

## DOCKETED

<b>Docket Stamp Updated:</b>	8/24/2017 6:07:44 PM
<b>Docket Number:</b>	15-AFC-01
<b>Project Title:</b>	Puente Power Project
<b>TN #:</b>	216594
<b>Document Title:</b>	Transcript of 02/10/2017 Evidentiary Hearing
<b>Description:</b>	N/A
<b>Filer:</b>	Cody Goldthrite
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Committee
<b>Submission Date:</b>	3/17/2017 9:55:38 AM
<b>Docketed Date:</b>	3/17/2017

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BEFORE THE CALIFORNIA ENERGY COMMISSION

In the Matter of: )  
 )  
Application for Certification for )  
the PUENTE POWER PROJECT ) Docket No. 15-AFC-01  
\_\_\_\_\_ )

EVIDENTIARY HEARING  
PUENTE POWER PROJECT

OXNARD PERFORMING ARTS CENTER  
800 HOBSON WAY  
OXNARD, CA 93030

FRIDAY, FEBRUARY 10, 2017  
9:31 A.M.

Reported by:  
Martha Nelson

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### COMMISSIONERS

Janea Scott, Presiding Member  
Karen Douglas, Associate Member

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Matthew Coldwell, Adviser to Commissioner Scott  
Jennifer Nelson, Adviser to Commissioner Douglas  
Le-Quyen Nguyen, Adviser to Commissioner Douglas

### HEARING OFFICER

Paul Kramer, Hearing Officer

### CEC STAFF

Shawn Pittard, Staff Project Manager  
Kerry Willis, Assistant Chief Counsel  
Michelle Chester, Attorney

### PUBLIC ADVISER'S OFFICE

Alana Matthews, Public Adviser

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George Piantka, PE, Director of Environmental  
Affairs, NRG Energy, Inc.  
Dawn Gleiter, Director of Sustainable Development,  
Project Manager, NRG Energy, Inc.

### INTERVENERS

Matthew Smith, Environmental Defense Center  
Alicia Roessler, Environmental Defense Center  
Ellison Folk, Shute, Mihaly & Weinberger LLP, City of  
Oxnard  
Lisa Belenky, Center for Biological Diversity  
Kevin Bundy, Center for Biological Diversity  
Grace Chang, Fighting for Informed Environmentally  
Responsible Clean Energy (FFIERCE)

**APPEARANCES (Cont.)**

INTERVENERS (Cont.)

Shana Lazerow, California Environmental Justice Alliance  
Gladys Limon, California Environmental Justice Alliance

APPLICANT'S WITNESS

Phillip Mineart

STAFF'S WITNESSES

Garry Maurath  
Marylou Taylor  
David Vidaver, California Energy Commission  
Paul Marshall  
Matthew Layton, California Energy Commission

INTERVENER'S WITNESSES

David Revell  
Jim Caldwell (via WebEx)  
Lawrence Hunt

PUBLIC COMMENT

Shirley Godwin  
Michael Stubblefield, Sierra Club, Los Padres Chapter  
Andrea Mondragon  
Sara Gepp  
Isabella Mondragon  
Larry Godwin  
Carmen Ramirez, City of Oxnard Mayor Pro Tem  
Gaye Therese Johnson (via WebEx)  
Ashley Baker (via WebEx)  
Sonny Lim (via WebEx)  
Hareem Kahn (via WebEx)  
Karen Hanna (via WebEx())  
Theresa Hodges (via WebEx)  
Dolores Mondragon  
Cezar Salas

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1 MS. WILLIS: Good morning. My name is Kerry  
2 Willis, Assistant Chief Counsel for the Energy Commission,  
3 and we're representing Staff today. And with me is Shawn  
4 Pittard, who is our Project Manager, and Michelle Chester,  
5 Staff Counsel.

6 COMMISSIONER SCOTT: Good morning. Now, to our  
7 Interveners, the City of Oxnard.

8 MS. FOLK: Good morning. Ellison Folk, with Shute,  
9 Mihaly and Weinberger, and we're outside counsel to the City  
10 of Oxnard.

11 COMMISSIONER SCOTT: Good morning. And the  
12 Environmental Coalition.

13 MS. ROESSLER: Good morning. This is Alicia  
14 Roessler, from Environmental Defense Center, and to my left  
15 is my colleague, Matt Smith. We represent the Coalition,  
16 Sierra Club and EDC.

17 COMMISSIONER SCOTT: Good morning. Do we have  
18 Intervener Bob Sarvey on our WebEx today? Bob Sarvey, if you  
19 have joined us, I think everyone is unmuted, please go ahead  
20 and speak up and introduce yourself.

21 HEARING OFFICER KRAMER: Well, wait a minute.

22 COMMISSIONER SCOTT: Oh, hold on one minute. We  
23 are unmuting folks.

24 HEARING OFFICER KRAMER: Okay.

25 COMMISSIONER SCOTT: Okay. Intervener Bob Sarvey,



1 if you are on the WebEx, please go ahead and introduce  
2 yourself.

3 COMMISSIONER SCOTT: Okay. Sounds like he's not  
4 here. Let me turn to, on the California Environmental  
5 Justice Alliance -- oh. Are you on the line, Shana? Okay.  
6 We will check back in a little bit. How about the Center for  
7 Biological Diversity?

8 MS. BELENKY: Yes. Good morning. This is Lisa  
9 Belenky, for the Center for Biological Diversity.

10 COMMISSIONER SCOTT: Good morning, Lisa. And Dr.  
11 Grace Chang, from FFIERCE, please introduce yourself. Good  
12 morning.

13 MS. CHANG: Grace Chang from FFIERCE, Fighting for  
14 Informed -- I'm sorry. I'm very tired this morning --  
15 Fighting for Informed Environmentally Responsible Clean  
16 Energy, and fighting for my health today.

17 (Laughter)

18 COMMISSIONER SCOTT: Oh, good morning.

19 COMMISSIONER DOUGLAS: Morning.

20 COMMISSIONER SCOTT: Do we have any folks from the  
21 California Coastal Commission in the room or on the line?

22 MR. STREET: Joseph Street, with California Coastal  
23 Commission. I'm on the line.

24 COMMISSIONER SCOTT: Good morning. Anyone else?  
25 Okay. I note that our public adviser is not here quite yet,

1 but all of the information you may need is at the yellow  
2 table over near the door. And I would just like to take a  
3 quick minute to say -- because I know when we get towards the  
4 end of the day everyone will be ready to head out -- I wanted  
5 to just say thank you so much to our tech staff, to all of  
6 the security, to our court reporter and to the translators,  
7 because they really help just make everything run really  
8 smoothly for us over all four days. So thank you very much.

9           And then before I turn this over to Hearing Officer  
10 Paul Kramer I wanted to let folks know that our goal is to go  
11 until we are finished with the evidence that we want to bring  
12 into our evidentiary hearing today. And so we'll go until  
13 we're finished.

14           I'm not quite sure how long that will take, but I  
15 wanted to give folks a heads up in case you wanted to take a  
16 look at flights and other things that -- just to kind of have  
17 your logistics ready there. So with that I will turn the  
18 conduct of this proceeding over to Hearing Officer Paul  
19 Kramer.

20           HEARING OFFICER KRAMER: Okay. And two other bits  
21 of information. At the conclusion of today's hearing,  
22 Committee plans to continue this hearing until next  
23 Wednesday, but that doesn't really need to involve any of  
24 you. It's in order to meet the requirements of the Bagley-  
25 Keen Act, you know, we need to notice our meetings.

1           And what the Committee is going to do next  
2 Wednesday following the Commission's business meeting is  
3 basically deliberate in closed session. There will, as there  
4 always is, be an opportunity for public comment, and that  
5 will come after we come out of closed session.

6           But the main point to make is, please, don't  
7 anybody travel up to Sacramento for that, because the public  
8 portion of the meeting is going to be very brief. If you  
9 want to listen in, I would recommend that you use the WebEx  
10 facility, unless you want to come to Sacramento for some  
11 other reason. I'm sure the Chamber of Commerce would tell me  
12 to welcome you, but not because of us, please.

13           And then secondly, our IT folks at the Energy  
14 Commission are going to be updating the software on many of  
15 our servers tomorrow, they say from 8:00 a.m. till 6:00 p.m.,  
16 and that means that if you're trying -- if for some reason  
17 you have a last minute reason to get to one of the documents  
18 that's in the docket, you probably will not be able to access  
19 those during this time where the servers are down for  
20 maintenance.

21           I don't think anybody's going to have a pressing  
22 need, but I just wanted to let you know that. And if you get  
23 on at 10:00 a.m. and it's not ready, you could check back in  
24 a couple hours. In my experience it's pretty rare where they  
25 actually take all the time they tell us they might. But just

1 fair warning on that.

2           So with that, let's continue the last part of  
3 yesterday's Biological Resources hearing. And we have Mr.  
4 Street on the line. So we will be able to talk to him, as  
5 well, but let's begin with the Environmental Coalition's  
6 witness, Lawrence Hunt.

7           MR. SMITH: Mr. Kramer, before we begin with Mr.  
8 Hunt, actually, on Wednesday I had filed and intended to mark  
9 as Exhibit 4036, an image of the project site that we wanted  
10 to use solely for demonstrative purposes during Mr. Hunt's  
11 testimony. Could I ask that the image be brought up on the  
12 screen?

13           HEARING OFFICER KRAMER: Okay. I'll get that up in  
14 a minute. So if you want to get going with the  
15 preliminaries.

16           MR. SMITH: Sure. Thank you.

17           MR. CARROLL: This is Mike Carroll, on behalf of  
18 the Applicant. We actually have an objection to the use of  
19 that particular image, which we find to have been cropped in  
20 a way that is -- doesn't put the site and the area  
21 surrounding the site in what we believe is its appropriate  
22 context.

23           I just noticed that someone docketed some  
24 additional aerial images of the site, which are very similar  
25 to the images that Mr. Smith is -- or to the image that Mr.

1 Smith is proposing to use, but provides a somewhat broader  
2 perspective and provides much better context for the project  
3 site and the setting.

4 And so I'm not exactly sure who docketed those  
5 images, but I think we have no problem utilizing those, or  
6 obviously, there are many, many aerial images of the project  
7 site in the Application for Certification in the Final Staff  
8 Assessment documents that have already been in the record for  
9 quite some time that everybody's familiar with.

10 MR. KRAMER: Mr. Kramer, this is Kerry Willis.  
11 Yeah, that would -- we also would join in that objection.  
12 Staff -- it was Staff that docketed the Google Earth image  
13 because it was quite different than the image that was  
14 provided by Mr. Hunt.

15 MR. SMITH: May I respond to those objections?

16 HEARING OFFICER KRAMER: Please go ahead and I'll  
17 try to get both documents up on the screen here.

18 MR. SMITH: So first of all, I believe Mr. Carroll  
19 said as a basis for the objection that he believes that the  
20 image was cropped. That's inaccurate. We did not modify the  
21 image in any way after it was downloaded from Google Earth.

22 The images of the coordinates of the project site  
23 using a GPS system, I'm not hearing any objection that it  
24 does not actually show the project site. The only objection  
25 I'm hearing is that it's to a portion of the project site,

1 that perhaps the Applicant and the Staff Counsel don't want  
2 to have focused on.

3 In our view it is actually an image of the whole  
4 project site, understanding that term to be what we were  
5 discussing yesterday during the direction examination of Ms.  
6 Love in terms of the three-acre area where the unit will be  
7 built. So we think it is an appropriate image to view.

8 I'm happy to entertain arguments as to the weight  
9 to be accorded to the demonstrative, but given that we're not  
10 even putting it in for substantive purposes as the basis for  
11 a finding, just as something to refer to during the course of  
12 Mr. Hunt's testimony, I don't even see why these objections  
13 are really necessary, considering also that we have used  
14 several demonstratives through the course of these  
15 proceedings already.

16 MR. CARROLL: And I don't -- this is Mr. Carroll.  
17 Let me say, I don't know if cropped is the right term. My  
18 point is, is that it is a very tight shot which in my -- and  
19 I'm not suggesting is intentional -- but in my view does not  
20 put the project site in its proper context.

21 And I think, you know, anyone that looks at the  
22 image that Mr. Smith is proposing and looks at the images  
23 filed by staff last evening will understand what I'm saying.

24 MR. SMITH: Well, I guess that goes to the point,  
25 really. I mean, I think that, obviously, Applicant and

1 Interveners and maybe to some degree Staff have different  
2 views of the site and the quality of the site and what aspect  
3 of the site to focus on.

4 Applicant and Staff have had their opportunities to  
5 put in images of the site that they believe are  
6 representative of their views.

7 MR. CARROLL: As did the Interveners. This is an  
8 image coming in, in the middle of the evidentiary hearings,  
9 an aerial shot of the project site. We have had aerial shots  
10 of the project site available in the public record for two  
11 years.

