 133:10 161:6 lead 90:11 150:5 leaders 104:23 leadership 16:10 87:13 leading 16:3 leaking 108:4,4 144:2 leaks 108:5 lean 94:6 leaned 69:20 learn 42:2 87:25 91:7 128:15 learned 2:14 24:9 26:7 27:8 28:24 31:21 42:4,19 44:19 47:7 59:18 69:25 73:18 75:9 79:6 93:8,8 96:7 121:7 learning 21:1 93:5 93:21 121:6 leave 18:15 67:3 140:13 leaves 61:14 141:5 led 73:25 left 45:9 70:19 135:8 legally 72:15 legible 6:1 legislation 24:5 105:5,14 106:1</p>	<p>legislators 18:23 legitimate 31:1 37:21 153:19 lemon 141:22 143:3 144:6 149:7 165:8 lemons 143:2 length 29:10 38:14 165:17 lesson 59:17 lessons 27:8 42:19 93:8 121:6,7 letter 113:17 letters 12:11 letting 114:17 level 33:10 41:15 61:21 75:17,22,23 76:23 77:4,9,11 86:22 100:6,9,11 100:11,13 103:1 112:16 levels 20:21 40:12 43:18 47:20 50:22 levin 9:19,22 15:4 67:10 liars 131:22,24 license 56:11 71:7 71:9 79:2 83:18 84:3 85:7 92:7 143:12 166:24 167:12 licensed 73:20 81:13 155:16,19 156:1 161:14 licensee 71:21 75:25 85:6 91:24 93:10 119:9 158:4 158:7 licensees 42:10 81:18 157:9</p>
---	---	---	---

[licensing - lowered]

<p>licensing 30:25 92:2 93:17 94:24 106:22 lid 49:20 50:21 lie 169:20,21 lied 115:23 116:2 147:14,15,16 lies 115:20 116:10 147:12 lieutenant 11:6 131:21,23 life 107:4,6,9 108:9 136:14 138:2,4,4,10 166:16 lifecycle 170:6 lift 25:25 31:24 42:25 44:15 148:18,20 lifted 59:5 lifting 153:9 light 57:19 116:10 119:14 151:20 likewise 36:20 37:7,24 limited 81:13 138:2,4,4 limits 33:14 linda 3:9,14 21:21 67:24,24 68:7 72:19 73:24 74:19 80:8,25 85:19 86:6 91:20 92:25 94:12 116:14 133:21 135:12,24 143:7 150:8 152:12 156:13 163:16 164:10 165:6 169:24 171:9</p>	<p>linda's 152:3 line 44:16 49:22 91:15 113:6 141:7 143:9 lines 119:22 159:3 link 22:23 links 23:1 lipstick 141:21 list 13:25 70:22 84:18,19 102:18 105:2 listened 145:4 literal 153:15 literally 124:6 little 5:8,20 6:2 10:6 12:7 18:2 19:25 20:7 22:7 27:10 38:16 47:22 50:12 60:5,8 62:23 66:10 77:14 107:10 108:13 111:22 112:10,11 124:17 135:2,21 148:20 157:16 live 4:22 134:16 147:7 lives 136:16 137:1 137:9 load 31:25 33:14 33:15,23 36:10,11 36:13,15,24 37:7 37:25 38:2,5,8,9 39:3 57:6,9 58:21 59:22 121:24 130:4 142:8 162:20 loaded 39:25 49:13 123:12 124:1 126:23 loading 61:8,12,14 65:15 95:15 125:5</p>	<p>148:5 loadings 35:11 loads 49:9 124:20 lobbying 17:10,11 19:8 local 7:23 9:23 65:17 locate 105:6 137:12 location 114:2 163:25 locations 100:22 logarithmic 62:4 logical 114:2 logistically 70:9 long 11:21 12:2 23:25 33:22,23,24 38:14 47:22 49:1 50:7 51:13 60:4 62:23 71:6 89:10 105:7 106:15 107:1 118:24 120:24 123:6 127:8,18 137:15 longer 60:5 87:23 111:19 136:9 look 4:4 20:15 33:11 34:23 51:21 86:9,19 87:1 88:11,25 95:19 98:24 102:19 110:8 119:6 128:10 130:10 139:15 140:22 145:3 151:11 160:8 165:11 looked 35:8,8,24 42:7 47:1 55:12 56:25 57:4 89:6 130:10</p>	<p>looking 21:9 32:5 38:24 40:22 44:10 55:16 57:5,7,9 74:23 98:13 114:18 115:5 138:12 142:5 145:25 lookout 70:12 looks 13:9 24:12 67:25 90:25 170:24 los 17:18 loss 27:24 137:8 lost 21:7 90:23 112:9 116:11 121:3 lot 4:13 5:10 6:3 8:10 12:7,11 13:14,22 14:1 15:1 16:5 19:19 20:24 24:1 30:2,7 31:14 48:15 50:15 52:16 70:15 86:11 93:9,12 95:23 98:19 99:7 107:10 112:8 121:7 126:15 127:10,10 129:11 140:10,11 154:12 155:23,25 159:20 162:5 165:6 166:1 170:18 171:1 lots 143:22 love 127:25 lovely 96:14 low 41:15 42:3 162:17 163:11 lower 26:1 41:21 58:24 139:25 lowered 25:6,7 26:2 27:13 38:10</p>
--	---	--	---

[lowered - mentioned]

<p>44:14 45:3 122:10 139:25 lowering 25:10,11 25:12 27:3 lowers 25:4 lowest 75:22 lunch 134:13 lutz 109:11 112:4 112:5,5 lying 148:8</p>	<p>man 36:21 107:8 management 24:11 30:8 35:19 43:9,15,17,18 49:15 50:8 51:19 54:15 56:9 87:22 90:13 91:5,11,14 91:18 92:9,18 93:9 94:9 mandate 107:13 mandy 99:14 101:21,22 102:2,3 manner 84:5 85:1 85:7 89:18 manners 138:14 manuals 120:2 manuel 44:6 45:8 manufactured 165:24 manufacturer 101:11 manufacturer's 125:20,21 manufactures 122:2 manufacturing 77:18 78:8 166:14 170:5 map 100:25 mar 8:12 march 1:15 10:12 11:1 marching 109:6 marked 58:2 marks 48:18 49:25 51:12 79:17 married 33:25 maryland 68:24 match 35:12 61:8 material 3:10 4:13 49:9 68:1 71:8</p>	<p>114:21 115:21 mating 44:13 59:9 60:6 112:24 matsui 15:5,6 matsui's 16:14 matter 12:22 62:20 75:10 77:2 matters 11:21 72:12 max 136:15 maximum 129:19 meal 134:8 mean 19:24 22:18 48:25 61:24 74:18 83:9 84:16,16,23 95:22 98:17 122:1 133:23 142:9 144:17 149:8 163:19 164:2 meaningful 105:6 105:12 means 84:23 126:15 139:2 140:3 meant 81:10 measures 101:4,9 108:21 meat 31:13 mechanical 78:4,5 165:25 168:17 mechanism 14:3 mechanisms 157:9 media 99:3 110:12 110:24 meet 10:2,18,21 46:9 47:11 67:9 81:24 92:18 153:15 154:1,6 155:5 meeting 1:5 3:23 4:14,21,25 6:22</p>	<p>7:13,18 8:5 9:7 10:25 11:19 12:3 16:11 18:22 24:1 28:13 54:7,20 64:3 66:15 67:9 70:7,7 76:17 94:17,18,22 99:25 111:5 121:18 139:7 147:18 148:22 150:6 154:23,25 155:1 157:17 159:19 169:24 meetings 8:18 10:10 17:23,25 97:16,19 108:19 111:6 113:19 134:4,8,15 155:6 meets 78:18 85:2,2 member 9:19 131:9 167:2 168:12,23 169:2,6 169:10,19 170:12 members 4:24 7:2 23:5 80:21 104:17 104:20 110:22 134:9 membership 10:4 16:17 104:17 memorial 148:1 memorialize 5:7 memories 131:12 memory 60:15 mention 9:17 15:22 19:2,13 20:9 21:14 23:8 35:22 67:4 111:4 139:24 mentioned 63:4 65:12 70:24 73:12 74:8 138:21 139:6</p>
m			
<p>machine 172:13 machining 139:4 madge 131:6 133:16,18,19 magically 5:13 magnetic 50:19 51:1 maheras 19:18 23:20 mail 5:16 16:18 19:20 22:19 101:25 mails 117:8 main 12:14 22:10 70:18 maintain 58:7 60:4 maintained 133:23 142:2 145:10 163:6 maintenance 52:10 53:18 56:13 77:19 102:17 105:13 142:3 148:2 166:15 major 6:22 142:19 149:9 making 4:7 8:25 65:9 107:22</p>			

[mentioned - mpr]

<p>139:7 140:5,9 157:16 merely 93:11 merged 6:18 merging 14:10 message 163:22 met 10:19 11:8 67:10,12,14 92:8 metal 120:12,12 120:13,13 123:15 123:15,22,22 124:22,22 metallurgy 166:10 metals 166:3 method 101:6,10 140:21 mexico 12:19 14:11 73:13 108:4 microphone 96:25 mics 135:22 mid 74:21,22 158:21 middle 21:20 95:11 108:19 109:24 mike 9:19 114:15 115:19 164:11 mile 108:3 114:25 114:25 131:11 132:3 miles 134:14 135:18 million 10:22 99:22 125:25 126:1 137:2 millions 101:15 107:16 millisecond 98:18 mince 91:21 mind 106:6 144:24 145:6</p>	<p>mindful 52:13 mini 135:3,9 minimal 159:16 minimize 37:20 minimizing 37:3 minimum 10:18 minor 103:12 minute 23:4 25:14 28:9 35:22 44:9 45:11 49:21 96:11 minutes 25:20 31:10 66:24 96:16 96:22 98:19,25 135:20 140:6,7,8 149:20 misalignment 139:1 140:3 158:25 misalignments 138:23 misinterpret 47:2 118:10 misinterpretation 152:8,11 misinterpreted 30:6 46:11 118:6 misinterpreting 153:19 misrepresenting 144:22 missed 27:7 missile 142:8 missing 102:15 107:11 112:20 114:12 mississippi 68:3 missouri 33:20 73:10 85:16 86:5 96:9 mistake 144:21</p>	<p>misunderstanding 153:3 mitigate 153:10 mitigation 54:9 106:2 mix 36:2 mocked 49:9 model 19:16 113:4 114:10 models 55:6,6 moment 6:5 52:13 monday 26:17 28:4 39:16 45:16 45:21 51:17 73:25 81:1 152:17,18 monday's 124:12 money 109:25 126:22 136:19 monitor 31:24 33:15 38:7 45:6 52:9 56:17 60:6 87:22 98:15 monitored 50:8 57:13 142:2 monitoring 37:5,7 37:23,25 38:2 65:10 97:25 99:9 100:11,18,22 monitors 37:13 65:13 month 98:23 104:21 113:18 157:7 162:24 monthly 154:17 155:5 months 18:1 86:24 88:9 162:24 163:3 moon 111:21 moratorium 106:17</p>	<p>morning 67:14 moross 96:19,23 97:4,6,12,13 morris 3:6 22:2 40:2 64:21 65:25 66:5,12 74:23 81:4,9 82:22 83:1 83:13 85:19 86:2 87:10 88:15,21 89:9,15 91:19 94:11 95:1,11,22 129:3,8 150:14,22 151:1,4 152:12,17 153:21 156:17,23 158:8,16 161:12 163:5,19 165:16 165:21 167:3 168:8 169:16 motion 61:24 motivated 164:22 motor 83:22 84:4 mountain 119:1 127:7 mounted 37:11 move 15:15 29:8 58:23 73:2 80:6 111:20 139:19 149:10 moved 18:18 26:11 37:1 40:15 57:10 59:5 163:3 163:24 movement 105:25 moving 19:15 36:24 38:19,20 40:24 57:15 82:20 104:4 111:24 mpc 124:7 mpc's 124:11 mpr 55:15</p>
---	---	--	---