12 MR. SMITH: And I'd like to finish my statement.  
13 Again, it's coming in now because we're putting it in as  
14 substantive evidence. The only reason I filed it and marked  
15 it the way I did was because Mr. Kramer had indicated during  
16 your earlier proceedings that it's the Committee's preference  
17 to have demonstratives marked as exhibits.

18 And so that's why I did that, to try to facilitate  
19 this, and I think my colleague would like to add a point.

20 MS. ROESSLER: And just to be clear, it's a Google  
21 Earth image of the shot. There's nothing been done -- that's  
22 been done to it. Perhaps if you pulled it up you could view  
23 it. It is the entire project site. It's certainly just a  
24 view to give you a closer version of actually what's on the  
25 ground, which is directly related to our testimony that we're

1 about to get from Mr. Hunt.

2 MS. WILLIS: And Mr. Kramer, Kerry Willis. Number  
3 -- TN No. 215823 is what Staff filed yesterday, and it's both  
4 images, the Google Earth image that -- from Mr. Hilliard and  
5 then also from Mr. Hunt. So they're side by side -- they're kind  
6 of -- not -- I guess not side by side, but page by page.

7 MS. ROESSLER: With all due respect, this is our  
8 direct line of testimony and our witness. You're allowed to  
9 put your own exhibits for your own witness. I would find it  
10 highly prejudicial if we were forced to use another party's  
11 exhibits for our own direct testimony and I have yet to see  
12 that occur in these proceedings. It would be an entirely  
13 different standard if that were applied to our witness on  
14 Biology.

15 MR. CARROLL: And what I would say in response is  
16 that, of course, everyone is entitled to use their own  
17 exhibits during the proceedings, provided that they file them  
18 and provide them to the other parties on a timely basis, and  
19 I'm not aware of any situation over the course of the past  
20 three days where a party has proposed and was permitted to  
21 put an image on the screen that, you know, has not been made  
22 available to the parties prior to the commencement of the  
23 hearings.

24 MS. ROESSLER: It was made available yesterday. It  
25 was docketed.



1 MR. SMITH: The day before yesterday.

2 MR. CARROLL: Prior to the commencement --

3 MS. ROESSLER: Or two days ago.

4 MR. CARROLL: -- of the hearings.

5 MS. ROESSLER: It was docketed.

6 MR. CARROLL: Well, most of us --

7 MS. ROESSLER: And we --

8 MR. CARROLL: -- most of us have been fairly busy  
9 over the last couple of days. It was not filed prior to the  
10 commencement. First of all, it was not filed at the time  
11 that the exhibits were supposed to be filed, certainly; nor  
12 was it even filed prior to the commencement of the hearings.

13 MR. SMITH: And again, that's -- again, that was to  
14 respond to Mr. Kramer's request that demonstratives have an  
15 exhibit number. We never intended to use this as substantive  
16 evidence. My understanding was that we had to have our  
17 exhibits that we wanted to use as substantive evidence filed  
18 at a certain time, but there is no indication that I'm aware  
19 of that that applied to a demonstrative exhibit. It's just  
20 used as a reference point during testimony

21 MS. ROESSLER: What is the objection to a picture  
22 of the site? I'm just curious why there's so -- such a big  
23 objection --

24 MR. CARROLL: Well, I --

25 MS. ROESSLER: -- from your side of a Google Earth

1 image over it.

2 MR. CARROLL: Well, I'm somewhat perplexed as to  
3 the persistence with which you are pursuing having this  
4 particular aerial shot of the site, given the many aerial  
5 shots of the site that are already in the record. So I would  
6 ask the same question of you.

7 But as I said at the beginning, I think it is  
8 framed in such a way that is -- that does not put the site in  
9 its proper context, and frankly, I think it's prejudicial.  
10 And to look at that image one would think that we were --  
11 that the project site was located in some sort of a pristine  
12 environment as opposed to being within the confines of an  
13 existing power plant surrounded by other industrial uses.

14 So that's the point -- and I understand the point  
15 that you're making, that you believe in some respects it is a  
16 pristine environment, but I believe that the shot is  
17 prejudicial and deceptive and fails to keep the project site  
18 in its appropriate context.

19 MR. SMITH: Well, sir --

20 MS. ROESSLER: It's just --

21 MR. SMITH: -- sir, if I may respond to that. I  
22 mean, I think, you know, our response would be that we feel  
23 that the photos that have been put into the record  
24 inadequately demonstrate the qualities of the site that we  
25 wish to emphasize for exactly the same reason.

1           And that's precisely why there is conflicting  
2 testimony and evidence in this case, as in any case, and that  
3 applies to demonstrative exhibits, as well as other exhibits.  
4 So I don't see why that should preclude us from using our own  
5 demonstrative on our direct examination.

6           MR. CARROLL: And again, I wouldn't have a leg to  
7 stand on and I wouldn't be saying anything if you had filed  
8 it on a timely basis with the rest of your materials.

9           MS. ROESSLER: There have been a lot of objections  
10 to things you've filed on a timely basis.

11          HEARING OFFICER KRAMER: You see now --

12          MS. ROESSLER: And I believe the rule that going  
13 forward in these proceedings so far is to let the evidence --

14          MR. CARROLL: I think all of those have been ruled  
15 on previously.

16          MS. ROESSLER: I'm still talking, please -- is to  
17 just let the evidence in. What are we hiding here with a  
18 Google Earth pictures? Just because you don't like the  
19 snapshot certainly isn't a basis.

20          MR. CARROLL: What are we hiding here? I would ask  
21 the very same question.

22          MS. ROESSLER: It's a Google Earth shot.

23          MR. CARROLL: Show less of the power plant?

24          MS. ROESSLER: Are you disputing any of the points?  
25 Are you disputing that that is not the longitude and latitude

1 and coordinates of the site? That, I can understand.

2 MR. CARROLL: Look, anyone who views the images  
3 understands the point I'm making. I don't have anything  
4 further to say about it. We'll let the Committee rule.

5 MS. ROESSLER: We understand why you may not like  
6 it or think it's representative, because it shows a close-up  
7 shot that there actually is vegetation onsite.

8 HEARING OFFICER KRAMER: Okay. Well --

9 MS. ROESSLER: And this goes directly to dispute  
10 your testimony yesterday from your biologist that this site  
11 is highly disturbed.

12 HEARING OFFICER KRAMER: Okay. Mr. Carroll, we  
13 will have in mind -- well, let me ask. Is Staff going to be  
14 offering their two aerials that were docketed the other day?

15 MS. WILLIS: I mean, we can offer them as exhibits.  
16 We didn't have the Staff bring them up because they were just  
17 filed yesterday, or I think, or the day before.

18 HEARING OFFICER KRAMER: Okay. So if the  
19 Environmental Center's 4036 comes in so will the Staff's  
20 document, which is -- doesn't have an exhibit number yet, but  
21 it's TN 215823, and now showing on your screen. And that has  
22 two aerials, actually. This is the second and this is the  
23 first of them.

24 So we will take them all in to use for illustrative  
25 purposes. I mean, a photo, if somebody wants to make a case

1 that these have been altered in some way or they are someway  
2 misleading beyond your point, Mr. Carroll, that you've  
3 already made, that the Environmental Center's very close-up  
4 image doesn't show any of the surroundings, you're welcome to  
5 do that.

6 So the number for the Staff's document, the exhibit  
7 number will be 2024, because we're holding 2023 for the  
8 corrected citation that Carol Watson is going to give us at  
9 some future point.

10 (Whereupon EC Exhibit No. 4036, Marked)

11 (Whereupon, Staff Exhibit No. 2024, Marked)

12 HEARING OFFICER KRAMER: So go ahead, Mr. Smith.

13 MS. ROESSLER: Thank you. Let's see. Can you  
14 please state your name for the record?

15 MR. HUNT: My name's Lawrence Hunt. It's L-a-w-r-  
16 e-n-c-e, H-u-n-t. And I might add, I have not been sworn in,  
17 so.

18 HEARING OFFICER KRAMER: Okay. Then I'll take care  
19 of the noise in the phone in just a -- let me do that right  
20 now. I see who it is. Okay. Raise your right hand.

21 (Whereupon, Lawrence Hunt, Witness for Environmental  
22 Center, duly sworn.)

23 HEARING OFFICER KRAMER: Thank you.

24 MS. ROESSLER: Thank you.

25 DIRECT TESTIMONY

1 MS. ROESSLER: Mr. Hunt, are Exhibits 4027 and 4027  
2 your opening and rebuttal testimony in this proceeding?

3 MR. HUNT: Yes.

4 MS. ROESSLER: Did you also review documents  
5 prepared by the Energy Commission Staff in this proceeding?

6 MR. HUNT: Yes, I did.

7 MS. ROESSLER: What documents did you review?

8 MR. HUNT: I reviewed the PSA and the FSA, the  
9 Coastal Commission's Addendum, the Application for  
10 Certification, the biological -- supporting documents on  
11 Biology prepared by AECOM, the Fish and Game, Fish and  
12 Wildlife Service letters, and the Venture Audubon Society  
13 letters, as well as scientific literature that are relevant  
14 to my testimony.

15 MS. ROESSLER: Thank you. And just as a point of  
16 order I would please prefer our exhibit to be posted during  
17 our testimony, if possible. Thank you. Okay. Mr. Hunt, can  
18 you please describe for us your professional background and  
19 experience relevant to your testimony in this case?

20 MR. HUNT: Sure. I have undergraduate and graduate  
21 degrees in vertebrate biology. I have conducted research on  
22 the dune systems, that is the wildlife in these dune systems  
23 since 1985 up until the present, continuing those studies.

24 And since 1989 I've been a consulting biologist. I  
25 have a business in Santa Barbara providing biological

1 consulting to a variety of clients. In relation to actual  
2 experience with these dune systems, for my masters and Ph.D.  
3 work the study sites included sites around the power plant  
4 itself, as well as other areas.

5           And I've also prepared documents on the origin and  
6 maintenance of dune systems in the Santa Maria Basin area,  
7 Santa Barbara County, which included looking at the dune  
8 systems in Ventura County and Los Angeles County, and have  
9 been retained as a consultant by the State of California and  
10 the State Coastal Conservancy to prepare fauna studies of the  
11 Emma Wood State and McGrath State Beach areas.

12           MS. ROESSLER: Have you also been retained by Parks  
13 and Recreation to do any studies around the site?

14           MR. HUNT: Yes. Those last two studies were co-  
15 authored. It was with Parks and Recreation and State Coastal  
16 Conservancy.

17           MS. ROESSLER: Thank you. Over the last 28 years  
18 or so you've been consulting who have been your clients?

19           MR. HUNT: I have a range of clients from private  
20 developers to local governments, planning departments, state  
21 agencies, such as Fish and Wildlife, as well as federal  
22 agencies, the U.S. Fish and Wildlife Service.

23           MS. ROESSLER: Have you ever represented any energy  
24 companies?

25           MR. HUNT: I have. Exxon Mobil, worked on

1 ExxonMobil projects, Occidental Petroleum, Southern  
2 California Gas, Shell Oil, a variety of clients.

3 MS. ROESSLER: Thank you. How many of -- in your  
4 years of consulting how many projects would you say you've  
5 consulted on where you've been required to identify and  
6 analyze impacts to special status species and habitats?

7 MR. HUNT: I don't have a firm number on that, but  
8 it would number in the hundreds.

9 MS. ROESSLER: Great. Are you familiar with the  
10 Puente Power Project site and surrounding area?

11 MR. HUNT: I am.

12 MS. ROESSLER: Can you describe the basis of your  
13 familiarity, how many years, how many times have you been  
14 there?

15 MR. HUNT: Yes. I first visited this general area  
16 in 1984 and have conducted research in these dune systems  
17 around the power plant site itself from about '85 until my  
18 last site visit out here was 2016. And when I say this area,  
19 I mean the area around the power plant. I have not been on  
20 the power plant site itself. There's a fence, security fence  
21 surrounding it.

22 MS. ROESSLER: Right. So you mention this fence.  
23 There is a physical barrier around this site. Would that  
24 physical barrier, that fence prevent wildlife from moving  
25 between the site and the surrounding area?



1 MR. HUNT: It depends on the wildlife, but for  
2 certain species, no.

3 MS. ROESSLER: Great. Do you feel that because you  
4 haven't been able to be onsite that that fence would have  
5 prevented you or affected your conclusions or opinions in  
6 your testimony in any way?

7 MR. HUNT: No, it wouldn't. There's certain  
8 special status species that I found immediately outside the  
9 fence on adjacent property to the north, west and south of  
10 the site, and those species, one being a silver legless  
11 lizard, the other one, Globose Dune Beetles, also Two-Striped  
12 Garter Snake. These are all special status species. Those  
13 could easily disperse onto the site.

14 MS. ROESSLER: Thank you. And we'll get into those  
15 shortly.

16 MR. HUNT: Sure.

17 MS. ROESSLER: Did you formulate an opinion as to  
18 whether there are any wetlands on the project site?

19 MR. HUNT: I did.

20 MS. ROESSLER: And what is your opinion?

21 MR. HUNT: My opinion is based on a review of the  
22 documents that I've previously stated I reviewed, as well as  
23 being out onsite in the adjacent areas in my field experience  
24 with wetlands in dune situations. My opinion is that there's  
25 a 2.03-acre area on the site that was identified as having

1 hydrophytic vegetation.

2           Several of the research protection agencies are  
3 considering that a wetland and I concur with that decision,  
4 that that is a wetland.

5           MS. ROESSLER: When you say you concur with those  
6 agencies, are you referring to the California Coastal  
7 Commission for the --

8           MR. HUNT: Yes, California Coastal Commission and  
9 the California Department of Fish and Wildlife.

10           MS. ROESSLER: Thank you. So the two-acre -- 2.03-  
11 acre wet [sic] site -- wetland you identified onsite is the  
12 same one that the California Coastal Commission confirmed  
13 onsite, as well --

14           MR. HUNT: Yes.

15           MS. ROESSLER: -- as the FSA?

16           MR. HUNT: Yes, it is.

17           MS. ROESSLER: Okay. Great. And you mentioned --  
18 or can you describe the features of that 2.03-acre site,  
19 wetland that make it appropriate to classify it as a wetland?

20           MR. HUNT: Sure. The documents state that the  
21 area's been -- that it has compacted soil and that it may  
22 have been used in the past for stockpiling spoils dredged  
23 from Edison Canal, which may contribute to increased salinity  
24 at the site. That's their interpretation.

25           But the most overriding factor was the presence of

1 certain hydrophyte, most notably pickle weed and two other  
2 species on that site that are wetland indicators.

3 MS. ROESSLER: And in your understanding, and I  
4 know you sat through the testimony yesterday of the Coastal  
5 Commission's one-parameter site, does this meet the  
6 definition of a wetland under the Coastal Commission's  
7 jurisdiction?

8 MR. HUNT: Yes, I think it does.

9 MS. ROESSLER: Thank you. Now, you did hear the  
10 Applicant's expert, Ms. Love, testify yesterday and she  
11 stated that because of disturbance and anthropogenic reasons,  
12 she believes the 2.03-acre wetland did not meet the Coastal  
13 Commission's definition. Is that -- what's your reasoning on  
14 that?

15 MR. HUNT: I don't agree with that. The Coastal  
16 Commission doesn't make a distinction between level of  
17 disturbance as far as certain plant indicators being onsite.  
18 The fact that it contains hydrophytic vegetation and it's a  
19 native species, that fits the one-parameter definition of a  
20 wetland.

21 MS. ROESSLER: So under the Coastal Commission's  
22 definition of a wetland, the fact that this site is disturbed  
23 or anthropogenic forces do not factor into whether or not  
24 it's a wetland?

25 MR. HUNT: Right. That's right.

1 MS. ROESSLER: Thank you. You also mentioned  
2 another wetland in your testimony. Can you please describe  
3 for us that wetland?

4 MR. HUNT: Yeah. This one, it's an interesting  
5 situation. This is based on the presence of coyote bush and  
6 mulefat, and I learned yesterday from looking at the  
7 documents they say that mulefat is present onsite. I learned  
8 yesterday from Ms. Love's testimony that mulefat was  
9 consisting of two individuals, which is a low number,  
10 granted, but both coyote bush and mulefat in this context of  
11 a dune field are capable of forming a transitional wetland  
12 that various wetland experts have identified as -- they call  
13 them phreatophytic wetlands.

14 That is, the species -- those particular species  
15 that are same genus, different species, they lay down a very  
16 deep root system in these dune systems and are tapping into  
17 groundwater. And that is a situation on this site that the  
18 groundwater has been identified as lying five to nine feet  
19 below ground surface.

20 The dune sheet itself sits on top of an alluvial  
21 plain that is draining fresh water to the ocean and  
22 contributing to this water table that's been identified as  
23 five to nine feet below surface. So these two species are  
24 laying down these deep roots, and I should say both of them  
25 are -- have seeds that are wind borne.

1           You've got this site surrounded by those species in  
2 various contexts. So these seeds are blowing in and they're  
3 finding favorable conditions to grow in this .53-acre area.  
4 I'm saying it's a transitional area that if left to develop  
5 would probably develop more characteristics of phreatophytic  
6 wetlands that are found in other dune systems.

7           MS. ROESSLER: Thank you. And is this consistent  
8 with the Department of Fish and Wildlife opinion?

9           MR. HUNT: Yes, it is. They also have the same  
10 opinion.

11          MS. ROESSLER: Thank you. Did you also review the  
12 opening and rebuttal testimony submitted by Ms. Love?

13          MR. HUNT: Yes, I did.

14          MS. ROESSLER: And are you familiar with her  
15 testimony that the coyote brush located on the site is a  
16 common species?

17          MR. HUNT: Yes, it is a common species.

18          MS. ROESSLER: Do you believe that just because  
19 it's a common species, does that take away from the fact that  
20 it's a rare habitat?

21          MR. HUNT: No. Again, in this context -- maybe I  
22 should backtrack a little bit. In an undisturbed situation  
23 you would have a series of dunes that are variable  
24 topography. And on the tops of these dunes you would have  
25 dune scrub vegetation, and then going down into the swales in

1 between these dune crests you would have in some cases, if  
2 the water table is high enough, coyote bush and mulefat,  
3 these phreatophytic plants, forming these transitional  
4 wetlands that other biologists have identified.

5 MS. ROESSLER: Thank you. Given your experience  
6 with the site and surrounding area over the last 30 years,  
7 could you please describe for us the surrounding area around  
8 the site to give us a better picture of the habitats?

9 MR. HUNT: Sure. I'd say the site has been carved  
10 out of one of the most sensitive habitats in California, that  
11 is, coastal dune system. This -- you take this thing in a  
12 regional context, these dunes are only present in a handful  
13 of sites, and that is these recurring dune sheets.

14 And most of these have been destroyed, obliterated.  
15 For example, LAX is built on the same type of dune system  
16 that is forming here. The thing that's interesting about  
17 this particular site is we still have remnants of the full  
18 feature of -- or full spectrum of dune features; that is,  
19 going from the beach to the innermost part of the inner side  
20 of the dune sheet itself.

21 With this special sort of habitat, that is, these  
22 windblown sands there are a number of special status species  
23 that occur, such as Globose Dune Beetles, silvery legless  
24 lizards, these little lizards. They have no legs. They  
25 burrow in sand.

1            Things like two-striped garter snakes, a host of  
2 wildlife species that are special status, and they're all  
3 living in these environments because you have a spectrum of  
4 conditions that aren't found elsewhere; that is, a  
5 juxtaposition of dune scrub and wetlands that formerly  
6 occurred on this site.

7            MS. ROESSLER: Thank you. So just to understand  
8 your opinion on the dune swale wetland onsite, is it your  
9 testimony that that is a rare habitat and that it is a  
10 wetland, because when putting those in context of a dune  
11 swale that it --

12           MR. HUNT: Yes.

13           MS. ROESSLER: -- would have the basis --

14           MR. HUNT: Yes, it is.

15           MS. ROESSLER: -- or I don't want to put words in  
16 your mouth, but I just wanted to clarify.

17           MR. HUNT: Yes. Yeah.

18           MS. ROESSLER: Thank you. Moving onto special  
19 status species, can you tell us what your understanding of  
20 the term "special status species" is?

21           MR. HUNT: Sure. Special status species are plant  
22 or animal species that are considered rare or have some  
23 conservation value by state resource protection agencies.

24           MS. ROESSLER: And did you evaluate the project  
25 site on whether it was likely to contain any special status

1 species? Were you asked to review the project site?

2 MR. HUNT: Yes. I was asked to review the project  
3 site based on documents. I'll say again, I have not been on  
4 the site.

5 MS. ROESSLER: Correct.

6 MR. HUNT: In person, yeah.

7 MS. ROESSLER: Correct. And can you tell us, what  
8 did you find?

9 MR. HUNT: Yeah. This site is -- again, I think it  
10 harks back to how unusual these --

11 MR. CARROLL: I'm going to --

12 MR. HUNT: -- how unusual these dune systems are  
13 and then --

14 MR. CARROLL: I'm going to object to -- since the  
15 witness has testified that he has not been on the project  
16 site, I don't believe he can respond to questions about what  
17 he found --

18 MS. ROESSLER: In his review of --

19 MR. CARROLL: -- on the project site.

20 MS. ROESSLER: -- in his review of the project  
21 site. I rephrase the question to say, in your review of the  
22 project site, which he then stated the basis for his review.  
23 And now, I'm asking what his findings are.

24 MR. CARROLL: Thank you for the clarification.

25 MR. HUNT: There's been a host of special status



1 species, primarily wildlife species, but some plants  
2 identified from the surrounding area, and some have the  
3 potential of being onsite itself.

4 MS. ROESSLER: Thank you. And in terms of -- I  
5 guess let's get to the issue, too, again, is why haven't you  
6 been on the project site?

7 MR. HUNT: I haven't been on the project site  
8 because it's surrounded by a security fence and private  
9 property.

10 MS. ROESSLER: Thank you. So just to move on,  
11 okay. In terms of this species that you did identify based  
12 on your experience around the project site, can you elaborate  
13 on the basis of your findings in terms of what you based  
14 those on, in addition to literature, and was there suitable  
15 habitat on site?

16 MR. HUNT: Yes. I'm basing the statements on  
17 extensive fieldwork I've conducted around the site itself,  
18 and again, the knowledge that there appeared to be suitable  
19 habitat on site from what I could see, and these species can  
20 disperse onto the site itself.

21 MS. ROESSLER: Did you do any focused surveys?

22 MR. HUNT: I did do focused surveys around the  
23 western, northern, eastern and southern portions of the  
24 project site, and these surveys weren't done with the idea of  
25 evaluating the project site itself. These were in the

1 general context of not being able to get on that site.

2 So looking at habitat immediately adjacent to the  
3 site, did focused surveys for a number of species.

4 MS. ROESSLER: So you had testified that -- I think  
5 in your testimony you found 10 -- identified 10 different  
6 species of special concern or very sensitive. Four were  
7 terrestrial. For those four terrestrial species, the legless  
8 lizard, Globose Dune Beetle, Blainville's Horned Lizard and  
9 Striped Garter Snake, did you do focused surveys for those?

10 MR. HUNT: Yes, I did.

11 MS. ROESSLER: And what kind -- what did your  
12 survey methods involve?

13 MR. HUNT: Well, the survey methods --

14 MR. CARROLL: I'm going to object to the question.  
15 You identified a number of species and asked whether or not  
16 he had conducted focused surveys. But then the follow-up  
17 question as to his findings was general. So I would ask that  
18 you please specify which of the focused surveys for the  
19 individual species he's referring to in his responses, just  
20 so that we can track.

21 MS. ROESSLER: That's where we're going.

22 MR. CARROLL: Okay.

23 MS. ROESSLER: He did focused surveys for those  
24 four terrestrial species, and that's what my line of  
25 questioning is getting into now.

1 MR. CARROLL: Okay. But the follow-up question  
2 was, what were your findings from those focused surveys, and  
3 so we don't know in the response that is to follow which of  
4 the focused surveys on which of the species he's referring  
5 to.

6 MS. ROESSLER: I asked him did he do focused  
7 surveys for four species, and he said yes, those four  
8 terrestrial species. And now, I'm asking about his survey  
9 methods.

10 MR. CARROLL: Okay. If I could request that the  
11 witness, for those of us who are not as steeped in this area,  
12 please specify as the responses are provided, which of the  
13 species and which of the surveys are being referred to in  
14 terms of explanation of both the methodology and the  
15 findings?

16 MR. HUNT: Absolutely.

17 MR. CARROLL: Thank you.

18 MR. HUNT: Yeah. The focused surveys depend on the  
19 species that you're looking for. For example, Globose Dune  
20 Beetles, you look for these by sieving through the sand; that  
21 is, putting the sand through sieves and these beetles are  
22 burrowing in the sand and you find them that way. And you  
23 have to do this in a variety of situation.

24 I found that species in both disturbed and  
25 otherwise undisturbed habitats. But without doing that

1 particular activity you're not going to find that species.  
2 For legless lizards you use rakes, and these four-pronged  
3 rakes, they call them potato rakes or whatever, you rake  
4 through the soil looking for these things, looking in --  
5 under leaf litter, under cover objects, wherever, and trying  
6 to uncover -- again, these animals are below ground. So you  
7 have to rake the soil and rake them out of the soil to find  
8 them.