[muldow - nuclear]

<p>muldow 133:17 136:6,8,10,12 multiple 29:22 34:9 36:17 37:11 37:24 40:22 49:3 53:11 64:6 100:8 multipurpose 124:7</p>	<p>116:7,8,8 127:18 140:15,22 142:13 142:17 143:3,4,5,5 144:25 146:15,16 146:21,21,22 148:22 155:25 156:8 163:20,21 167:22 169:14,24</p>	<p>news 52:15 89:2 106:11 131:10,15 newspaper 114:19 nice 129:21 nicely 112:25 night 116:3 niguel 8:11 nilly 167:15 nina 128:25 131:6 131:7,8 nominally 85:2 non 138:8 nonissue 60:1 normal 28:19 normally 4:16 north 8:14 10:14 100:23 northwest 19:18 notably 19:6 note 7:13 23:20 68:22 94:15 noted 124:3 notes 159:20 notice 94:18 158:11 noticed 134:24 157:18 notices 22:20 notification 26:17 132:5 notified 45:20 152:16 notifying 101:1 noting 123:12 november 24:17 27:9,16 28:11 29:10 31:8 43:20 47:15 64:4 66:14 69:22 nrc 21:18 26:18 28:1,4 39:15</p>	<p>45:14,19,20 46:2,4 46:8,12 48:16 49:23 51:14 55:12 55:12,15 56:10 57:23 58:8,12,15 59:10,16 60:7 64:2,3,7,11 68:18 71:10 72:14 79:1 88:10 89:6 91:13 92:24 93:10,13 94:15 101:12 102:8 103:14 105:22 110:10 113:12 116:5,11 116:12,21,25 118:7,9,11 123:18 123:19,21 124:13 124:22 126:1,14 130:19 132:25 133:5,21 134:1 144:19 145:22,24 146:16 150:9 151:4,5 152:15 153:17,17 157:1,1 157:20 161:12 163:7 167:7 nrc's 67:17 132:9 157:19 nrc.gov. 70:19 nuclear 3:8,10,18 3:19 12:21 17:24 18:12 19:7 20:4 21:3,15 30:3,19 39:9 68:1 71:7 78:3 91:11 93:7 97:22 98:7,12 99:23 102:5 105:13,16,25 106:16,18,19 110:10 114:21 125:18 127:6</p>
n	<p>needed 33:12 36:19 48:3 59:16 107:21 108:24 119:10 136:19 142:11 needs 20:20 21:6 30:18 32:19 80:2 80:2 91:2 92:13 114:3 123:5 126:4 nei 17:24 neighborhood 107:19 neil 9:13 60:12 neither 172:17 never 69:21 71:5 71:18 76:22 108:6 117:14 119:20 128:16 132:12 134:4,6 139:8 140:11 new 3:17 5:21 6:25 7:2 9:14 12:6 12:19 13:8,10 14:11 16:16 34:8 35:21 50:10 62:15 63:23 71:12 72:4 72:6 73:13 83:9 92:17 102:21 105:14 108:4 114:3 115:6 129:21 165:10 newly 9:18,19</p>		
<p>nagasaki 111:12 naive 44:23 name 2:15 5:3 22:18 70:25 117:24 118:17 121:15 131:8 133:19 147:4 172:22 named 134:3 nations 105:12 native 105:11 navigate 58:5 ncr 48:1 63:25 72:16 near 86:5 100:24 102:8 119:5 120:4 123:17 128:11 130:16 nearby 100:22 necessarily 35:25 92:24,25 necessary 102:12 need 2:18,19 5:6 12:1,15 13:16 14:17,25 15:25 17:14 19:7 20:2 21:8 23:16 30:11 60:4 75:2 80:14 88:3 91:1 94:8 95:2 105:5 107:13 110:20 111:21,22 112:16 113:9</p>			

[nuclear - opportunity]

<p>130:13 133:24 136:23 137:6,16 141:15 142:8 143:11,20 146:4 147:11 149:14 163:18 number 10:19 11:10 17:22 18:14 25:1 37:10 39:10 39:20,21 40:8,14 44:4 58:1 61:25 64:11 82:21 116:22 121:2 136:8 148:4 162:13 172:25 numbered 6:8 numbers 44:12 62:19 numerous 58:14</p>	<p>occasionally 44:24 84:12 occur 31:12 41:24 49:10 57:14 59:1 77:17,18,19,20 87:20 occurred 26:6 41:18 45:19 46:6 86:10 103:2 141:1 160:24 occurring 36:10 occurs 41:22 124:8 146:5 ocean 2:8 100:21 101:17 oceanside 67:15 october 121:18 offer 8:1,16,25 152:14 offered 10:2 office 15:3,4,5,6 16:14 67:11,13,15 68:8,20,22,23 69:10,11 92:3 152:15 officer 3:18 offices 68:12 69:2 80:9 104:24 105:1 official 5:18 124:18 officials 9:18 118:9 163:21 164:2,7 offline 94:13 offload 26:23 29:5 32:22 33:7 offloading 11:19 offshore 10:17 oh 25:8 40:3 107:25 112:14 113:7 116:14,16</p>	<p>122:6 146:19 okay 2:4 6:21 7:22 20:8 23:18 24:14 31:4,7 40:4 44:15 45:3,12 46:16 53:6,10,13 56:22 61:5,16,19 62:2,10 63:11 64:15 66:12 71:3,25 73:22 74:23 76:3 77:12 77:22,23 78:16,25 79:14,25 81:17 84:18 91:25 96:3 96:10 97:7,12 121:20 122:7 130:7 136:4,15 139:1,13,16 147:4 165:13,16,22 166:1,8,19,21 169:15 old 139:15 omnipresent 20:19 once 16:15 20:1 21:9 55:11 56:25 61:14 88:11 126:23 134:5 ones 68:25,25 69:4 74:7 80:13 92:6 138:3 146:25 ongoing 21:19 23:17 32:21 74:3 82:6 92:20,23 137:23 158:18 online 4:14,15 97:16 98:25 99:3 106:20 onofre 9:13,21 11:24 13:24 16:24 68:10 73:18 85:24 89:4 97:22 101:16</p>	<p>106:25 114:22 118:19 133:24 136:24 155:17 163:18 onsite 101:6,10 152:24 153:17,18 op 17:17 open 9:5 64:9 71:4 94:24 113:5,9,14 114:8 opened 15:25 opening 8:5 15:11 operability 170:7 operate 83:16,22 83:25 84:4,25 85:7 operated 57:16 operates 91:14 operating 10:16 84:6 95:12 operation 42:5 78:8 166:15 operational 168:19 operations 34:9 64:10 77:19 operator 4:11 35:6 37:9 38:9 40:11 84:4 85:6 99:5 operators 25:10 36:19 38:23 58:3 opinion 127:19 137:20 opportunities 67:8 opportunity 28:15 53:25 67:1,9,21 76:9 93:5 94:21 126:13 152:14 157:20 163:22 164:20</p>
o			
<p>o 99:18,18 117:24 o'clock 140:7 oath 117:17 172:12 obligations 104:6 obliged 75:25 76:1 observable 76:7 observation 129:10 observe 36:7 37:15 58:17 observed 115:1 167:25 observing 54:6 obstruction 39:2 57:18 obstructions 58:6 obvious 83:11 obviously 8:19 18:8 41:6 71:5 80:14 81:14</p>			

[opposed - people]

<p>opposed 103:23 opposite 116:19 optimum 99:9 option 141:24 143:13 orange 2:24 8:15 65:18 104:16,22 122:25 123:4 order 105:10 108:23 118:11 organization 34:14 43:10 66:6 91:14 93:6 organized 20:12 organizing 9:12 original 104:1 outraged 131:21 outreach 67:6 outside 2:23 3:25 48:19 68:24 overall 159:12 overexposure 140:14 overhauled 34:18 overhead 142:25 overlooked 93:16 overpack 58:22 overpass 155:22 oversight 27:7 31:16,25 33:1 34:14,15,18,19 35:3,19,23,24 36:5 36:5 42:15 43:7,8 43:9,10 69:5 81:3 91:8,23,24 94:9 112:6 133:20 145:22 overview 24:8 65:3 owner 42:10 85:6</p>	<p>owners 87:12 oxide 50:4 52:8 165:14</p> <hr/> <p style="text-align: center;">p</p> <hr/> <p>p.m. 171:13 pacific 19:18 101:16 package 23:11 padres 8:7 66:19 page 50:12 70:18 73:17 132:10,11 157:20 pages 1:25 palmisano 23:8 24:7,14 29:15 30:12 31:1,5 39:24 40:5 41:6 44:4 52:17,25 53:3,9,15,23 54:3 54:5,17 55:1,8,18 55:23,25 56:21 60:14,24 61:3,10 61:13,17,20,23 62:8,11,22 63:6,9 63:12,16,19,21 64:16,25 65:5,12 87:16 96:5 118:5 132:23 135:13 147:13 148:7 153:13 154:8,16 155:3,11 156:8 159:9,13 160:1 161:3 162:6,16 163:9 164:18 panel 1:4 2:1,16 4:6,7,24 16:3 18:10 24:21 28:13 33:5 45:10 62:14 62:17 70:8 80:21 97:14 134:9 147:16 148:14,14</p>	<p>154:14,16,19 155:4 170:25 panel's 29:11 panic 109:23 111:23 paper 49:22 paragraph 69:2 parameter 65:11 parameters 57:16 parliament 109:20 part 4:25 5:17 16:3 17:20 19:6 20:17 23:25 27:2 28:18,22,23 29:6 30:14,16,24 45:24 54:17 56:10 87:16 100:16 101:24 115:21 120:16 128:12,18 158:24 159:11 168:20 participates 134:22 participating 94:20 particular 4:11 14:6 18:18 19:18 20:10 24:1 48:5 68:12 78:11 100:4 171:9 particularly 28:18 32:14 35:22 73:20 159:24 160:4,13 160:15 parties 172:20 partly 110:14 158:25 parts 16:4 party 32:4 47:25 49:5 92:25 pass 78:15</p>	<p>passed 13:4 133:6 passive 50:4 path 48:9 56:23 58:3,11 63:22 81:1 patience 62:24 171:7,8 pattern 132:7 151:13 163:12 pause 23:4 43:20 43:24 52:12 62:22 127:12 pay 41:4,5 paycheck 77:8 paying 41:2 44:20 110:13 117:16 133:8 peek 62:20 peen 160:18 peened 52:3 penalties 75:19 129:15 131:3 151:10 penalty 76:25 151:18,23 pennsylvania 131:21,23 people 6:19 13:15 18:3 21:10,16 27:2 30:22 32:13 32:13 33:14 34:1 35:9 36:5 37:12 37:16,18,23 38:8 39:6,20,21 40:8,10 40:14,16,19,23 42:17 43:8,11 47:4 52:20 55:21 62:25 84:16,23 87:21 94:3 96:23 98:21 107:14 109:2,6,24 110:6</p>
---	---	---	--