9           Two-striped garter snakes, those are visual surveys  
10 going out at the appropriate time of year, typically early in  
11 the morning before they warm up. These things are cold-  
12 blooded. So they're very agile once they get warmed up. So  
13 you want to sort of sneak up on them, if you will, early in  
14 the morning. And you can see these things sitting in the  
15 vegetation, basking.

16           The same thing with horned lizards, which are a  
17 terrestrial species. They have to be done at a certain time  
18 of year and also a certain time of day, because these things  
19 disappear during the middle of the day.

20           MS. ROESSLER: And is it important how often or how  
21 frequent or how many focus surveys you do for these species,  
22 or is going out to the site one day and doing one focus  
23 survey sufficient?

24           MR. HUNT: No. Several of these species,  
25 specifically the legless lizard, you'd have to go out

1 multiple times to really determine the things are not there.  
2 There have been numerous sites that I've gone to, including  
3 this adjacent to the project site, where you go out one day.

4           You find the animal. You got back to -- and you  
5 release it. You go back to the same place and rake the area,  
6 you don't find the animal. Conditions are the same.

7 Whatever, the thing has eluded you. These are very secretive  
8 animals, for the most part.

9           MS. ROESSLER: In your understanding of hearing  
10 Love's testimony and the Staff's biologist's testimony about  
11 reconnaissance surveys, would reconnaissance surveys be  
12 sufficient to detect these four terrestrial special status  
13 species?

14           MR. HUNT: No, they wouldn't.

15           MS. ROESSLER: Can you tell us why?

16           MR. HUNT: Yes, because a reconnaissance survey  
17 pretty much is that. That is, walking around a site,  
18 characterizing conditions, you may note certain conditions  
19 such as soil density or distribution of vegetation, that sort  
20 of thing.

21           I would say they did focused surveys from the  
22 standpoint of mapping vegetation and trying to do wetland  
23 delineations, determining parameters for boundaries of  
24 wetlands and that sort of thing, presence of wetlands. But  
25 in terms of -- and they said they did multiple surveys for

1 special status plants, that plants don't move.

2           These things are either annual or perennial  
3 species. So you can go out there on a reconnaissance level  
4 and frequently see those, but for these wildlife species  
5 reconnaissance surveys are not adequate.

6           MS. ROESSLER: Thank you. In terms of -- okay.  
7 Just kind of moving on. So those are the four terrestrial  
8 species. So just to confirm, you did focus surveys -- we all  
9 know you didn't go on the site -- in the vicinity and the  
10 immediate area of the site. Is that correct?

11           MR. HUNT: Yes, that's correct.

12           MS. ROESSLER: For those four species, the legless  
13 lizard, the Globose Dune Beetle, the Blainville's Horned  
14 Lizard and the Striped Garter Snake.

15           MR. HUNT: Yes.

16           MS. ROESSLER: Correct. Great. Just to move on  
17 here a little bit, to your knowledge and review of the  
18 reports and documents, have -- did the CEC Staff do focused  
19 surveys to detect those four special status terrestrial  
20 species on the project site.

21           MR. HUNT: No. Based on what they had written it  
22 seemed to me those were reconnaissance level surveys.

23           MS. ROESSLER: In terms of your knowledge, I guess  
24 same question in regards to the Coastal Commission. Are you  
25 aware that they have done any focused surveys on site to

1 detect those four special status species?

2 MR. HUNT: No, I don't believe they have.

3 MS. ROESSLER: Thank you. Are you aware that the  
4 Applicant's biologist, Ms. Love, has done any sufficient  
5 focused surveys for those four terrestrial species on the  
6 project site?

7 MR. HUNT: No, I don't think so.

8 MS. ROESSLER: Thank you. Now, did you also  
9 conclude in your testimony that this site was likely to  
10 contain suitable habitat or foraging habitat for six special  
11 status bird species, the California black rail, burrowing  
12 owl, western Snowy Plover, white-tailed kite, Northern  
13 Harrier and the Least Bell's vireo?

14 MR. HUNT: Yes, I did.

15 MS. ROESSLER: And what did you base your opinion  
16 on, that those species would be present on the project site?

17 MR. HUNT: Sure. These are all birds, obviously,  
18 that forage over wide areas, and they're opportunists. All  
19 birds are opportunists, and this -- I'm basing that on the  
20 presence of suitable foraging habitat on the project site  
21 itself. So these things can easily access that habitat if  
22 they're in the general area.

23 MS. ROESSLER: And --

24 MR. HUNT: And I should say, they have been noted  
25 in the general area. There are records of all of those

1 species in the area.

2 MS. ROESSLER: So is there a connectivity between  
3 the project site and the surrounding area where these species  
4 are known to forage.

5 MR. HUNT: Yes, absolutely. The project site is  
6 embedded in habitats that these things are foraging in.

7 MS. ROESSLER: And is that documented in literature  
8 or how would one know that. What did you base your findings  
9 on?

10 MR. HUNT: I'm basing it on a visual observation of  
11 the site itself, being around the project site itself and  
12 noting suitable habitat offsite. And then looking at  
13 conditions when I was there through the fence, that appears  
14 to be suitable habitat onsite too.

15 MS. ROESSLER: Thank you. In your opinion, and  
16 based on your 30 years of experience, working on the habitats  
17 and viewing the habitats around this site, is it acceptable  
18 methodology for an agency or a biologist to abstain from  
19 doing focused surveys to detect these special status species  
20 on a project site like this?

21 MR. HUNT: No. I think it's inappropriate to just  
22 do reconnaissance level surveys. Even though they visited  
23 the site several times, the most -- it appeared to me that  
24 the most time they spent out there was in terms of vegetation  
25 mapping and wetland delineations, very little time spent



1 doing wildlife surveys.

2 I think again, you need to look at the context of  
3 the site. There are sites that biologists visit where a  
4 reconnaissance level survey would be appropriate. It's not  
5 appropriate in this case. you've got to take the larger  
6 context of the site itself, embedded again, and I've got to  
7 keep coming back to this point, of one of the most sensitive  
8 habitats in California.

9 MS. ROESSLER: So it sounds like even based on an  
10 objective biologist's judgment, doing a reconnaissance survey  
11 on this and being aware of the site surrounding area, where  
12 it has document sensitive and rare habitats that you just  
13 testified to, would that be sufficient to just abstain from  
14 doing further studies or surveys for these species?

15 MR. HUNT: No, I don't think so. Again, you've got  
16 this context of the species are known from the area  
17 immediately surrounding the project site. I'd say there's a  
18 moderate to high likelihood of one or more of these species  
19 occurring onsite itself. And to push off doing focused  
20 surveys for in a preconstruction context or whatever, is I  
21 think an error. Because you've got one or more of these  
22 species onsite that should be identified in the habitat,  
23 occupied habitat, identified to either modify the project  
24 upfront or not wait until the bulldozers are ready to start  
25 construction.

1 MS. ROESSLER: Thank you. Do you have an  
2 understanding of what is meant by the term "environmentally  
3 sensitive habitat area"?

4 MR. HUNT: Yes.

5 MS. ROESSLER: And what is your understanding of  
6 that term?

7 MR. HUNT: My understanding that it's a habitat  
8 that is maybe itself geographically rare or -- and I say or -  
9 - supports special status wildlife species or other special  
10 status plants.

11 MS. ROESSLER: And in your years of consulting  
12 experience, have you done work identifying environmentally  
13 sensitive habitat areas for their clients?

14 MR. HUNT: Yes, I have, on a number of occasions.

15 MS. ROESSLER: Is the 2.03 acre wetland on the  
16 project site an environmentally sensitive habitat area?

17 MR. HUNT: I'd say, yes it is.

18 MS. ROESSLER: Can you tell us why?

19 MR. HUNT: Yes. Number one, it supports  
20 hydrophytic vegetation. That in my mind makes it, and in the  
21 mind of state resource agencies, makes it a one-parameter  
22 wetland. It's in a coastal dune context. And the vegetation  
23 that is there, although it's disturbed and they have non-  
24 native species intermixed in it, it provides suitable habitat  
25 for one or more special status species such as two-striped

1 garter snakes.

2 MS. ROESSLER: Great. Thank you.

3 MR. CARROLL: But just a point of clarification,  
4 you just stated it provides suitable habitat for certain  
5 species. I believe you were referring to the project site,  
6 but so again just for clarification, the basis for that  
7 conclusion is?

8 MS. ROESSLER: All right, please don't put words --  
9 you can have redirect. I asked a specific question, what are  
10 the -- and he's answering about the features on the project  
11 site if you're trying to clarify. I'd prefer you not testify  
12 or restate what his testimony is.

13 MR. CARROLL: Let me restate that. I object to the  
14 previous question to the extent that it is asking him about  
15 conditions on the project site, which suggest that he has  
16 firsthand knowledge of the conditions on the project site,  
17 which he has testified that he does not.

18 MS. ROESSLER: No, that's not what he testified to.  
19 He testified he's not actually physically been on the project  
20 site in the same way that your biologist, Love, testified  
21 she'd not physically been on offsite, alternative sites.  
22 However, she was still able to give an extensive opinion  
23 about what her thoughts were on the environmental  
24 constraints.

25 Here, it is certainly sufficient with a biologist

1 with 30 years of experience surveying in the surrounding  
2 area. And he does a literature review as well, so if you  
3 want to get to that --

4 MR. CARROLL: I don't disagree with that, but I  
5 think that the previous question didn't acknowledge that.  
6 I'll withdraw the objection.

7 MS. ROESSLER: Thank you. So Mr. Hunt, I believe  
8 you were describing why you thought the two-acre wetland  
9 onsite was an environmentally sensitive habitat area?

10 MR. HUNT: Yes, I mentioned the two-striped garter  
11 snake. And this may get to the objection, I found that  
12 species within a couple hundred feet of the northern boundary  
13 of the site and these species have a home range of several  
14 acres. That is a cruising area that they are foraging in,  
15 there may be core areas that are more suitable for them, but  
16 they forage over a fairly large area.

17 And that home range could easily encompass the  
18 project site itself. And when you have a situation of  
19 hydrophytic vegetation occurring there are other species that  
20 are common general species, which Ms. Love testified to  
21 yesterday, the site supporting common general species.  
22 Things like western toad and specific tree frogs, these are  
23 food items for two-striped garter snakes. These animals are,  
24 you know, cruising around looking for food, so that's why I'm  
25 saying that is ESHA, because that could be suitable habitat

1 for that species.

2 MS. ROESSLER: Thank you. So let's move on to the  
3 dune swale wetland located on the site that you testified to  
4 earlier. Do you believe that is an environmentally sensitive  
5 habitat area?

6 MR. HUNT: I do.

7 MS. ROESSLER: Can you explain why?

8 MR. HUNT: Sure. Again, I think what is happening  
9 here is the site, albeit disturbed, is continually being re-  
10 colonized by vegetation, native vegetation from the outside.  
11 And the point .5 --

12 MR. CARROLL: I object to the questions that are  
13 asking the witness to characterize what is occurring on the  
14 project site when he has testified that he has not been on  
15 the project site. So if the witness has testified that he  
16 has not been on the project site, he is incapable of  
17 responding to the question that is essentially asking him as  
18 to whether or not re-colonization is occurring on the project  
19 site.

20 MS. ROESSLER: No, he's not talking about -- first  
21 of all, he's looked at photographs. He's been in that site  
22 and around it for 30 years. If you actually want to make an  
23 objection to his qualifications to render an opinion on that  
24 site, that's one thing. But to interrupt the testimony to  
25 make an opinion and a legal conclusion that he's not

1 qualified is different.

2 He's testified he has reviewed the information.  
3 He's looked at photographs. He's been on and around the  
4 site. He has looked through a transparent physical barrier  
5 around the site. He's conducted several studies around the  
6 site and he's relied on literature.

7 And like I said it's much more than your biologist  
8 did yesterday to provide testimony on to the unsuitability of  
9 two offsite alternatives for this project.

10 MC Okay. Well, there was an opportunity to cross  
11 examine that witness yesterday, so I'm not sure of the  
12 relevancy of that. I'm not objecting or questioning his  
13 qualifications in any way, and I appreciate the explanations  
14 that you provide every time that I object as to what he is  
15 basing his conclusions on. But unfortunately very quickly  
16 thereafter the questions stray in to asking him to testify  
17 about what's happening on the project site. When he's  
18 testified that he has no basis for providing information as  
19 to what is happening on the project site.

20 MS. ROESSLER: I never asked him what happened on  
21 the project site. I'm just asking him about his opinion  
22 about what exists on the project site.

23 MR. CARROLL: Okay. But the objection --

24 HEARING OFFICER KRAMER: Okay. But the objection's  
25 overruled and Mr. Carroll you're entitled as to inquire as to

1 the underlying observations and information upon which he  
2 based his opinion in your cross.

3 MS. ROESSLER: Thank you.

4 So sorry, to get back to your opinion on the half-  
5 acre dune swale wetland onsite, and whether or not it's an  
6 environmentally sensitive habitat area.

7 MR. CARROLL: I object to the question on the basis  
8 that it assumes facts not in evidence. There has been no  
9 evidence to support --

10 MS. ROESSLER: His testimony, I'm referring to his  
11 testimony.

12 MR. CARROLL: All right, so you're asking him based  
13 on his assumption that there's a dune swale wetland on the  
14 site?

15 MS. ROESSLER: Yes. I'm trying to return us back  
16 before the interruption where we were in the testimony on his  
17 dune swale wetland testimony, which I stated a few times if  
18 we're not clear. Are we clear now?

19 MR. CARROLL: Well, the question was premised on  
20 the fact that there is a dune swale wetland on the site. And  
21 I would submit that there is no evidence that's been  
22 submitted there is a dune swale wetland on the site. So if  
23 you want to ask him a question that is premised on an  
24 assumption that there's a dune swale wetland on the site, I  
25 don't have any objection to that.

1 MS. ROESSLER: There's actually three pieces of  
2 evidence that there's a dune swale wetland on the site: the  
3 Coastal Commission Biologist Exhibit 4030, the CDFW letter,  
4 and Dr. Hunt's testimony.

5 I'm asking him in this specific instance, about his  
6 testimony --

7 MR. CARROLL: I believe he --

8 MS. ROESSLER: -- that there is a dune swale  
9 wetland onsite, but I don't think we need to go into arguing  
10 the evidence. I'm pretty sure we can save that for briefing.

11 MR. CARROLL: Okay. Well, that was additional  
12 mischaracterization of the evidence. There is no indication  
13 in the report from the Coastal Commission biologist that  
14 there's a dune swale wetland on the site.

15 MS. ROESSLER: Mr. Kramer, do we have an objection  
16 to rule on? Or I just feel like there's unnecessary  
17 interruptions to this to keep restating your conclusions that  
18 my witness hasn't been onsite or to argue about the existence  
19 of evidence. I'm trying to solicit testimony.

20 HEARING OFFICER KRAMER: I've forgotten the  
21 question at this point, so it's not --

22 MS. ROESSLER: Exactly.

23 MR. CARROLL: I'll withdraw the objection.

24 MS. ROESSLER: Thank you.

25 So based on your testimony that the .52 acre dune



1 swale wetland is located on the project site, do you believe  
2 that it's environmentally sensitive habitat area?

3 MR. HUNT: I do.

4 MS. ROESSLER: And can you explain why --

5 MR. CARROLL: Again --

6 MS. ROESSLER: -- the basis for your conclusions?

7 MR. HUNT: Yes. The coyote brush, coyote bush, and  
8 mule-fat, these phreatophytic plants, are not covering the  
9 site. They're in a particular area, and which to a  
10 biologist, indicates there's something about that area that  
11 is favorable to those species.

12 Immediately offsite, those species occur in the  
13 situation where they can access groundwater. Do that in a  
14 swale situation, an area of deflation in the dunes where the  
15 roots can get down to the groundwater, or potentially on the  
16 project site itself where the dunes have been scraped away  
17 again they can access the groundwater in that particular  
18 area.

19 They also provide suitable habitat for things like  
20 legless lizards, Globose Dune Beetles, they found that in  
21 coyote bush scrub. And so, in my mind, that's why I am  
22 basing -- I'm saying that's ESHA.

23 MS. ROESSLER: So is it fair to say that the .52  
24 acre dune swale wetland is an environmentally sensitive  
25 habitat area, because of its ability to support rare species

1 and because the dune swale area itself is a rare habitat?

2 MR. HUNT: Yes, both.

3 MS. ROESSLER: So is it accurate to say that 2.55  
4 acres of the 3-acre project site is covered by wetlands that  
5 can also be classified as environmentally sensitive habitat  
6 areas?

7 MR. HUNT: Yes, it is.

8 MS. ROESSLER: And based on the likely presence of  
9 rare and sensitive species that you testified to, and their  
10 habitat onsite, is it your opinion that the remaining half  
11 acre is also an environmentally sensitive habitat area?

12 MR. HUNT: It is. This area also supports coyote  
13 bush and again for the same reasons that I just testified to,  
14 a potential for a special status species to be there.

15 MS. ROESSLER: Thank you.

16 MS. ROESSLER: And to your knowledge, does the FSA  
17 identify environmentally sensitive habitat areas onsite?

18 MR. HUNT: Yes, it does. I'm sorry, the FSA, I was  
19 thinking of the other thing.

20 MS. ROESSLER: I was going to say --

21 MR. HUNT: No, it doesn't. The FSA has a footnote.

22 MS. ROESSLER: The FSA?

23 MR. HUNT: Yes. The FSA has a footnote in it that  
24 states that although they agree that there's a one parameter  
25 wetland onsite, they do not consider it ESHA. That

1 conclusion is based on the finding of the AECOM biologists,  
2 which are based on reconnaissance level surveys, not focused  
3 surveys.

4 MS. WILLIS: I would move to object. I don't  
5 believe that's the FSA that he's referring to. It's the  
6 Coastal Commission report.

7 MR. HUNT: Oh, I'm sorry. Okay. I'm getting my  
8 documents mixed up here.

9 MS. ROESSLER: It's okay. It is day four, and we  
10 were here late. And thank you.

11 So just to clarify, I think the question was does  
12 the FSA identify ESHA onsite, which you testified that it did  
13 not. My follow-up was why do you think the FSA concluded  
14 there is no environmentally sensitive habitat areas onsite?

15 MR. HUNT: Right, they said because they didn't  
16 find special status species in that particular area. And the  
17 habitat itself, was in their opinion, not particularly  
18 valuable.

19 MS. ROESSLER: And can you describe, in your  
20 opinion, did they use appropriate methodology to identify  
21 environmentally sensitive habitat areas on the project site?  
22 By "they," I'm referring to the FSA staff.

23 MR. HUNT: No, they didn't. Again, they're based  
24 on reconnaissance level surveys, not focused surveys.

25 MS. ROESSLER: Thank you. Now, to your knowledge,

1 does the Coastal Commission's 30143(d) report identify  
2 environmentally sensitive habitat onsite?

3 MR. HUNT: It does not.

4 MS. ROESSLER: And can you tell us what is your  
5 opinion of the methodology employed by the Coastal  
6 Commission, for that report, to your knowledge?

7 MR. HUNT: Yeah, the Coastal Commission was based  
8 again on site visits, reconnaissance level surveys. They do  
9 state that there is a one-parameter wetland areas on site.  
10 But they don't consider it ESHA, because it doesn't support  
11 special status species. And again, they're basing that on  
12 reconnaissance level surveys.

13 MS. ROESSLER: Okay. To your knowledge, does the  
14 Coastal Commission's biologist, who did the evaluation for  
15 that report, did she do any special status or focused surveys  
16 for special status species?

17 MR. HUNT: Not to my knowledge.

18 MS. ROESSLER: Based on your knowledge, did the  
19 Coastal Commission's biologist, who did the evaluation for  
20 that report, review the entire site for environmentally  
21 sensitive habitat areas with species?

22 MR. CARROLL: Could you state that question again?

23 MS. ROESSLER: Sure. Based on your knowledge, did  
24 the Coastal Commission's biologist, who did the evaluation  
25 for the Coastal Commission report --

1 MR. CARROLL: I'm going to object to --

2 MS. ROESSLER: -- review the entire site?

3 MR. CARROLL: I apologize for interrupting. Object  
4 to the question, based on lack of foundation. There hasn't  
5 been any testimony presented that the witness is familiar  
6 with the studies that were conducted by the Coastal  
7 Commission biologist.

8 MS. ROESSLER: Okay. All right, fair enough. Are  
9 you -- in order to establish foundation, are you familiar  
10 with Exhibit 4030, Jonna Engel's email about the scope of the  
11 work she did for the Coastal Commission's report?

12 MR. HUNT: Yes, I am.

13 MS. ROESSLER: And is it based on that information  
14 that your opinion is that the Coastal Commission's biologist  
15 did not conduct a review for ESHA for the entire project  
16 site?

17 MR. HUNT: That's right. She did not.

18 MS. ROESSLER: Thank you. Moving on here, so to  
19 your knowledge, did the applicant's biologist, Ms. Love, and  
20 the FSA rely on the California Natural Diversity Database to  
21 determine that species were absent from the project site?

22 MR. HUNT: Yes they did.

23 MS. ROESSLER: Based on your experience, is that a  
24 reliable methodology to use to determine absence?

25 MR. HUNT: No, it's not. The Natural Diversity

1 Database is maintained by the California Department of Fish  
2 and Wildlife. And it's based on biologists sending in  
3 observations of special status species, but it is not an  
4 exhaustive list of a presence of special status species in  
5 any one area. And in fact, there's a disclaimer on the CNDD  
6 website that says specifically that simply, because you do  
7 not see a particular species for the area that you're looking  
8 at, does not imply the species is not there. So it's not a  
9 substitute for doing surveys.

10 MS. ROESSLER: Thank you. And is the disclaimer  
11 you're referring to part of your written testimony you  
12 submitted that you're referring to, the disclaimer for the  
13 California Natural Diversity Database?

14 MR. HUNT: Yes.

15 MS. ROESSLER: Thank you. In preparing for your  
16 testimony today, and forgive me if you've already answered  
17 this, did you review the description of the project's  
18 impacts, the biological resources in the FSA?

19 MR. HUNT: Yes, I did.

20 MS. ROESSLER: Do you believe that the FSA  
21 adequately discloses the project's impacts to biological  
22 resources?

23 MR. HUNT: No, I don't.

24 MS. ROESSLER: Can you tell us why?

25 MR. HUNT: I don't think they've adequately

1 characterized environmentally sensitive habitat areas that  
2 exist on the site, or the potential for special status  
3 species to be onsite itself.

4 MS. ROESSLER: And how will the project impact  
5 those onsite environmentally ESHA -- and species that you've  
6 identified in your testimony?

7 MR. HUNT: The project would remove ESHA, and in  
8 doing so would eliminate those species from being onsite. So  
9 it would be direct mortality.

10 MS. ROESSLER: Direct mortality?

11 MR. HUNT: Yeah.

12 MS. ROESSLER: So just to wrap up here on this. So  
13 because the FSA does not disclose the destruction of ESHA and  
14 special status species that you identified in your testimony,  
15 and the dune swale wetland, it does not adequately disclose  
16 the project's impacts to biological resources?

17 MR. HUNT: No, it doesn't.

18 MS. ROESSLER: Thank you. In preparing for your  
19 testimony today, did you review the biological mitigation  
20 conditions proposed by the staff in the FSA?

21 MR. HUNT: Yes, I did.

22 MS. ROESSLER: And do you believe that those  
23 biological mitigation conditions in the FSA adequately avoid  
24 or mitigate the direct impacts of the project that you just  
25 mentioned?

1 MR. HUNT: No, I don't. Again, they're based on  
2 reconnaissance level surveys, pushing off any focused surveys  
3 until right before the habitat is going to be removed. So in  
4 that case, they're inadequate.

5 MS. ROESSLER: So I think you're referring to  
6 pushing off, meaning the mitigation?

7 MR. HUNT: Delaying.

8 MS. ROESSLER: Because they're not identifying the  
9 special status species in the focused surveys, they are not  
10 able to mitigate or improve or move the project in a manner  
11 that could avoid them. Is that correct?

12 MR. HUNT: Right. Right, so they would not know  
13 where the species occur onsite, or if they occur onsite even.  
14 And therefore the mitigation wouldn't be sufficient.

15 MS. ROESSLER: Thank you. Are you familiar with  
16 biomitigation condition 9, the wetland impact mitigation  
17 plan?

18 MR. HUNT: Yes.

19 MS. ROESSLER: And do you believe that that  
20 condition adequately avoids and/or appropriately mitigates  
21 the direct impacts of the project?

22 MR. HUNT: No, I don't. Do you want me to expand  
23 on that?

24 MS. ROESSLER: Can you explain why it doesn't?

25 MR. HUNT: Sure. It's because the -- my primary



1 objection is not only loss of onsite wetlands, but it doesn't  
2 adequately mitigate onsite, in a compensatory manner. It  
3 talks about a nebulous compensation offsite in the general  
4 area or in the larger watershed of Santa Clara River or other  
5 areas around the site. And so it's not really characterizing  
6 how valuable these onsite areas are.