[people - pool]

<p>110:23 115:9,12 115:13 116:11 117:19 123:2 130:11 134:10,23 135:18 137:2,9 143:4 144:14 146:19 149:24 150:1 161:9 162:21 164:17 165:7 169:20</p> <p>perceived 93:14</p> <p>percent 49:19 130:13</p> <p>perception 132:14 132:19</p> <p>perfectly 94:7 110:16</p> <p>perform 35:7 87:3</p> <p>performance 31:19,22 34:22 83:24 84:15,22 85:4</p> <p>performed 31:18 86:18</p> <p>performing 31:16 93:8 158:1,5</p> <p>period 6:15 25:15 28:21 46:17 59:13 69:1 71:11 73:2 75:3 76:23 97:3 152:7</p> <p>periodic 53:19 81:11,16</p> <p>periodically 34:1 71:13 147:25</p> <p>periods 6:14</p> <p>permanent 11:25 65:16 106:2 137:13,19 139:20</p> <p>permissible 78:7</p>	<p>permission 99:11</p> <p>permit 11:16 121:22 122:8</p> <p>person 28:21 36:21 37:14 126:14 134:3</p> <p>personally 67:11 90:11 93:12</p> <p>personnel 35:17 35:18,18,19,20 112:19</p> <p>peters 15:5</p> <p>phase 78:8 168:19 170:7</p> <p>phone 131:17 147:23 155:5</p> <p>physical 50:2 103:5</p> <p>physically 102:23</p> <p>physics 18:9</p> <p>pick 80:4 90:25 142:22</p> <p>picked 38:12 53:7 57:11 131:17</p> <p>picky 83:6</p> <p>picture 48:13 49:20 58:20 88:4 88:5 107:11 108:12</p> <p>piece 74:6 75:6 135:8 164:7</p> <p>pieces 74:7 102:11</p> <p>pig 141:21</p> <p>pilot 14:9,12,13,15 15:1,14</p> <p>pin 116:24</p> <p>pittance 129:22</p> <p>pittsburgh 131:11</p> <p>pity 16:21</p> <p>pizza 135:8</p>	<p>place 10:23 11:1 26:23 36:21,23 53:17 56:14 58:24 59:4 99:8 103:11 105:8 108:1,9,18 108:20,23,24 119:25 134:16,25 137:15 142:3 145:23 156:16 172:9</p> <p>placed 90:16 172:11</p> <p>places 13:23 50:24 98:14 99:9,10 108:17 141:7 169:6</p> <p>plain 30:8,17 90:8 170:20</p> <p>plan 16:24 17:1 94:20 111:24 114:22 127:16 128:2 142:3 145:12 154:21 155:8 162:24</p> <p>plane 120:6,6</p> <p>planet 107:8</p> <p>planned 82:12 92:19</p> <p>planning 16:13 53:13 97:23 112:8 112:12 120:11 146:7</p> <p>plans 120:1</p> <p>plant 2:13 10:16 60:17 61:4 62:1 73:9 86:13 87:13 95:7 96:8 107:12 130:13 143:11</p> <p>planting 107:1</p> <p>plants 18:12 108:14</p>	<p>plastic 51:11</p> <p>plate 54:24</p> <p>playing 147:23</p> <p>please 3:4 5:1,3,24 6:6,11 7:22 10:5 17:4 20:8 23:15 24:6 69:12 96:15 101:14 117:7 131:2 133:5,5 139:11 146:25 154:13 156:7 159:25 169:1,5</p> <p>plug 151:14</p> <p>plus 55:14 62:18 100:24</p> <p>plutonium 111:13</p> <p>point 21:21 26:24 56:13 59:7 73:5 74:13 75:15 76:13 77:12 79:14 89:16 94:11 98:15 107:20 115:15 141:23 148:4 161:4 166:12,19 166:22 167:4</p> <p>pointed 73:9</p> <p>points 38:25 77:15 90:19 106:6 135:20 168:25</p> <p>pole 57:19</p> <p>policemen 84:10</p> <p>policy 68:25 75:16 76:19 127:5 151:5 151:8,14,23,24,25 152:4,5 164:7</p> <p>political 14:17</p> <p>politicians 110:24</p> <p>politics 13:25 15:18</p> <p>pool 34:24 101:9 133:22 142:24</p>
--	---	--	---

[pools - process]

<p>pools 60:17 62:1 127:23,23</p> <p>poor 26:13 83:16 112:21 125:21</p> <p>port 48:9 56:22 57:6</p> <p>portion 6:15,17 170:5</p> <p>portions 170:4,6</p> <p>portrayed 128:20</p> <p>position 3:23 37:6 75:7 152:23</p> <p>positioned 122:14</p> <p>positions 40:21</p> <p>possess 71:7</p> <p>possibilities 146:18</p> <p>possibility 111:5</p> <p>possible 6:20 11:23 89:4 90:17 135:16</p> <p>possibly 6:9 26:13 69:19 70:2 71:1,4 75:11 90:8 110:17 157:13</p> <p>posted 4:15 29:16 66:8 135:7 161:7</p> <p>posters 109:19</p> <p>potato 127:2</p> <p>potential 62:16 77:6 86:9 98:21 129:23 132:13,18 136:25 137:23 138:4</p> <p>potentially 76:4 159:19</p> <p>pound 128:3</p> <p>pounds 99:22 107:16 111:13,14 111:15 130:16</p>	<p>power 18:12 60:17 61:4,25 68:14 130:13</p> <p>practice 32:18 58:14 59:6 109:3 116:23</p> <p>practiced 58:4</p> <p>pre 45:15 74:5 76:5 101:11 157:3</p> <p>precautionary 104:7</p> <p>precision 125:5 137:25 142:11,13 142:15 148:23 149:2</p> <p>precursor 42:22</p> <p>predicting 56:6</p> <p>prefer 15:17</p> <p>preliminary 132:10</p> <p>premises 130:25 133:23</p> <p>preparation 112:8</p> <p>prepare 126:20</p> <p>prepared 78:13 80:5</p> <p>preparing 31:3 56:11 154:20</p> <p>present 18:20 39:19 85:1 117:13 132:11</p> <p>presentation 8:22 9:7 11:8,9 148:11</p> <p>presentations 8:13 8:24 135:19</p> <p>presented 60:12 99:24 117:14</p> <p>presenting 18:6</p> <p>president 3:17 96:1</p>	<p>presidential 15:19</p> <p>presidentially 151:6</p> <p>press 30:2 131:22</p> <p>pressure 166:1,3,5</p> <p>pressurized 126:25</p> <p>pretty 18:23 31:20 70:5 83:11 87:11 89:20 111:19 149:5 169:21</p> <p>prevent 28:9 34:17 44:3</p> <p>prevented 43:2 145:23</p> <p>previous 35:10 39:14 139:7 153:23</p> <p>previously 40:8 83:12</p> <p>primarily 152:15</p> <p>primary 160:8</p> <p>principle 104:8</p> <p>prior 72:14,16 144:18 172:11</p> <p>priorities 99:20</p> <p>priority 21:6,12 21:13</p> <p>private 20:5 117:18 131:25</p> <p>proactive 75:8</p> <p>probability 129:17</p> <p>probably 13:6 49:18 70:6,11 119:20 134:12,14 136:9 139:14 141:6 161:24 166:6</p> <p>problem 32:3 50:3 78:11 108:15</p> <p>110:19 112:14,15 120:9,14 123:13 123:16,20 125:3 125:10,11 136:18 136:24 139:3 140:18 142:19,22</p> <p>problems 19:23 34:17 42:8 57:1 91:17,18 124:21 127:10,15,17 136:13 140:3</p> <p>procedural 26:14</p> <p>procedures 27:6 31:23 33:2,6,8,12 33:21,24 34:4,5,9 34:10,12,18,20 35:3,5,7,12,14,21 36:4 38:22 39:5 43:13,14 46:24 57:2,21 60:3 63:23 83:4 91:12 102:18 108:13 114:12 122:3 125:9 165:2</p> <p>proceeding 21:16 38:11</p> <p>proceedings 1:13 171:13 172:8,11 172:13</p> <p>process 4:10,12 5:21,23 6:13,24 10:3 11:20 12:4,8 13:2,14 14:2,6 15:21 16:13 19:10 20:22,25 21:4,10 23:16 24:9 30:25 32:1 44:2 61:8,12 61:14 65:4 69:8 72:19 74:17 77:18 91:8 95:15 103:7 103:14 105:22</p>
---	---	---

[process - quinn]

<p>106:22 127:21 132:17 141:2 144:24 157:5,23 processes 10:8 34:18,20 145:25 processing 98:12 procuring 102:13 produce 90:15 117:4 161:15 product 90:23 149:10 profession 140:14 profit 98:4 program 19:15 35:16 39:7,9,11,12 41:14,15 42:11,12 42:13,16,19 43:5 50:8 51:19 52:10 53:18 54:15 56:9 56:14,16 81:22 93:19 132:18 154:4 programs 35:12 56:17 progress 4:19,20 147:24 158:16,17 project 14:12,14 14:15 43:15,17,18 65:3 120:15 129:20 projects 14:9 15:1 15:14 98:11 promoters 164:4 pronouncing 117:24 121:15 proof 86:23 161:17,21 proper 11:21 42:18 136:20 properly 21:7 41:3 60:22 162:25</p>	<p>property 127:19 proportions 137:22 proposed 159:14 proprietary 88:23 113:6,7,8 protect 107:2 136:17 148:15 protected 101:17 146:12 163:11 protecting 108:10 protection 102:17 122:13,21 141:1 153:8 proven 142:1,1 provide 4:8 30:13 35:12 42:14 43:8 81:7 91:2,24 135:1,9 136:19 154:17,22 155:4 provided 28:1 34:15 39:16,16 46:8,25 51:14 provides 43:16 providing 36:4 49:23 91:10 134:20,22,25 137:15 public 5:14 6:5,14 6:15,17,20 24:21 26:4 27:14 28:20 30:18 39:22 48:16 55:20 64:17 65:21 67:6 71:15 90:17 94:16,25 96:12,13 97:3 98:5,16 101:1 107:13,22 109:4 110:11,11 110:15 111:1,2 112:1 113:10 117:3,13,15</p>	<p>119:19,24 121:7 123:20 129:3 131:9 133:8 136:18 149:3 157:17 163:17 169:16 170:19 171:3 public's 119:11 121:3 publically 65:9 76:6 100:25 pudding 86:23 pueblo 23:22 pull 40:25 purpose 94:22 purposes 55:5 pursued 12:25 put 4:17 5:1 13:23 16:15 17:2 28:15 34:19,24 38:2 50:11 53:17 59:4 59:8 65:16 71:15 74:19 98:13 112:22,24 114:9 120:12 121:20 122:5 141:21 149:23 150:3 putting 65:13</p>	<p>question 5:1 17:21 20:17 21:19 48:7 48:24 52:11 59:10 59:11 77:20 80:25 81:9 83:13 84:14 85:22 87:4 88:8 89:24 91:1 94:1 95:5 97:20 114:20 118:4 123:14 147:19 150:8,9 155:24 156:11,20 157:13 158:15 162:13 163:16 164:9,9 165:5,8 167:17 169:11 171:2 questionable 137:6 questioned 147:20 questions 5:10,18 5:19,22 11:11 22:8,14,23 29:12 33:5 43:21,23 45:10 52:14 64:20 67:2 77:21 80:21 88:7 113:24 118:14 119:10,14 121:1,4,9 141:16 145:5 149:21 150:3,15,16 159:1 159:23 162:7 170:18 quick 89:20 quickly 41:1 50:5 71:1 153:22 quinn 39:13,15 40:3,17 52:22,23 53:1,6,13,21 54:2 54:4 80:23,24 81:5</p>
		q	
		<p>qualification 33:14 35:16 48:12 qualifications 35:9 qualified 35:6 63:25 143:10,11 quality 91:5 quarter 1:4 2:1 21:9 111:5 112:7 125:7 quarterly 154:17 155:6</p>	

[quite - refrigerator]

<p>quite 10:18,19,21 42:14 78:12 115:7 123:25 135:10 160:16 164:21 quote 123:23 124:7 131:24 132:13,24 quoted 131:21 133:2</p>	<p>ray's 159:6 reach 75:8 103:22 107:20 158:3 reached 8:15 10:1 32:12 86:13 156:25 reactive 81:22 reactor 62:1 68:14 166:4 reactors 106:19,20 read 4:17 14:22,23 45:25 136:13 readily 101:6 readiness 32:12 reading 98:24 readings 25:22 reads 38:5 ready 17:1,3 26:10 29:4 32:22 58:10 60:6 71:20 155:10 real 58:1 148:12 realistic 15:9 89:7 137:17 reality 79:12,13 realize 37:9 53:16 realized 33:22 127:9 really 11:21 12:22 15:3 16:25 17:13 18:9,14,17 20:16 21:1 22:20,21 30:21 31:8,13 33:11 39:17,22 41:12 44:17 55:24 60:1,19 62:20 74:25 78:1 88:17 89:14 94:6 102:4 104:5,8 107:14,23 116:7,7 119:14 121:1 126:14,21 127:11,20 128:4</p>	<p>128:14 130:1,2,17 130:18,18 131:20 137:10 139:4 140:15 143:9,10 147:9 155:11 156:8 163:13 164:20 166:2 170:8 realtime 65:13,19 97:24 98:16,17,17 reanalyzed 57:25 rears 143:4 reason 5:16 71:19 95:7 112:21 116:2 148:9,12,22 reasonable 137:14 146:23 reasonably 56:5 reasons 19:5 60:22 87:4 110:14 116:20 153:2 reassess 127:12 reassure 98:21 recall 10:15 recalled 126:4 recap 24:16,18,22 29:9 recapped 43:22 47:16 recapping 31:7 received 17:19 78:14 134:18 receiving 22:19 recenter 42:25 recess 96:17 recognize 3:5,16 5:2 29:7 160:11 166:23 recognized 25:10 25:20,23</p>	<p>recognizes 166:18 166:25 recognizing 27:3 recommendation 144:2 recommended 143:25 recommitted 29:2 record 5:4,18 97:1 101:24 102:1 117:25 143:1 164:16 171:5,5 172:12 records 86:19 87:2 117:9 163:6 recovering 41:11 recreation 100:20 recreational 100:22 rectified 80:2 red 65:13 redacted 29:16 redesign 140:20 redirect 127:13 redundant 153:8 reef 10:8,14,17,23 65:3 refer 170:1 reference 63:2 159:23 referred 158:19 170:25 referring 30:3 reflecting 16:11 reformation 165:14 reforms 50:5 52:8 refresh 60:14 refrigerator 130:12</p>
r			
<p>radiation 20:18,18 25:22 37:3,20 40:12,14 44:19 50:22 65:10 97:24 98:16 110:18 125:17 139:24 140:1,4 162:15,16 162:18 163:10 radioactive 97:8,9 107:3,5 radioactivities 27:25 radioactivity 27:20 radiological 100:20 radius 114:25,25 railcar 19:16,23 railcars 20:1 23:21,24 raise 4:25 22:7 25:24 147:7 raised 5:19 11:11 170:18 rambles 135:13 ramp 58:23 81:19 random 53:12 randomly 82:14 range 19:4 ray 109:11 112:4,5</p>			

[refusing - requirement]

<p>refusing 117:4 reg 115:6 regard 16:21 24:5 65:9 146:8 regarding 102:16 123:15 143:16 regards 128:7 region 3:7 26:18 68:1,1,2,8,16 69:3 73:10 81:17 86:6 91:21,22 129:8 regional 3:7 65:23 68:11,20 69:2 92:15 152:15 regionally 105:3 regions 82:8 92:16 regular 1:5 9:23 97:18 regularly 47:5 96:6 147:12 155:6 regulation 46:11 46:23 124:25 regulations 45:18 78:15 125:2 129:13 130:3 regulator 119:8 regulators 117:16 164:4 regulatory 3:8 21:15 30:3,20 72:11,18,24,25 92:2 93:7 102:5 105:12 129:13,25 141:15 147:12 149:14 168:2 reiterate 124:18 related 23:9 31:23 31:25 48:8 58:19 68:6,13 159:6 relating 105:15</p>	<p>relations 110:15 111:1 relationship 62:4 relative 172:19 relax 115:14 relaxed 150:19 relaxing 150:9,20 150:23 release 27:25 91:1 126:25 released 89:3 releases 101:2 releasing 107:2 relevance 110:3 relevant 87:18 relied 68:11 143:25 relies 79:1 relocation 99:22 reluctance 132:14 rely 78:20 90:22 relying 37:14 42:15 remain 101:5,18 remained 27:22 remaining 64:13 76:3 remains 26:22 remarkable 144:16 remediated 80:3 remedy 124:24 remember 42:21 64:4 107:24 108:2 121:21 147:22 151:19 remind 4:5,24 66:15 150:18 reminded 109:14 reminding 90:14</p>	<p>reminds 146:20 remobilized 63:22 63:24 remotely 37:16 remove 145:8 render 75:7 rendered 76:17 renewal 56:11 reoccurrence 28:9 repairable 138:8,9 repairs 103:21 repeat 128:16 repeated 170:16 replace 141:25 143:13 144:25 replaced 126:4 143:6 163:4 report 11:4,14 16:17 23:9 30:9 30:10 45:18 46:2 46:3,15 47:10,13 48:10 57:23 58:8 58:12 59:16,18 60:7 74:11,16,19 74:20,25 75:3,24 78:12,21,23 79:25 98:16 103:10 113:19 116:25 118:9,12 124:4,15 130:4,9 132:10,13 132:15,22,25 133:11 154:18 155:2,5 157:15 158:19 167:7,11 reportability 152:19 reportable 152:20 152:23 164:23 reported 1:21 55:11 74:8 85:25 86:20 98:20 116:3</p>	<p>130:15,17 152:9 153:11,16,23 163:6 reporter 131:11 172:3,6 reporter's 1:13 reporting 45:13 45:22 46:10,23 47:3 65:20 73:24 75:3 85:11 100:18 116:14,15,16 118:7 124:21 130:12 132:16 152:7 153:3,6 154:2,6,11,11 reports 47:8 48:8 70:25 81:18 85:17 90:7,16,20 113:24 123:15 124:3 130:10 repository 12:1 163:25 represent 67:20 representatives 152:21 represented 136:17 representing 15:7 request 100:16 101:9 103:15 114:8 requests 100:3 require 106:1 136:19 required 10:19 46:1,15 56:9 83:12 130:3 163:6 requirement 46:10 124:25 153:6 154:2,5 163:8</p>
---	---	--	---

[requirements - rope]