7 MS. ROESSLER: Thank you. In your experience is  
8 wetland mitigation, I believe, successful very often?

9 MR. HUNT: Yes, it can be.

10 MS. ROESSLER: It can be at, at what ratios would  
11 you think is appropriate for wetlands mitigation?

12 MR. HUNT: Well --

13 MS. ROESSLER: In this particular context?

14 MR. HUNT: Well, I think everyone knows wetlands in  
15 California have been drastically reduced, coastal dune  
16 wetlands even more so, by probably 95, 98 percent. So state  
17 resource protection agencies have put mitigation ratios at a  
18 higher than a 1 to 1 or even 1.5 to 1 ratio. Typically,  
19 they're going for 3 to 1, 4 to 1 or higher ratios, to try to  
20 compensate and make sure we have no net loss of these  
21 wetlands.

22 MS. ROESSLER: And in your opinion, does  
23 biomitigation condition 9 establish a plan for successful  
24 wetland mitigation?

25 MR. HUNT: No, it doesn't.

1 MS. ROESSLER: I believe you heard testimony  
2 yesterday, and are aware of, the FSA currently establishes 4  
3 to 1 and the applicant is suggesting -- and its expert  
4 testified yesterday to a lower level. I believe 1 to 1 or  
5 1.5 to 1. Can you tell us what your opinion is of whether  
6 that's appropriate?

7 MR. HUNT: I don't think it should be reduced. For  
8 one thing, again I'll go back to the idea of offsite  
9 mitigation for onsite loss of wetlands.

10 The animals that are using that wetland onsite as  
11 well as animals that may be dispersing onto the site, that  
12 site is lost, okay? So that the animals that are offsite are  
13 no longer able to access that habitat. And to reduce the  
14 mitigation ratio down from a 4 to 1 to a 1 to 1 or 1.5 to 1,  
15 I think is inappropriate.

16 MS. ROESSLER: Thank you. Are you familiar with  
17 the biomitigation measures in the FSA for indirect impacts to  
18 environmentally sensitive habitat areas and wildlife in areas  
19 adjacent to the project site?

20 MR. HUNT: Yes, I am.

21 MS. ROESSLER: Do you have an opinion as to whether  
22 those mitigation for indirect impacts to environmentally  
23 sensitive habitat areas and wildlife species adjacent to the  
24 site are sufficient?

25 MR. HUNT: No, I don't think so. They recommend a

1 number of mitigation measures to try to mitigate for noise,  
2 lighting, human presence, that sort of thing. But these are  
3 impacts that are going to be going on in very sensitive  
4 habitat area the life of the project itself. And I don't  
5 think those measures are adequate.

6 MS. ROESSLER: So, in your opinion will the project  
7 have a significant impact to biological resources?

8 MR. HUNT: I think it will.

9 MS. ROESSLER: And can you tell us why?

10 MR. HUNT: Sure, again I'm not sounding like a  
11 broken record here, but you've got the project site situated  
12 in an extremely sensitive coastal dune environment. There  
13 are a number of special status species occur here.

14 You know, when a biologist typically goes out to a  
15 site, we're lucky if we find one or two special status  
16 species in the general area. This site has ten to twelve  
17 special status species including endangered federally and  
18 state-endangered species, fully protected species that are  
19 known from the immediate vicinity of the project site itself.

20 So for all of those reasons including the amount of  
21 mitigations and the types of mitigation that are being  
22 proposed I think the project is going to have a significant  
23 impact on these resources.

24 MS. ROESSLER: Thank you. Okay. So just a few  
25 more questions, we're almost done. Did you review the FSA's

1 description of the outfall removal and discharge to  
2 wastewater to the Edison Canal?

3 MR. HUNT: Yes, I did.

4 MS. ROESSLER: And do you have an opinion as to  
5 whether the removal of the outfall may have an effect on any  
6 federally endangered species?

7 MR. HUNT: Yes, it could affect California Least  
8 Terns and Western Snowy Plovers as well as burrowing owls.

9 MR. HUNT: Can I --

10 MS. ROESSLER: Describe how the species would be  
11 affected?

12 MR. HUNT: How, yes. The species would be affected  
13 during removal. That is demolition of the site itself, both  
14 by noise, human presence associated with removing all of  
15 those elements. Yes, that's it.

16 MS. ROESSLER: All right, thank you. Have you  
17 reviewed the FSA's proposed mitigation measures, to mitigate  
18 the effects of the outfall removal on the least tern?

19 MR. HUNT: Yes, I have.

20 MS. ROESSLER: And do you believe those conditions  
21 are sufficient to protect the least tern from any of the  
22 project's effects?

23 Sorry, did I confuse you? I can restate that.

24 MR. HUNT: Sure. Go ahead and restate that,  
25 please?

1 MS. ROESSLER: Okay. Sorry. I think I merged a  
2 couple of things. Do you believe the FSA's proposed  
3 conditions are sufficient to ensure that the outfall removal  
4 would not have any effect on the least tern?

5 MR. HUNT: No, I think it may affect it. It could  
6 disrupt birds that are adjacent to the work area. I can  
7 envision a situation where even if they fenced off the work  
8 area birds could enter the work area itself. This is a  
9 fully-protected species. That means the project can have no  
10 effect on the species, so I think it may affect it.

11 MS. ROESSLER: And do any of these species risk  
12 being crushed or killed in this process?

13 MR. HUNT: Not adult birds, but certainly nestlings  
14 or eggs certainly could.

15 MS. ROESSLER: So the nests or eggs of the  
16 federally-endangered least tern, for example, could be  
17 crushed or destroyed by the outfall removal? Is that --

18 MR. HUNT: Potentially, yes. If they occurred in  
19 the area.

20 MS. ROESSLER: Do you have an opinion as to whether  
21 any special status species may use the Edison Canal as  
22 foraging habitat?

23 MR. HUNT: As foraging habitat? Yes, it's  
24 possible. In fact, there have been observations of  
25 California least terns using the Edison Canal as foraging

1 habitat.

2 MS. ROESSLER: And what do you base that on, the  
3 FSA reports literature which is the basis for your  
4 conclusion?

5 MR. HUNT: Yeah, that's based on the FSA and also  
6 Ventura Audubon Society information, observations of birds  
7 flying over that water body.

8 MS. ROESSLER: Thank you. So the FSA also  
9 concludes and it is consistent with your testimony that the  
10 California least tern uses the Edison Canal as foraging  
11 habitat?

12 MR. HUNT: Yes.

13 MS. ROESSLER: Do you have an opinion as to the  
14 whether the wastewater and storm water discharges into the  
15 Edison Canal from the project, may have an effect on the  
16 California least terns foraging in the canal?

17 MR. HUNT: Well, based on statements made  
18 yesterday, and if we take up that line of reasoning again, I  
19 have to agree that it involves a series of suppositions to  
20 reach that conclusion. And that would be the supposition  
21 that you have sufficient freshwater inputs into the canal  
22 from the relocated outfall to affect the salinity, which  
23 would then possibly affect the prey species on the California  
24 least terns subsist. And that that in turn, would affect  
25 their foraging behavior. That is conceivable from a

1 biological standpoint.

2 MS. ROESSLER: Thank you. That's fair. And do you  
3 have an opinion as to whether the wastewater and stormwater  
4 discharges into the Edison Canal from the project may have an  
5 effect on any other federally endangered species?

6 MR. HUNT: Yes. I think it may affect the  
7 tidewater gobies.

8 MS. ROESSLER: And what is the nature of the  
9 potential effect on the tidewater goby?

10 MR. HUNT: Well, this is an interesting species.  
11 It typically occurs in low salinity water, but it can survive  
12 in a wide variety of salinities. And one of the features of  
13 the life history of this thing, or the demographics of this  
14 fish, is that these populations are distributed in estuaries  
15 up and down the coast.

16 And in some of these locations, these populations  
17 go extinct. Biologists go back out a year later, two years  
18 later, and the population has been reestablished by some  
19 means. What they think is that during periods of high  
20 freshwater inputs, that is during the rainy season when  
21 rivers and storm drains or whatever are dumping a lot of  
22 fresh water into the near-shore environment, that these  
23 animals are dispersing from established populations and  
24 moving down the coast.

25 In our particular area, under consideration here,

1 we have known populations in the Santa Clara River Estuary  
2 and in the Ormond Beach area J Street Drain. So Edison Canal  
3 sits in between those two locations and it's entirely  
4 possible that gobies may enter the canal itself periodically.

5 MS. ROESSLER: Thank you. So is it fair to say  
6 that the discharges in the Edison Canal may affect two  
7 federally-endangered species - the tidewater goby and the  
8 least tern?

9 MR. HUNT: Yes, it could.

10 MS. ROESSLER: And to your knowledge, has any  
11 consultation process been initiated under the Endangered  
12 Species Act?

13 MR. HUNT: No, it hasn't.

14 MS. ROESSLER: For these species?

15 MR. HUNT: No, it has not.

16 MS. ROESSLER: Thank you.

17 A couple of questions here?

18 MR. SMITH: Yeah, Mr. Hunt, just to make sure we're  
19 clear on a couple of things, could you just describe for us  
20 again briefly, the scope of the documents that you've  
21 reviewed to form the factual basis for your testimony today?

22 MR. HUNT: Sure. It's a laundry list of documents  
23 here. From the CEC looking at the PSA and the FSA, the  
24 pertinent sections, the California Coastal Commission  
25 addendum to the project, the applicant's documents -- that is



1 the application for certification and Ms. Love's statements,  
2 her testimony and rebuttal. And then various documents such  
3 as Fish and Wildlife Services letter, the U.S. Fish and  
4 Wildlife Service letter, Ventura Audubon Society, as well as  
5 other supporting documents such as the Tidewater Goby  
6 Recovery Plan, other scientific literature.

7 MR. SMITH: And to the extent that there are other  
8 documents cited in your opening or your rebuttal testimony  
9 that you did not just mention, you also cited and relied upon  
10 those documents as support in the testimony, correct?

11 MR. HUNT: Yes, I may have forgotten a few. The  
12 Habitat Restoration Plan for the outfall removal, other  
13 documents --

14 MR. SMITH: And you have been in --

15 MR. HUNT: -- that are in my testimony.

16 MR. SMITH: Thank you.

17 MR. CARROLL: I'm sorry, Mr. Smith, to interrupt,  
18 but if you're moving off from that question I just wanted to  
19 get clarification before you did. So there was --

20 MR. SMITH: Mike, you can do it on rebuttal. I  
21 don't think you should be telling me what questions to ask on  
22 direct.

23 MR. CARROLL: Fine.

24 MR. SMITH: I mean, if there's an objection to a  
25 question I'm about to ask for, you can object but --

1 MR. CARROLL: There was a reference to the addendum  
2 to the California Coastal Commission report. All I was going  
3 to go ask for was clarification on what that document was,  
4 but I'll ask in rebuttal.

5 MR. SMITH: Okay. Thank you, Mr. Carroll. And I'm  
6 sorry that I addressed you as Mike. I didn't mean any  
7 disrespect. I'm just casual.

8 So Mr. Hunt, let's see where was I? And so you've  
9 been a consulting wildlife biologist for how long now?

10 MR. HUNT: Since 1989.

11 MR. SMITH: And would you say in your professional  
12 experience is it normal practice for biologists to render an  
13 opinion on the conditions of a particular location based in  
14 part on a literature review?

15 MR. HUNT: Yes, it is. Um-hmm.

16 MR. CARROLL: I'm sorry, I didn't hear the  
17 question.

18 MR. SMITH: It's in the transcript and I already  
19 asked the question, so.

20 MR. CARROLL: Look, I mean -- fine.

21 MR. SMITH: Mr. Hunt, and you say you've had how  
22 many years of experience studying the coastal dune  
23 environment in the area surrounding the project site?

24 MS. WILLIS: Mr. Kramer, I need to object.

25 MR. CARROLL: We're not raising any objections to

1 his qualifications. I'm not sure what the point of this is.

2 MS. WILLIS: I actually have notes from the very  
3 first moments that he testified to all of the documents he  
4 reviewed, his qualifications, the number of years he's  
5 worked. I don't think we need to go through this all one  
6 more time.

7 MR. SMITH: Okay. I'll withdraw.

8 MS. WILLIS: We have no objection to his  
9 qualifications.

10 MR. SMITH: Okay. I'm sorry, I just thought from  
11 some of the commentary that there was going to be questioning  
12 about this on rebuttal and I just wanted to make sure a few  
13 things were clear, maybe they weren't heard by counsel. So  
14 I'll withdraw that question. I'm just going to ask a couple  
15 more brief things.

16 You testified that you conducted focused surveys  
17 for four terrestrial wildlife species, correct?

18 MR. HUNT: Yes.

19 MR. SMITH: And how close to the project site did  
20 those focused surveys take you?

21 MR. HUNT: Yes, within a few feet of the site long  
22 fence.

23 MR. SMITH: And how close to the project fence have  
24 you actually found populations of the species you were  
25 surveying for?