<p>requirements 10:20 41:9 45:23 78:19,22 79:10 83:4 84:19 85:3 102:14 105:18 106:3 118:7 150:23 154:6 166:23 168:1 requires 3:3 22:25 research 146:4 resist 99:6 resistance 48:6 49:2 52:4 resistant 51:24 resolution 51:2 132:15 resolved 71:24 72:25 80:3,17 resources 68:19 81:14,15,15 82:5,8 111:1 respect 33:6 102:7 respects 166:12 responders 16:6 response 46:5 60:1 113:19 145:9 responses 20:16 118:14 139:12 responsibility 29:7 84:3 85:6 91:22 responsible 11:24 17:15,16 129:6 156:15,19 157:25 158:8 rest 8:8 25:8 46:6 73:19 86:7 115:25 116:1 148:1 restart 21:10 29:4 64:5 148:5</p>	<p>resting 105:8 restraint 58:25 rests 148:2 result 46:18 125:21 136:24 137:8 145:7 resulted 137:24 results 45:16 49:21,23 51:7,15 72:2 74:9 90:3 167:19 resume 26:20 32:22 71:22 resumed 26:23 resumes 82:11 resuming 64:10 retaining 101:9 166:5 retaliation 132:14 132:19 retired 32:13 retract 47:10 48:11 59:19 60:7 retrain 47:5 retrained 35:17,23 43:4 retrieve 162:8 retrieved 161:5 revealed 91:6 reverse 120:9 review 32:16 43:13 47:24 49:24 56:25 58:17 78:22 87:3 92:6 105:21 105:23 143:20 146:5 reviewed 29:20,21 46:24 72:13 74:14 78:17 80:11 93:22 151:6</p>	<p>reviewing 49:23 51:15 102:6 103:14 reviews 28:1 29:22 47:19 64:14 revised 35:11 36:4 43:12 46:24 rewritten 34:3 rich 123:10 126:10 126:11 richer 165:18 richter 62:9 rid 110:21 rides 50:19 51:1 ridiculous 142:11 148:17 rigging 25:15 153:9 right 3:6,17 7:6,16 12:13 21:6,19 23:22 34:10 41:10 44:9 52:17 54:17 55:1,18 63:8,16,19 63:19 64:25 65:5 69:14 70:19 72:1 74:13,18 75:19,24 76:12 77:5 78:13 79:5 81:13,20 82:6 83:19 84:1,7 88:21 91:22 95:12 95:15 107:18 109:1 111:18 118:20 119:11 120:24 121:5,8,9 121:17 122:7 126:2 127:24 128:10,16 147:21 151:10 164:1 165:12 166:16,17 167:9,20 168:20 168:24 169:25,25</p>	<p>rigor 94:10 rigorous 43:13 rigorously 30:25 ring 125:6 139:3 142:14 159:2,4 rings 103:21 rise 100:6,9,10,11 100:13 risk 26:3 27:14 51:12 52:16 115:11,12,13 124:10 126:22 146:3 risks 9:14 101:13 143:16,19 river 68:3 road 20:7 83:21 111:18 127:16 170:23 roads 84:6 robot 50:18,24 51:1 54:25 robots 50:14 robust 5:23 28:6 35:14 51:23 61:3 102:22 robustness 35:2 rockville 68:24 rods 99:23 roger 20:9,10,11 106:13 109:11,12 109:13 role 152:3,3,3 rolling 19:25 room 2:19,20 54:16 81:6 90:2 94:19 110:6 118:22 124:20 root 32:7 rope 38:12,14 40:23 148:23</p>
---	--	--	---

[rotated - sections]

<p>rotated 34:2 rough 44:11 roughly 44:11,14 58:2 round 49:12 rub 41:23 rubbing 48:7 rude 169:15,19 rule 129:12 154:7 rules 13:15,16,22 21:18 69:1,6,6,7 69:16,16 83:21,21 84:6 129:5,6,11,12 129:14 150:10 169:2 run 44:7 69:23 135:17 141:13 143:10,10,11 running 10:17 107:24 runs 32:18 45:5 82:21 159:15 rupture 128:4 rush 131:12</p>	<p>79:25 82:5 85:1 100:19 101:3 102:12 103:9 104:6 105:18,20 108:1 115:6 116:21 122:3 124:4,15 125:2 133:2 143:1 157:15 167:6,11 168:5 salaries 117:16 salesperson 149:8 sample 49:8 56:17 sampling 100:20 samuel 118:18 san 7:5,7 8:14 9:2 9:12,21 10:15 11:24 13:23 16:24 65:18 66:17 68:10 73:18 85:24 89:4 97:22 101:16 106:24 114:22 117:11 118:19 122:25 123:4 133:24 136:24 144:13 147:5,7,8,8 155:17 163:18 sand 107:1 140:19 satisfaction 76:1 80:5 167:24 satisfactory 25:23 satisfied 58:15 64:5,7 78:18 88:10 save 142:24 143:15 saving 132:21 saw 22:16 48:13 119:20 saying 112:8 121:22 147:22</p>	<p>148:16 169:4 says 113:2,12 114:1 116:14,15 124:18 147:20 148:15 166:6,21 167:4,11,13 scale 62:9 136:22 sce 10:17 22:20 112:17 114:1 116:6,25 117:13 scenario 89:7,8 100:10 scenarios 100:9,14 111:10 schedule 97:18 scheduled 8:5 94:17 school 66:17 108:18,21 109:17 schools 108:20 scientist 110:1 scientists 89:21 scope 167:21 scott 3:6,9,14 21:21 64:21 66:5 66:6 80:24 82:19 85:15 116:15,18 133:21 135:12,24 143:7 150:8 156:13 158:19 162:19 163:16 164:9 165:6 171:9 scott's 90:1 scraped 124:23 125:8 scraping 120:12 120:13 124:5,15 124:19 125:1,14 137:25 138:2 139:2 142:16</p>	<p>scratch 30:16 32:6 48:19 88:12,14,14 103:5 122:8 142:9 scratched 103:4 122:6 scratches 50:1 51:5,16 52:19 55:9,10 63:5,18 77:15,17,20 78:24 79:13,16 95:20 103:13,24 112:23 119:17 121:19,23 122:10 165:6,7,13 166:17 167:9,12 167:14,21,24 170:18,22 scratching 41:23 48:7 49:10,11 56:7 71:23 74:6 74:24 75:6 77:13 77:21 78:7,10 79:24 80:1,1 85:18,25 86:10 87:7 95:8 103:2 103:10,16 124:10 128:7 150:21 166:13,14 167:5 168:5 screen 5:13 37:12 screens 36:18 sea 100:6,9,13 sealed 25:17 141:5 second 10:25 33:18 98:18 167:3 167:4 secondly 46:5 48:8 secret 117:3 secretary 2:17 sections 168:16 170:2</p>
s			
<p>sackett 99:14 101:21 102:2,3,3 sacramento 15:7 safe 20:20,20 78:18 94:7 99:21 101:18 110:16,18 113:13 141:8 safecast 96:19 97:4,25 safely 27:13 60:22 83:22 84:5 164:6 safety 3:1,11 20:21 26:4 27:24 41:1 48:25 52:7 68:1 72:21 78:12 78:20,23 79:1,11</p>			

[sector - significance]

<p>sector 20:5 see 5:2 19:23 20:9 23:4 25:2 33:16 33:16 34:16 36:11 36:13 37:6,12 38:24 39:1,23,25 40:24 42:7 43:21 44:6,17 49:10 50:12,21 52:11,14 55:21 66:10 67:8 69:12 86:17 87:3 88:6 96:3 104:2 105:18 110:25 111:4,8 112:11 113:4,10,14 114:9 114:10 119:20,23 120:11,22 123:2 125:22 133:4 141:4 154:25 157:12 164:22 seeds 106:25 107:12 seeing 84:12 102:19 120:19 seen 4:3 33:20 47:6 51:9 75:13 114:3 128:22 130:11 143:18 segment 6:22 150:6 seismic 9:14 48:11 48:22 59:1,1 60:19 62:15 98:24 102:16 122:13,20 seismically 57:13 59:11 select 103:3 selected 138:3,8 138:15 149:6 self 121:21</p>	<p>sell 98:5 149:11,15 sells 98:3 senate 12:5 13:5 14:4,4,21 105:1 151:7 senator 14:7,7 15:3 67:13 send 5:16 7:13 11:23 12:11,18,23 13:19 14:15 20:3 101:25 106:8 146:25 sending 16:23,25 sends 98:18 senior 30:7 43:15 92:8 sense 29:2 44:9 60:2 110:5,8,8,9 110:20 111:2 sensitive 90:21 sensors 99:9 sent 13:17 23:20 65:23 113:17 sentence 69:1 113:11 separately 29:21 158:3 september 10:24 46:13,16 75:21 81:25 153:12 sergio 7:11 serious 28:12 29:6 110:4 111:19,23 119:16 123:3 137:11 143:9 seriously 104:6 144:24 serve 134:8 served 6:8 service 3:1 134:5</p>	<p>sessions 147:18 set 9:20 33:7 35:6 35:14 44:8 55:14 64:23 68:25 113:17 151:13 159:11 166:2 172:9 setting 44:21 127:15 settle 96:23 settled 2:4 10:3 settlement 16:4 154:18,22 seven 64:23 149:24 150:1 severely 103:5 severities 103:7 severity 75:17,22 76:23 77:4,9,11 shackle 38:5,6 shackles 38:3 shamed 134:20 share 69:17 73:16 88:3 89:17 91:15 92:11 94:14 96:5 152:2 shared 74:9 87:18 87:20 96:8 sharing 29:3 75:8 shell 50:19,20,25 123:25 124:1 shelter 108:23,24 shenanigans 132:4 sheriff's 2:24 3:3 shield 25:9 48:22 shielding 44:19 shift 36:17 shim 116:24 157:4 shimkus 13:11 shiny 129:21</p>	<p>shipment 13:19 shipments 14:15 shipped 16:8 shooter 109:4 shoreline 100:21 short 51:13 59:13 95:22 109:24 133:9 143:14 150:23 157:8 162:23 shortened 108:9 shorthand 172:3,6 172:13 shot 111:21 show 49:20 50:9 51:8 53:25 82:14 143:16 showed 29:17 39:17 112:17 shown 78:17 143:23 shows 23:12 30:9 40:7,18 44:7 161:3 shrunk 114:23 shut 25:17 109:6 126:24 shuttle 120:18 sic 107:15 155:12 side 2:21 38:4 49:9 57:18 59:17 70:19 125:7 128:19 sides 51:4 142:10 160:19 sight 21:7 37:2 sign 6:6 22:17 131:19 145:14 signature 172:24 signed 39:20 significance 28:16 31:9 47:20 52:8</p>
---	--	---	--

[significance - spent]

<p>77:1 significant 31:18 42:1,6 48:24 57:9 75:18 76:4 77:10 82:5 102:9 133:2 significantly 37:25 38:21 43:9 45:4 silicone 50:18 silly 129:20 similar 53:5 simple 38:12,17 88:13 169:10 simply 26:13 63:21 78:12 89:9 124:24 153:24 164:3 simulator 34:6 simultaneously 12:25 single 161:16,21 sir 43:25 61:20 169:22 sirens 115:10 sit 92:18 site 4:22,23 11:25 12:18 13:20,20 18:19 21:1 30:10 32:17 33:18,19,22 46:13 54:6 63:7 65:10 86:4 88:1 96:1 120:2 127:18 133:25 137:13,19 155:18 sited 73:13 sites 12:23 13:24 14:10 15:24 33:9 68:14,16 82:9 100:20,23 siting 105:7,22 sits 36:14 44:13 111:19</p>	<p>sitting 3:8 80:9 84:11 98:8 situation 110:4 132:2 six 8:17 28:14 64:23 149:25 162:20 size 10:22 51:5 135:1 sized 34:6 135:2 skip 146:15 skipped 146:25 slide 5:14,24 6:1 7:22 10:5 11:18 17:4 20:8 22:5,15 22:17 24:6 25:2 32:23 39:14,25 44:7 45:9 112:17 113:2 114:10 159:7,10 slides 4:14,17 23:11 24:16 29:9 48:23 64:23 66:7 66:22 70:24 slight 48:23 slings 38:4 slow 108:13 small 116:22 123:25 smaller 114:4,5 145:20 smart 142:22 socal 4:1 social 99:3 society 78:5 165:25 168:17 solana 8:12 solely 37:14 solid 29:23 solution 136:20 146:23</p>	<p>solutions 138:13 143:3,5 solve 106:18 125:3 somebody 8:22 38:13 83:24 127:3 somewhat 146:11 songs 3:19 70:20 99:23 100:1,23 101:1,15 102:8 105:2 150:10 158:1 songscommunit... 66:9 soon 70:2 75:4,7 75:10 sooner 145:24 sophisticated 49:7 sorry 23:25 52:25 83:7 sound 38:16 127:16 131:19 137:18 sounds 126:21 soup 125:15 source 114:8 sourced 113:5,9 113:14 south 8:15 100:23 104:15,21 southern 3:18,21 4:10 9:14 11:10 22:12 82:19 86:12 90:5,13,22 91:9,25 97:21 99:21 102:6 125:17 129:22 130:3,21,23 143:15 147:11 148:17 149:4,13 152:20 153:1,6 158:6,6 166:24 168:21 170:8</p>	<p>space 119:18 120:17 123:24 speak 18:8 28:4 79:23 87:10 114:18 126:13 149:25 150:1 153:5 speakers 3:5 144:18 speaking 138:21 special 69:25 75:21 82:1,2,2 123:18 152:24 specialists 35:23 35:24 specific 6:16 9:12 34:22 36:3 39:21 81:12 84:14 92:25 153:1 168:19 specifically 42:19 98:10 106:24 167:6 specification 168:15 specifications 104:2 170:1 specificity 35:13 specified 45:23 46:17 specifies 103:10 spell 168:16 spend 82:4 spending 18:21 136:19 171:10 spent 11:23 12:18 12:21,23 13:17,21 13:23 14:16 16:7 16:23 18:17 19:15 20:4 26:3 27:20 30:7 34:24 57:10 60:17,23 61:9,15</p>
---	--	--	--

[spent - subsequent]

<p>62:1 76:20 82:20 99:22 115:7 134:12 163:18 171:1 spirit 15:11 spoken 9:21 spot 74:20 120:19 141:17 spotlight 70:20 spotter 36:21 37:1 40:10,22 spring 13:7 staff 9:22,23 11:9 63:22,24,25 67:12 68:7 81:5 89:11 90:15 92:3 130:24 162:14 staffing 165:2 stainless 50:4 51:23 119:21 stake 116:9 stakes 104:8 stamp 166:6 stand 73:1 96:24 154:15 standard 33:7 51:24 standards 77:25 78:3,4,6 166:2,7 169:9 standing 50:21 stands 12:8 38:13 start 10:23 32:9 39:1,2 66:21 71:16 91:19 106:22 150:14 started 2:18 8:9 26:14 33:7 82:20 96:18,25 102:23 113:16 127:21 134:22</p>	<p>starts 71:12 state 5:3 10:7 11:2 11:5,7,7,12 23:10 88:18 99:2,24 109:23 172:6 stated 118:6 123:21 124:5 statement 124:18 165:13 states 86:4 104:19 104:24 105:9,11 105:20 131:15 137:11 151:8 station 97:22 status 154:14 stay 19:19 123:7 steam 143:2 steel 50:4 51:1,23 119:21 160:6 steinmetz 144:10 147:2,3,5,23 164:12 step 32:23 40:8 72:6 114:2,7,11 141:3 stepped 37:19 stepping 91:9 steps 23:12 33:13 102:16 stetson 2:16 6:12 6:25 7:15 10:6,9 18:4 22:6,9 63:1,2 63:8,11,14,17 82:17,18,23 83:8 96:21 150:5,7,20 150:25 151:2 154:13 156:13,21 158:23 159:22 162:12 163:15 steve 19:17 23:20</p>	<p>stock 149:6 stockholm 109:20 stood 148:12 stop 37:6 71:6,9 71:14,17 108:14 120:14 133:5 147:25 stopped 115:25 147:25 148:2,9 stops 148:4 storage 11:25 12:18 14:9 15:24 17:15,15 25:1,5,14 32:14 36:1 45:25 60:15,25 61:2,9,10 61:18 65:14 73:11 73:22 76:20,21 92:22 100:7 106:2 118:24 120:25 125:18 126:19 127:23 136:23 137:7,13,16,19,23 139:20 141:5 155:16,20 156:2 stored 156:3 stories 116:13 storing 140:19 storm 100:8 story 128:14,21 165:18 straight 96:12 116:13 strap 58:25 59:1,4 59:9,12,15,23 60:4 strategic 154:20 155:7 strategies 12:14 12:24 17:16 strategy 12:25 13:2 14:5 15:25 16:2,23 159:12</p>	<p>streamed 4:22 streets 109:6 strength 48:22 50:2 strengthen 160:17 strengthened 42:9 42:16 43:14,17 60:3 stress 105:5 119:15 120:21 160:3,12 strict 106:1 strictly 135:25 strikes 69:15 strive 69:17 strong 17:13 32:7 164:14 169:21 structure 25:9 structured 6:14 studied 109:16 115:2 studies 89:2 stuff 53:24 84:24 89:20 99:5 107:6 107:17,25 108:10 109:7 110:21 111:23 167:16 stylus 49:9 subcontractor 156:14 subject 2:11 74:9 76:2 100:13 subjected 120:21 submitted 46:2 124:14 subscopic 119:20 subscribed 172:22 subsections 166:21 subsequent 74:4</p>
---	--	--	---

[subsequently - team]

<p>subsequently 72:17 153:11</p> <p>substance 122:4</p> <p>successful 15:23 36:19 39:6 53:12 70:5</p> <p>successfully 26:1,2 35:7</p> <p>sucks 112:25</p> <p>sued 113:16,22 117:6</p> <p>sufficient 33:24 161:8</p> <p>sufficiently 34:17 59:25</p> <p>summarize 32:24 55:25</p> <p>summarized 28:2</p> <p>summary 51:22</p> <p>supervision 31:17 36:5</p> <p>supervisors 7:7 9:3</p> <p>supervisory 35:19</p> <p>supplied 78:21</p> <p>supplies 108:24,25</p> <p>support 6:13 17:23</p> <p>supported 42:23 116:24</p> <p>supporters 104:18</p> <p>supposed 103:11 107:2 108:6 121:23 125:13 139:1 148:15</p> <p>sure 5:22 6:19 7:12 8:20 18:4 23:14 24:20 29:11 30:11 33:15 36:6 36:24 38:9,18 43:23 45:11 51:20</p>	<p>55:6 57:15 58:4,7 59:3 67:2,16</p> <p>73:17 80:20,22</p> <p>83:2 84:20 86:1 88:3 93:3,13 95:17 114:24</p> <p>122:22 126:3 134:24 135:7,17 135:23,24 141:12 141:14 145:20 149:20 150:16 157:8</p> <p>surf 100:24</p> <p>surface 49:19 124:11</p> <p>surfrider 99:19,23 102:4 104:15,16 104:21 105:19</p> <p>surfrider's 99:20 100:12</p> <p>surprised 148:21</p> <p>surrogate 88:15</p> <p>surrounding 3:13 153:25</p> <p>suspect 95:6,17</p> <p>suspends 58:21</p> <p>swedish 109:14</p> <p>swell 2:8</p> <p>swing 59:3,25</p> <p>system 33:18 36:2 36:16 42:4 44:25 45:25 49:18 52:2 52:2 53:17 54:11 56:11,12,15 57:3 58:10 60:20 62:3 65:16 70:17 72:4 73:8,8,14 86:3,10 91:12 98:2 112:22 119:25,25 120:7 120:16,20 123:23 125:4,5,13,18</p>	<p>126:4,19 127:13 137:7,16,23 141:22,25 142:12 142:12,13,15,18 142:23 143:3,13 144:25 145:6 146:7,22 148:23 148:24 149:3,15 155:13,16,20 161:14 162:17</p> <p>systems 87:18,20 98:1 120:20 143:5 155:18,19 156:1 162:18</p> <p style="text-align: center;">t</p> <p>table 6:7</p> <p>tables 168:15</p> <p>take 4:4 6:2 13:21 25:24 29:7 39:3 41:15 43:23 45:11 46:21 47:17 49:19 50:21 51:3 72:7 76:14 83:22 85:19 87:1 94:12 96:11 103:11 104:6 105:8 108:12,18 120:7 141:14,18 144:6,7 151:12 152:19 156:17 158:15 164:20</p> <p>taken 3:23 24:10 56:1,1 67:9 72:5 89:16 94:12 96:17 117:10,17 151:9 159:20 172:9</p> <p>takes 17:1 72:7 74:16,18</p> <p>talk 7:25 13:10 17:9 22:7 26:7 28:8 30:15 34:13 41:22 45:13 46:18</p>	<p>47:16,21 48:4 49:15 113:21,25 118:23 120:24 132:20 135:15 157:21 159:19 161:9 165:17</p> <p>talked 31:7 33:3 36:8 42:21 43:22 52:2 58:10 70:10 71:24 74:1,15 77:13 85:12 90:9 95:25 107:25 121:6 140:25 153:22 160:16 164:12,12</p> <p>talking 13:15 17:8 18:3,10 19:6 40:17 63:6 71:10 78:4 107:10 109:24 122:18 125:15 155:12 162:1,19 169:12</p> <p>tall 44:11,13</p> <p>tangential 70:15</p> <p>taping 63:14</p> <p>tara 104:12 106:13</p> <p>task 9:20 10:2,4 35:7</p> <p>tasks 136:17</p> <p>taylor 7:3,5 44:1 45:7 61:21 62:6 62:10 85:14,15,22 87:6</p> <p>taylor's 95:5</p> <p>team 32:12,15 67:14 82:1 87:12 90:13 113:16,17 113:23 152:25 153:17</p>
--	--	---	---