1 MR. HUNT: Well, for example, two-striped garter  
2 snakes, I found them within 200 feet of the fence. Legless  
3 lizards within 25 or 30 feet of the fence, Globose Dune  
4 Beetles, within 10 or 15 feet of the fence.

5 MR. SMITH: And you were able to see through the  
6 fence as you stood adjacent to the project site, correct?

7 MR. HUNT: Yes.

8 MR. SMITH: And have you also looked at aerial  
9 photographs of the project site?

10 MR. HUNT: I have.

11 MR. SMITH: Okay. Thank you, no further questions.

12 HEARING OFFICER KRAMER: Okay. Mr. Carroll?

13 CROSS EXAMINATION BY APPLICANT

14 MR. CARROLL: Thank you.

15 Mr. Hunt, so just to pick up on the clarification I  
16 was seeking. Well, first of all I guess we can take the  
17 image off the screen. I thought that you were going to refer  
18 to that, but I assume that at this point we can take it off?  
19 Oh, it's off. Thank you.

20 Just to get clarification on the documents on which  
21 you relied, you mentioned the PSA, the FSA, which I  
22 understand. You mentioned the Coastal Commission addendum to  
23 the project and so I just want to make sure I understand it.  
24 Is that the attachment prepared by Dr. Engel to the Coastal  
25 Commission's 30413(d) report?

1 MR. CARROLL: No, I'm referring to the 30143(d)  
2 report itself.

3 MS. ROESSLER: He didn't testify as to the  
4 addendum. He was just referring to the report itself.

5 MR. CARROLL: Of this, so he --

6 MS. ROESSLER: Is that what you asked?

7 MR. CARROLL: Right, there was a reference to the  
8 Coastal Commission addendum. So it's the entirety of the  
9 Coastal Commission report, is that --

10 MR. HUNT: Yes, that's right.

11 MR. CARROLL: Okay.

12 And then you also mentioned you U.S. Fish and  
13 Wildlife Service letter and I believe -- well, you mentioned  
14 the U.S. Fish and Wildlife Service letter -- what's the date  
15 of that letter?

16 MR. HUNT: I don't remember the exact date.

17 MR. CARROLL: Okay. One last question, were you  
18 referring to specific pieces of correspondence or were you  
19 referring generally to information from U.S. Fish and  
20 Wildlife Service?

21 MR. HUNT: No, it was a letter specifically in  
22 relation to this project.

23 MR. CARROLL: Okay. And so I believe I know which  
24 one you're referring to.

25 And did you also refer to a communication from the

1 California Department of Fish and Wildlife?

2 MR. HUNT: Yes, specific to this project.

3 MR. CARROLL: Okay. Do you know, were those the --  
4 the comments of those two agencies on the Preliminary Staff  
5 Assessment -- do you know if those were the documents that  
6 you're referring to?

7 MR. HUNT: I believe it is.

8 MR. CARROLL: Okay. Thank you.

9 MS. ROESSLER: It's the document cited to in his  
10 testimony, his written testimony --

11 MR. CARROLL: Okay. Thank you for the  
12 clarification.

13 MS. ROESSLER: -- as well, if you need the exhibit  
14 numbers.

15 MR. CARROLL: Thank you. I assumed it was  
16 important since Mr. Smith was reiterating, so I wanted to  
17 make sure that I understood what the documents were.

18 Could we put up on the screen the image of the  
19 project site that the CEC staff docketed last evening?

20 HEARING OFFICER KRAMER: There were two of them, so  
21 do you have a preference?

22 MR. CARROLL: Can we see the other? All right, I  
23 think the previous one is probably more helpful, at least at  
24 this point.

25 Mr. Hunt, you indicated and I appreciate your

1 candor about the fact that you have not been on the project  
2 site. You indicated further in your testimony that your  
3 inability to be on the project site would not affect your  
4 analysis. So is it your testimony that it's inconceivable  
5 that any information that you might gather or that one might  
6 gather by virtue of being physically on the project site,  
7 would alter your analysis or conclusions?

8 MS. ROESSLER: Objection. Are you restating -- you  
9 seem to be saying -- I never recall him saying the word  
10 "inconceivable." Or can you restate your question?

11 MR. CARROLL: Well, he didn't say inconceivable.  
12 That was my word.

13 MS. ROESSLER: Okay.

14 MR. CARROLL: I believe - And I'm paraphrasing, I  
15 believe that he was asked a question would his ability to be  
16 on the project site affect his analysis. And the answer to  
17 the question was no. And so my question is, are you saying  
18 that it is beyond the realm of possibility or inconceivable  
19 that information that one might gather as a result of being  
20 on the project site, or that you might gather as a result of  
21 being on the project site, could alter your analysis and  
22 conclusions?

23 MS. ROESSLER: Sorry, the question I asked him was  
24 whether it negatively impacted his analysis?

25 MR. CARROLL: Please disregard my reference to the

1 previous question.

2 My question is, is it inconceivable that, were you  
3 to have been on the project site physically and able to  
4 gather information, that the ability to do so and the  
5 information you might have gathered could have changed your  
6 analysis as presented here and in your prepared testimony?

7 MR. HUNT: Yes, it might change it on the  
8 standpoint of minor points, but it would not change my major  
9 conclusions.

10 And, so, for example, characterizations of soil  
11 density across the site, I might get a better idea of where  
12 those areas are of compacted soils, but I know that there are  
13 places on the site where soils are not compacted and could  
14 harbor some special status species.

15 MR. CARROLL: And is that sort of information, like  
16 what you just referred to in terms of soil, is that valuable  
17 information in conducting these sorts of surveys?

18 MR. HUNT: Yes, it is.

19 MR. CARROLL: And is that the sort of information  
20 that you would typically collect in conducting an evaluation  
21 like this?

22 MR. HUNT: Yes, I would.

23 MR. CARROLL: And does the inability to collect  
24 that information inhibit at all your ability to develop  
25 analysis and render conclusions with respect to the



1 conditions of the project site?

2 MR. HUNT: No. Again, it might alter it in a minor  
3 sense, but it doesn't change my general conclusions.

4 MR. CARROLL: Well, I didn't ask if it would change  
5 your general conclusions. I asked you, and let me rephrase  
6 the question, would that information -- well, let me restate  
7 the question.

8 Would that information -- does the lack of that  
9 information, or your lack of access to that information,  
10 inhibit your ability to provide analysis and render  
11 conclusions with respect to the condition of the project  
12 site?

13 MR. HUNT: No.

14 MR. CARROLL: And would the availability of that  
15 information to you enhance your ability to render analysis  
16 and conclusions with respect to the condition of the project  
17 site?

18 MS. ROESSLER: What do you mean by -- I'm sorry.  
19 Objection.

20 What do you mean by "condition of the project  
21 site"? Are you -- could you clarify? It's a very broad  
22 term.

23 MR. CARROLL: Whether or not the project  
24 site -- whether or not the project site includes depressions,  
25 whether or not the project site includes dunes, whether or

1 not the project site includes swales, many of the things that  
2 you have -- well, let me just leave it at that. Those are  
3 the -- those are the sorts of things I'm referring to.

4           Would the ability to be on the project site and  
5 collect information and make firsthand observations more  
6 directly -- or let me rephrase it.

7           Does the inability to be on the project site and  
8 make firsthand observations with respect to those issues  
9 inhibit your ability to render analysis and conclusions with  
10 respect to those types of conditions on the project site?

11           MS. ROESSLER: Objection.

12           It's, as you just proved, that term "conditions"  
13 encompasses very many conditions. Could you break the  
14 question up and ask him specifically? I would imagine  
15 depending on the condition, there could be potentially a  
16 different answer.

17           MR. CARROLL: Let me just -- I'm going to come back  
18 to it in a more specific way on each of those, so let me  
19 withdraw the general -- my last question and move on.

20           You testified that you had observed three species  
21 in the area surrounding the project site, one was the legless  
22 lizard. Could you fresh my recollection on if you stated, or  
23 if you didn't, please tell us where and when that observation  
24 or those observations were made?

25           MR. HUNT: Sure. The observations are north of the

1 project site and west -- I'm sorry, east of the project site  
2 and south of the project site. And those observations were  
3 made as late as 2007, 2008.

4 MR. CARROLL: 2007 --

5 MR. HUNT: 2007, 2008.

6 MR. CARROLL: Thank you.

7 You also testified that you had made observations  
8 of the Globose Dune Beetle in the area surrounding the  
9 project site. Same question, could you refresh my  
10 recollection or tell us where and when those observations  
11 were made?

12 MR. HUNT: Sure. That would be the north of the  
13 site and west of the site, and those would be in the early  
14 2000s. I don't recollect the exact date.

15 MR. CARROLL: And you also testified that you had  
16 made observations of the Two-Striped Garter Snake in areas  
17 around the project site. Same question, would you refresh my  
18 recollection or answer where and when those observations were  
19 made?

20 MR. HUNT: Yeah. Those observations are north of  
21 the site around McGrath Lake and to the southeast of McGrath  
22 Lake and that would be 2008.

23 MR. CARROLL: Thank you.

24 With respect to the 2.03-acre One Parameter wetland  
25 that is referred to the Coastal Commission record, I believe

1 that you -- well, I don't believe -- you stated that you  
2 agree with the conclusion of the Coastal Commission that  
3 there is a 2.03 one-parameter wetland on the site. Could you  
4 please restate or clarify the information that you are  
5 relying upon with respect to that particular issue?

6 MR. HUNT: Sure.

7 MR. CARROLL: This is now the breakdown of my more  
8 general question. So, specifically, with respect to the  
9 2.03-acre wetland, on what did you rely in arriving at that  
10 conclusion?

11 MR. HUNT: Yeah.

12 MS. ROESSLER: He already answered that during  
13 direct. It just seems a little repetitive, if we're going to  
14 go through every document he relied on again. I thought that  
15 was pretty clearly established. Do you not recall?

16 MR. CARROLL: Well, but as I stated in my general  
17 question, it was not clear to me what documents he was  
18 referring to. And when I tried to seek clarification of that  
19 during the direct, I was rebuffed and told to revisit during  
20 rebuttal. When I visited -- revisited in a general way  
21 during rebuttal, I was rebuffed and told that that was too  
22 general and that I should be more specific. So, now, I'm  
23 being very specific and I'm asking, because, to me, the  
24 testimony was not clear, what Mr. Hunt relied upon in  
25 reaching his conclusion that there is a 2.03 One Parameter

1 wetland on the project site.

2 HEARING OFFICER KRAMER: Overruled.

3 MS. ROESSLER: That's fine. Go ahead.

4 MR. HUNT: Yeah. I relied on the PSA, information  
5 in the PSA, FSA and AECOM's biologists' document. And that  
6 is based on their description of Pickleweed and two other  
7 hydrophytic species, Slender Leaf Ice Plant and Woolly  
8 Sea-Blite occurring in that 2.03-acre area.

9 MR. CARROLL: Thank you.

10 And I want to understand a little bit better  
11 the -- well, let me rephrase it.

12 Could you state your understanding of the Coastal  
13 Commission's One Parameter wetland definition?

14 MR. HUNT: Sure. It stems directly from California  
15 Department of Fish and Wildlife Service definition of three  
16 parameters, which also goes back to U.S. Army Corps  
17 definition. There are three parameters, that is, hydrophytic  
18 vegetation, hydric soils, or hydrology.

19 And, in this particular case, the Coastal  
20 Commission says -- and Fish and Game, Fish and Wildlife  
21 Service, the State Department, says meeting any one of those  
22 criteria is a wetland. And, in this case, you have presence  
23 of hydrophytic vegetation.

24 MR. CARROLL: And, so, again, and I just want to  
25 understand the application of that rule. And, so, is it the

1 case that identification of one of those parameters  
2 essentially ends the analysis and is a sufficient basis for  
3 making the determination?

4 MR. HUNT: It does in my experience, albeit,  
5 situations are -- you may have a fairly undisturbed habitat  
6 or disturbed habitat, but the Coastal Commission has ruled in  
7 other cases that level of disturbance is not a factor.

8 MR. CARROLL: Okay. So, in other words, the -- so  
9 the Coastal Commission would identify it as a wetland and, I  
10 guess, your testimony is that applying the Coastal  
11 Commission's definition, you would as well, regardless of the  
12 condition of the habitat or the extent of the degradation of  
13 the habitat?

14 MR. HUNT: I would. You've got one species  
15 occurring there, Pickleweed, which require fairly specific  
16 conditions to persist.

17 MR. CARROLL: And the determination, or your  
18 determination -- I'm sorry. Your determination in applying  
19 the Coastal Commission definition that it was a wetland would  
20 be made regardless of how those conditions came to exist?