[technical - thought]

<p>technical 24:11 32:5 43:8 60:9 68:21 72:3,9,12,18 77:22 79:21,24 93:6 143:20 167:16 168:14 170:1,18 technically 73:17 79:5 technology 19:14 19:24 31:24 114:3 114:5 146:4 ted 39:13 40:17 52:22 80:23 teenage 109:15 telephone 94:21 television 40:23 tell 21:22 39:24 51:7 56:4 66:9 132:23 164:14 telling 23:21 39:19 78:9 110:16 115:3 119:24 123:19 151:22 tells 110:2 tend 123:25 term 11:21 12:2 49:1 50:7 51:13 51:13 87:23 88:14 105:7 109:25 118:24 120:24 123:6 131:23 137:15 terminated 71:9 terminology 81:21 terms 5:9 15:20 21:14 22:5 27:5 29:2 32:19 34:20 41:11 45:18 48:25 62:11 94:9 105:16 133:3 161:11</p>	<p>terrible 111:9 terrifying 130:18 territory 68:5 test 19:16 58:4 83:23,24 tested 38:6 47:4 98:1 102:15 113:12 testified 17:20 testifying 172:11 testimony 2:10 115:21,22 testing 19:17 23:22 49:8 56:2,4 98:2 texas 3:15 12:19 14:10 texts 117:8 thank 2:5,25 3:14 7:4,11,17,20 8:4 9:10,16,24 10:9 11:17 18:4,25 20:10 22:9 23:2,2 23:3,17,19 24:14 45:7,8 56:21 64:19 65:22 80:19 81:9 82:18 85:21 86:8 96:10 97:13 97:14 99:12 100:4 101:4,19,20 102:8 104:4,9,10 106:6,9 109:8,9 112:1,2 114:13,14,17 115:17 117:21 118:2,15 121:10 121:11 123:8 126:5,8,8,12 128:23,24 131:4,5 133:15 136:4,12 138:15,16 141:9 144:3 146:24</p>	<p>149:17 150:7 163:15 168:10 171:9,11 thanked 134:5 thankfully 123:19 thanks 16:14 66:12 83:13 95:4 115:16 150:15 164:8 theme 152:7 thereof 172:16 thick 51:10 141:25 142:1 143:14 160:6,9,10 thicker 52:1 thickness 63:4 thin 126:24 160:10 thing 18:14 21:14 30:1 36:20 41:10 43:1 47:6 49:11 52:1 55:4 67:4 79:12 84:1 99:1,4 112:19 114:9 118:20 121:5 126:2 135:11 142:3 150:2 170:14 things 6:4 12:21 13:7,13 17:12 19:2 21:25 22:21 30:2,2 36:23 37:1 37:10 40:13 42:6 42:13 43:22 45:17 46:4 47:17 52:5 54:14,21 67:23 73:25 74:3 81:17 81:18,23,24 84:21 84:24,24,25 90:10 93:16,21 94:6 95:20 98:6 100:6 108:1,16 109:3</p>	<p>112:17,18 115:11 119:17 120:5,11 121:2 125:24 127:11 140:25 145:3,4 154:12 166:11 think 2:10,22 7:1 7:18 9:15,23 12:4 12:9,9,13 17:20 21:5,20,24 24:2,4 29:15 30:4 31:11 35:5 39:19,22 46:20 47:22 48:16 55:2 58:25 60:21 62:7 65:22 67:16 70:2,5 72:4,5,23 74:20 80:25 81:5 83:16 89:15 91:6 92:12,18 94:5,18 95:22 98:1 99:7 108:17 109:15 110:3,5,14,20 111:21 118:17 119:9 121:3,4 129:11,18 139:3 140:15,16,17 141:2,6 144:8 147:9,10 149:25 151:17 158:23,24 161:24 163:19 164:15 166:13 169:8,19 thinking 37:3 97:8 third 21:9 32:4 47:25 49:5 53:5 53:12 55:14 111:5 thoroughly 24:21 57:4 thought 22:16 87:6 91:20 93:2 164:17,23</p>
---	--	---	--

[thousand - transported]

<p>thousand 128:3 thousands 107:16 threaten 50:1 threatening 136:14 137:21 three 8:18 9:4 11:6 25:8 48:4 49:13 51:6 52:24 53:1,7 56:3 68:11 75:21 92:15 96:22 100:5 100:19,21 117:1 135:20 141:11,18 145:16 150:15 155:18 160:5 threshold 42:3 43:6 47:3 thunberg 109:16 tide 100:8 tie 38:12 tight 41:21 44:18 48:21 time 6:3,19 21:24 30:7 36:9 41:20 46:17 47:17,22 52:13 56:18 59:13 64:22 65:2 67:3 71:11 72:7 74:16 74:18 76:14 80:21 81:12 82:4 93:12 95:24 98:22 104:4 106:15 107:23 125:22 126:22 128:3,5 133:4 134:11,13 135:16 135:17,21,23,25 137:14 139:19,23 140:4 141:4,11 144:6,8 146:15 148:6 153:14,15 162:2 164:25 165:17 171:1,10</p>	<p>172:9 timeline 106:1,4 timely 69:18 89:18 132:15 times 9:22 17:18 57:22 58:14 timing 152:11 tip 57:15,17 tipping 107:20 title 12:21 today 3:15 39:19 64:3 67:12 72:2 89:11 118:10 119:13 131:10,12 132:3,8 133:10,14 136:21 137:18,22 138:6 167:17 toilet 110:1 tokyo 97:17 told 115:22,24 118:23 121:19 128:22 165:18 tolerances 45:2 48:21 tom 16:2 23:7 24:7 24:13 30:6 52:23 63:2 64:20 71:24 73:9 74:7 85:12 87:15 91:7 96:3 115:23 116:7 132:23 135:13 138:20 139:6 142:5 144:20 147:13 148:7,19 148:20 152:9,14 153:4 156:4 159:8 159:22 162:12 164:9,11 170:15 170:24 ton 58:22 70:23</p>	<p>tone 131:18 tonight 2:5,9,12 2:25 3:6,22,24 4:18,21 5:15,20 6:2,6,10 7:18 9:24 21:4 23:14 29:1 31:21 76:8 91:7 99:15 102:25 109:14 110:4 116:18 126:13 136:10 138:21 139:6 141:12,16 144:15,19 145:4 149:21,22 150:2 154:12 164:12 tonight's 4:13 7:13 11:19 tons 48:20 57:8 tool 50:23 top 25:13 36:22 37:2,5,13,15 38:13 48:22 99:20 105:2 140:1,4 topic 6:16 171:6 topics 20:23 torgen 117:22 118:16,18 torres 131:6 133:16,18,19,19 totally 115:12 168:24 touch 133:12 tough 15:19 61:24 66:20 119:10 121:1,4 128:2,5 town 70:7 traffic 19:20 train 63:23 trained 35:6,20 36:3 42:17 58:3</p>	<p>training 27:6 31:23 33:1,17 34:13 35:4,4,8,11 35:15 38:23 39:5 43:12 46:25 47:4 57:2,21 120:3,10 165:2 transcribed 172:14 transcript 1:13 transcription 172:16 transcripts 70:24 transfer 25:7 44:8 44:10 57:8 163:17 transferring 101:7 translate 62:19 translated 55:19 57:20 transmits 38:7 transmitted 73:19 transnuclear 54:10 transparency 29:2 98:6 103:18 transparent 28:23 28:25 47:21 91:11 103:8 144:21 171:3 transport 58:11 126:21 146:11,12 155:10,16,20 156:2 transportable 101:19 transportation 17:16 19:14 105:13 155:21 transported 35:1 155:18 156:3</p>
--	---	--	--

[transporter - use]

<p>transporter 25:2,3 48:9,12 56:22 57:6 58:21 59:22 156:12</p> <p>transporting 15:25 19:14</p> <p>travel 162:22 163:2</p> <p>traveling 171:10</p> <p>travels 18:3</p> <p>trend 41:17</p> <p>trial 69:23</p> <p>tried 144:20</p> <p>trillions 137:8</p> <p>trivial 151:20</p> <p>trivializing 110:18</p> <p>trouble 42:24</p> <p>true 115:1 127:25 156:4</p> <p>trust 112:10 116:9 116:20 117:19 119:11 121:3</p> <p>truth 115:3 132:23</p> <p>try 13:1,22 17:23 40:13 47:23 90:6 137:4 152:2 155:14 165:21 171:2</p> <p>trying 14:5 22:7 71:4 73:3 85:23 91:21 93:24 98:4 98:4 103:12 140:20 141:21 143:4 148:8 149:15</p> <p>turn 24:7</p> <p>turned 70:4 153:10</p> <p>turnover 140:10 140:12,16 162:14 163:1,14</p>	<p>twice 115:23</p> <p>two 2:24 3:5 4:8 10:10 12:14,24 16:13 17:24 19:2 36:23 40:6,10,19 42:17 52:15 54:13 60:15 67:11 68:12 76:3 92:9 100:10 100:23 106:20 113:12 116:11,12 120:11 132:5 147:17 148:6 155:19 162:21,23 163:3</p> <p>type 32:3 43:1 50:4 114:5 136:22 156:19 161:15</p> <p>typical 59:6 162:20</p> <p>typically 82:15 95:13 135:13</p> <hr/> <p style="text-align: center;">u</p> <hr/> <p>ultimately 41:6 46:13 80:13 163:23 164:1 167:7</p> <p>umax 86:3,10 103:25</p> <p>umpires 69:14 79:9</p> <p>unacceptable 24:25 26:6 125:12</p> <p>unanimously 11:13</p> <p>unannounced 82:13</p> <p>unavoidably 125:8</p> <p>unbelievably 169:15</p>	<p>unclear 156:20</p> <p>uncommon 77:16 78:9</p> <p>unconscionable 131:25</p> <p>undergoing 19:17</p> <p>underground 141:6</p> <p>underlying 31:12 89:6</p> <p>underneath 122:17 160:8</p> <p>underpinning 39:8</p> <p>underscore 9:11 12:12 29:25</p> <p>undersigned 172:5</p> <p>understand 20:20 30:19 34:12 38:10 41:16 43:1 46:22 58:9 80:25 83:9 85:23 88:4 90:1 92:12 115:12 121:16 133:25 137:5 138:12 145:25 146:10 159:17 165:9 167:19</p> <p>understandably 30:22</p> <p>understanding 20:18 37:4 103:1 115:9 127:22,24 153:7,11,14</p> <p>understood 26:21 31:9 67:18 145:15 165:1</p> <p>underway 14:1 15:2 20:22 21:10 21:16</p>	<p>unequivocally 78:23</p> <p>unfolding 128:15</p> <p>unfolds 6:24 17:3</p> <p>unilaterally 168:4</p> <p>unit 95:13</p> <p>united 86:4 104:19 104:24 137:11</p> <p>unload 36:15</p> <p>unnecessary 44:21</p> <p>unprecedented 76:20 77:11</p> <p>unqualified 102:15</p> <p>unsecured 130:4</p> <p>unsupported 25:15 31:10</p> <p>upcoming 52:9 86:24</p> <p>update 12:3,8 23:23 28:19 103:12 154:22</p> <p>updates 6:3,23,23 17:5 21:15 22:6 23:6 65:1</p> <p>updating 102:17</p> <p>upfront 28:10 121:9</p> <p>upped 60:19</p> <p>upset 109:17,18</p> <p>uranium 111:14</p> <p>urge 4:4</p> <p>urgency 110:5,9 110:21 111:2 112:1</p> <p>use 18:11 31:24 32:21 33:17,18 39:11 42:3,12,18 43:5 51:25 52:20 73:9 78:16 87:9 110:25 111:1</p>
---	--	---	--

[use - want]

<p>116:22 140:23 164:5 167:1 useful 21:22,25 user 36:16 37:8 167:8 170:3 users 87:17 uses 167:9 usually 8:22 utilities 54:12 96:6 utility 32:13</p>	<p>133:11 161:7 versus 160:10 vertical 25:3 44:25 48:12 49:18 58:20 59:21 62:4 124:8 138:22 140:17,21 140:23 vessel 166:1,5,16 vessels 126:25 166:4 viable 147:21 vice 2:17 3:17 96:1 victor 2:4,15 7:1 7:16,20 9:10 11:17 18:25 22:3 23:2,18 29:13,25 30:14 31:4 39:13 41:1 52:12,18 54:13,19 55:2,9,19 55:24 56:20 60:10 60:21 61:1,6 62:13,25 63:20 64:15,19 65:1,6,22 66:2 80:19 82:17 85:14 87:24 88:17 88:22 89:12,23 90:24 93:25 95:3 96:3,10,18 97:2,7 99:12 101:20 104:10 106:9 109:9 112:2 114:14 115:17 117:21 118:2,13 121:11 123:8 125:23 126:5,8 128:24 131:5 133:15 135:16 136:4 138:16 139:11 141:9 144:3,9 146:24 149:17 150:19,21</p>	<p>154:9,24 156:7,10 158:22 159:6,10 160:21 162:4,10 164:8 165:5,20 168:7,10 169:1,5,8 169:14,21 170:10 170:14 video 148:11 videos 139:15 view 21:18 views 19:4 villain 128:20 violated 57:21 131:4 violation 45:14 76:22,23 85:11 102:7 116:15 153:20 158:11 161:18 violations 75:17 75:20 76:11 77:10 virginia 18:6 virtually 10:22 49:18 visit 101:15 visited 104:23,25 visual 37:4 39:16 51:3 voices 144:17 volumes 20:3 volunteer 134:10 voted 11:4,13 vr0528 115:6 vulnerability 100:7</p>	<p>walk 33:2 walked 6:7 34:4 109:19 wall 50:25 160:4,9 walled 126:24 141:25 142:1 143:14 160:10,10 walls 160:14 walter 131:14 want 3:5,16 4:5,24 4:25 5:7,11,15 6:5 6:18,21 7:2,11,24 8:1,5,21 9:6,11,17 9:24 10:6 11:18 12:7,12 15:2,22 18:2 19:2,13 20:8 20:10 21:22 22:6 22:20 23:4,6,8,14 23:23 24:2,7,20 28:11 29:25 43:23 44:23 45:10,12 47:17 50:9 51:20 52:12,13,20 54:13 59:3 64:22 66:22 67:2,4,23 68:17 71:3,18 73:5 75:4 75:15 76:9 77:12 77:14 78:1 80:4 80:20 87:24 89:16 90:24 91:19 92:11 93:2 94:1 96:4,13 97:24 98:24 111:24 113:4,10 113:11,14 114:9 114:10 117:7 119:4,19 124:17 127:17,20 128:19 128:20 136:1 141:12,14 147:6 149:20 150:16 151:24 154:10</p>
v			
<p>vacation 66:19 valuable 88:9 89:1 171:11 valve 126:25 van 123:10 126:10 126:11,12 156:4 variance 124:14 variety 4:2 5:6 7:23 13:8 various 50:14 varying 47:20 vault 25:5 44:15 124:2 145:21 vct 59:21 vehicle 83:22 84:4 84:4 vendor 33:8 39:10 48:1 93:18,19,23 102:15 157:21 158:10 161:15 167:11 168:8 170:3 vendor's 42:16 vendors 42:11 50:14 54:10 155:21 157:10 verbally 66:23 verbatim 172:12 version 13:11 29:16 31:3 55:17</p>			
		w	
		<p>wait 98:23 162:2 waited 130:6 waiting 11:3 72:2 80:10 167:17,18</p>	

[want - work]

<p>156:10,17 164:8 165:5 167:19,19 170:11,14 171:8 wanted 2:18 12:17 69:24 73:22 88:6 88:7 wants 21:18 81:6 139:15 warning 131:19 warranty 125:19 washington 12:7 12:12 18:22 98:13 waste 99:23 101:7 101:17 105:13,16 105:25 106:2,18 118:21 125:18 126:20,21,23 127:6,19 133:24 136:23 137:7,7,13 137:16 143:20 146:4 155:10 watch 36:22 37:14 38:8,9 76:8 83:25 84:23,24 129:3 watchdogs 131:9 watching 5:3 34:24,25 82:12 water 100:10,11 100:16,17 134:18 134:19,21,22 166:4 waters 134:18 way 2:23 4:8 8:11 17:9,10 23:6 30:5 32:24 36:22 37:5 38:18 68:3 82:15 83:15 89:19 91:2 112:23 114:4,21 114:23,25 119:6 120:8,8 125:3 127:5 128:11,21</p>	<p>134:14 140:6 141:3,13 148:24 160:25 163:12 ways 64:6 82:4 151:25 we've 6:14 10:1 11:3 12:3 16:25 17:2 24:4,18,19 26:7 27:25 29:15 29:19,20,20,22 31:22 32:16 34:17 34:21 35:2,8,8,11 35:13 36:2 37:10 37:25 38:16 42:9 42:9 43:4,9,12,13 43:14 45:4 46:23 46:24,25 47:4,18 47:24 49:4,4,6,7 49:12,15,21 50:10 50:13 51:5,8,13,20 52:5,6 53:24 54:9 54:9,15 56:1,1 58:9,12,13,14,18 59:20 60:7,19 63:24,25 65:12 66:24 68:6,11 76:15 78:17 79:19 86:11 87:18 89:6 92:16 96:7 98:10 102:25 103:13 108:3 112:9 121:8 137:17 144:9 147:24 151:13 155:6 159:15 160:17 171:4 weak 33:12 120:19 weakening 125:2 weakest 120:16 weakness 102:10 132:11,13,18 145:14</p>	<p>weaknesses 93:15 102:20 wear 41:23 48:5 48:14,18 49:4,6,24 51:12,22 52:7,21 79:17 weather 2:6 web 70:23 157:19 webinar 28:2,3 39:15 45:16 51:17 64:1 66:7,8 69:20 69:22 70:4 71:20 72:20 73:25 74:10 75:13 90:10 124:13 145:16 151:14 webinars 67:7 website 9:8 19:21 22:21,22 40:2,3 50:12 70:17 75:14 76:8 149:24 151:11 161:8 wedged 25:13 27:4 week 18:6 26:15 50:11 99:24 102:23 147:25 148:5,6 weeks 10:11 16:18 67:11 92:9 117:1 157:8 164:24 weighs 48:20 weight 145:18,19 welcome 6:25 7:2 welded 25:17 126:24 welds 52:3 160:4 160:13,14,17,18 went 8:10,17 16:13 66:16 76:25 82:21 86:18</p>	<p>west 12:19 68:3 wet 37:9 141:5 wheeler 10:14 wheels 50:19 112:24 whereof 172:21 whistleblower 116:1 117:2 142:18 whiston 118:16 121:13,16,17 widely 17:19 wildflowers 2:7 willy 167:15 window 119:7 wish 39:18 withdrawal 124:8 withstand 27:17 28:6 29:18 witness 115:20 172:21 witnesses 32:17 172:10 won 8:6,7 66:20 wonder 4:19 83:11 140:12 wondered 145:22 wonderful 72:5 wondering 91:13 word 52:20 80:3 169:21,23 wording 152:10 words 32:2 59:24 65:8 83:6 86:25 91:22 151:19 work 13:22 14:1,5 16:4,22 32:20 34:16 36:25 49:16 55:5 62:18 68:6 68:13 80:11,14 90:4 94:7 147:8</p>
--	--	---	---

[work - zones]

148:10 154:14 157:2 162:22 163:12,20 worked 16:2 34:8 54:9,10 73:5 119:1 135:18 137:17 worker 50:21 120:3 workers 26:4 27:14 140:10 working 20:6 45:21 50:13 54:5 65:17,20 68:19 73:15 128:17 134:12 164:1,3 works 146:8 workshop 20:23 20:23 21:8 162:1 workshops 20:14 world 4:19 107:19 108:11 122:4 137:3 138:5 worry 110:19 worse 149:3 worst 20:14 30:23 111:9 143:1 worth 68:9 123:12 125:16 wrap 62:23 write 22:18 49:22 writing 149:23 written 5:9,18 34:21 83:23 101:23 wrong 46:14 110:17 wrote 17:17 97:20 ws 34:2	y
	yanked 143:9 yeah 52:23 53:3 60:14 61:11,11 66:21 118:1 125:23 152:13 153:13 154:16 160:1 162:6,12 163:9 year 12:5,6,9 13:3 13:11 14:23 15:10 15:16,18 24:3,4 33:23 53:24 54:20 56:13 60:12 113:15 year's 15:18 years 3:20,20 8:9 8:18 9:4 11:3 16:9 16:13 17:2 18:14 33:19 39:10 42:5 56:10 66:21 95:14 107:7,18 110:2 118:24 122:18 127:2 131:10 132:6 137:18 155:24,24 162:21 yucca 119:1 127:7
	z
	zero 66:20 zone 100:24 zones 160:14