21 MR. HUNT: Yes, I would. It may be a site that was  
22 graded and stockpiles of soil piled on it. It could also be  
23 a situation where, again, in the context of this project  
24 site, what was here before any of this was disturbed were a  
25 series of wetlands and alkali flats that contained the same

1 species that spawn there now.

2 So be it either anthropogenic causes or whatever  
3 that's making that particular space, that 2.03-acre area,  
4 suitable habitat for this hydrophyte.

5 MR. CARROLL: Okay. So just to summarize, as far  
6 as the Coastal Commission's One Parameter wetland definition  
7 is concerned, a wetland is a wetland regardless of the  
8 condition or the quality or how it came to be a wetland,  
9 including whether it was the result of human activity?

10 MS. ROESSLER: Objection.

11 This is asked and answered now three times. He's  
12 already answered this question.

13 MR. CARROLL: Do you recall what your previous  
14 answer to that question was?

15 MR. HUNT: I think it was that --

16 MS. ROESSLER: He just answered twice. But you  
17 keep restating his testimony in a slightly different manner.  
18 It's the same question.

19 MR. CARROLL: I take it the answer is yes? Is that  
20 the --

21 MS. ROESSLER: I'm not testifying for him. The  
22 answer is what the transcript will read.

23 HEARING OFFICER KRAMER: I think it would be easier  
24 to just have him answer it at this point, if it's a simple  
25 yes or no answer. Otherwise, you're going to have to repeat

1 the question.

2 MS. ROESSLER: Do you remember the question at this  
3 point?

4 MR. HUNT: Yes.  
5 My answer would be, yes.

6 MR. CARROLL: Thank you.

7 MR. HUNT: I can't speak for all of Coastal  
8 Commission's decisions up and down California, but, in my  
9 experience, yes.

10 MR. CARROLL: Thank you.

11 How familiar are you with the use of and the  
12 activities that have occurred on the project site beginning  
13 with the initial development of the Mandalay Generating  
14 Station?

15 MR. HUNT: I'm familiar by looking at historic  
16 aerial photographs of the site, also noting conditions that  
17 were present out there when I first started coming -- going  
18 out there in 1984 and 1985, and, you know, subsequent site  
19 visits as to what activities are happening.

20 MR. CARROLL: You testified that it was your view  
21 that neither the Applicant's biologists or the Energy  
22 Commission's biologists had conducted sufficient or adequate  
23 or perhaps appropriate surveys for detecting certain species  
24 of concern specifically with respect to the Globose Dune  
25 Beetle. And you testified that the appropriate



1 procedure -- and I apologize if I'm not using the correct  
2 terminology -- but the appropriate methodology would be  
3 raking of the soil.

4           Were you present yesterday during the testimony of  
5 Ms. Love on behalf of the Applicant?

6           MR. HUNT: Yes.

7           MR. CARROLL: Do you recall her discussing that  
8 they had, in fact, raked soil on the site?

9           MR. HUNT: Yes, I do. And that was confusing  
10 testimony. She didn't describe how much raking, what type of  
11 equipment she was using.

12           With regards to the dune beetle, specifically, that  
13 you're asking, you don't rake for it. You have to put the  
14 sand through a sieve. These beetles are only two-, or  
15 three-millimeters long.

16           So, I have no idea how much raking or where she did  
17 the raking or anything like that.

18           MR. CARROLL: And I believe you indicated that with  
19 respect to the legless lizard that the raking is also part of  
20 the appropriate --

21           MR. HUNT: That is appropriate. But, again, I have  
22 no idea how much or where she raked.

23           MR. CARROLL: Okay. But, for all you know, she may  
24 have raked in the appropriate areas and conducted sufficient  
25 raking?

1           MR. HUNT: I don't think so. If she had conducted  
2 systematic raking surveys of the site, I think it would have  
3 been described as such in the methods.

4           MR. CARROLL: But you don't know that she didn't?

5           MR. HUNT: I don't know specifically.

6           MR. CARROLL: Thank you.

7           You also indicated that in -- well, withdraw that  
8 question.

9           Referring to the aerial photograph that's on the  
10 site now, you've referred in a number of points in your  
11 direct testimony to having looked through the fence. Can you  
12 please give us a sense of where and when you made  
13 observations of the project -- the observations of the  
14 project site that you referred to in your direct testimony?

15          MR. HUNT: Sure. That would be from about 1984,  
16 1985 onward, whenever I was in that area, and that's multiple  
17 times, at least a dozen times, in that particular area to the  
18 north of the site itself. Does that answer your question?

19          MR. CARROLL: Yes.

20          So, your -- well, it may. So, your testimony is  
21 that your extent of your visual observations were from the  
22 north of the project site; is that right?

23          MR. HUNT: North and west.

24          MR. CARROLL: Okay.

25          MR. HUNT: Yeah.

1           MR. CARROLL: And do you recall, and if you do, can  
2 you give us an estimate, of the distance between the fence  
3 line at which you were located and the project site?

4           MR. HUNT: Yes. I think it's about 50 feet maybe.  
5 Maybe less than 50 feet.

6           MR. CARROLL: And in your opinion, is that a  
7 distance that might inhibit your ability to make observations  
8 with respect to the presence of some of the species that  
9 we've been discussing today, the Globose Dune Beetle, the  
10 legless lizard, Two-Striped Garter Snake?

11          MR. HUNT: No, it does not for those first two  
12 species, the Globose Dune Beetle and the legless lizard. I  
13 frequently carry binoculars with me, so I scan the site with  
14 binoculars looking at, say, soil conditions, that sort of  
15 thing.

16          Two-Striped Garter Snake, again, as I said in my  
17 testimony, they have a large home range, they could easily go  
18 through that fence and get on the site.

19          MR. CARROLL: And do you recall whether the line of  
20 sight from the fence line north of the project site to the  
21 project site, is that a -- is the topography between the  
22 point of observation and the project site, is that a flat  
23 area?

24          MR. HUNT: It's relatively flat. There's  
25 artificial berm along the fence line itself. But, otherwise,

1 relatively -- it's a subdued typography.

2 MR. CARROLL: Thank you.

3 HEARING OFFICER KRAMER: Mr. Carroll, I just want  
4 to say for the record that the image we've been looking at  
5 for a while is the first of the two images that are attached  
6 to Exhibit -- or apart of Exhibit 203 -- or 2024 rather. It  
7 looks like Page 2 of 3 of the PDF file.

8 MR. CARROLL: Thank you.

9 Turning to the issue of the dune swale wetland,  
10 what are the requisite elements for determining whether or  
11 not a dune swale wetland exists?

12 MR. HUNT: The dune swale wetland, it's classic  
13 definition is that it's forming in the interstitial area  
14 between dune crests. And when I am talking about dune  
15 crests, these could be very low areas. The dunes may be only  
16 a couple of feet high. But there is an area of deflation, or  
17 depression, between areas of higher typography such that the  
18 plants, say, Coyote Brush, Mulefat, they're closer,  
19 physically closer to the water table and access it, or it  
20 could be areas of where sand has been blown away and you have  
21 a basement area that's exposed. And, again, relatively close  
22 to a water table that these plants can access.

23 MR. CARROLL: Okay. So, the presence of dune swale  
24 wetland, am I correct, that it's dependent upon, I believe  
25 you used the term, a depression?

1 MR. HUNT: I'd say the classic definition is one  
2 associated with a depression, uh-huh.

3 MR. CARROLL: Thank you.

4 And coming back to the question upon which -- the  
5 information upon which your conclusions rely, specifically  
6 with respect to the dune swale wetland, what is the  
7 information upon which you relied to reach the conclusion  
8 that there is a dune swale wetland on the site?

9 MR. HUNT: That the California department of Fish  
10 and Wildlife Service letter. And I'm forgetting -- there is  
11 another document, but I'm forgetting right now.

12 Also relying on the information in the FSA and PSA  
13 on Coyote Brush and Mulefat occurrence on the site itself.

14 MR. CARROLL: Okay. So, with respect to that  
15 question, is the Coyote Brush and the Mulefat, is that an  
16 indicator of a dune swale wetland or -- well, let me ask that  
17 question.

18 Is that an indicator of a dune swale wetland?

19 MR. HUNT: It is an indicator of a dune swale  
20 wetland, yes.

21 MR. CARROLL: And I believe that you testified that  
22 the presence of Mule -- I'm sorry -- Mulefat and Coyote Brush  
23 Scrub, and I think you used the term, "in this context" --

24 MR. HUNT: Uh-huh.

25 MR. CARROLL: -- is significant. If you recall

1 that question and response, what was it that you meant by "in  
2 this context"?

3 MR. HUNT: I meant "in this context" by it  
4 occurring in areas where it can access a water table.

5 MR. CARROLL: Okay. So, is that a specific  
6 reference to the project site or is that a general statement,  
7 that generally Mulefat, the presence of Mulefat and Coyote  
8 Scrub, in the context of a dune swale, an area that has the  
9 characteristics of a dune swale wetland, is significant? Is  
10 that with specific reference to the site or is that a general  
11 statement?

12 MR. HUNT: No, that's both. Coyote Brush, you see  
13 it in other situations, but it's always in areas where it can  
14 tap into a perched water table. So, on the site itself, that  
15 is just offsite, you find it in classically defined dune  
16 swale wetlands. And, on site, it's found in conditions where  
17 it can tap into water. In both of those situations, it's  
18 tapping into groundwater.

19 MR. CARROLL: Thank you.

20 You testified that you had, in fact, done focused  
21 surveys for the species that we've been discussing here, the  
22 Globose Dune Beetle, the legless lizard, the Two-Striped  
23 Garter Snake, and the horned lizards. Were those  
24 coincident -- are those the same incidents that you testified  
25 that you observed them? In other words, you testified at one

1 point that you had made observations of those species and  
2 then you testified a little bit later that you had done  
3 focused surveys for those species. Are those one and the  
4 same? In other words, was it during the focused surveys that  
5 you made the observations?

6 MR. HUNT: Yes, it is.

7 MR. CARROLL: Okay. So, there's no point in going  
8 through when the focused surveys happened --

9 MR. HUNT: No.

10 MR. CARROLL: -- those are coincident with when the  
11 observations occurred?

12 MR. HUNT: That's right.

13 MR. CARROLL: What is the purpose of the  
14 reconnaissance-level survey work?

15 MR. HUNT: You do a reconnaissance-level survey to  
16 look at site conditions, that is, what sort of land use is  
17 currently going on on the site, maybe try to get an idea of  
18 historic land use, but also to gain an idea of the context of  
19 the site itself in relation to a larger particular area.  
20 Maybe looking at plant communities that are on site,  
21 generally characterizing those, and assessing potential for  
22 wildlife species to occur there.

23 MR. CARROLL: And, so, I take it from that that one  
24 of the purposes of the reconnaissance-level surveys is to  
25 determine whether or not it's appropriate to proceed with

1 more focus surveys?

2 MR. HUNT: Yes.

3 MR. CARROLL: And you indicated that, and I don't  
4 recall if you referred to a specific time period, but that at  
5 one point in time this area was similar to the area where LAX  
6 now exists. Is that -- do you recall that testimony?

7 MR. HUNT: Yes.

8 MR. CARROLL: Okay.

9 MR. HUNT: Although the typographic features differ  
10 somewhat, they're basically formed by the same processes and  
11 dune emplacement occurred during the same periods of time.  
12 We're talking hundreds of thousands of years.

13 MR. CARROLL: So, could it be that activity at the  
14 project site that has occurred since it was developed as a  
15 power plant might have resulted in circumstances such that  
16 there is no longer suitable habitat for the various species  
17 that we've been discussing?

18 MS. ROESSLER: Objection to the fact it's  
19 speculation.

20 What are you asking him for?

21 MR. CARROLL: Well, let me rephrase the question.

22 Would you concede that the Mandalay Generating  
23 Station Power Plant site that's on the screen has been  
24 altered from the initial state of this area much like the  
25 area where LAX is now built has been altered from its



1 existing state?

2 MS. ROESSLER: Objection. Overly broad.

3 What do you mean "altered" and how? In what way?

4 In what condition? By what manner? What feature?

5 MR. CARROLL: Would you concede that there is

6 paving that now exists that was not present on the property

7 in its virgin state?

8 MR. HUNT: Yes.

9 MS. ROESSLER: What property are you --

10 MR. HUNT: Yes.

11 MS. ROESSLER: You're using the word --

12 MR. CARROLL: She wanted me to be specific.

13 MR. HUNT: Okay.

14 MS. ROESSLER: Okay, well, sorry, objection.

15 MR. HUNT: Yes.

16 MS. ROESSLER: What do you mean by "property"? Are

17 you talking about the three-acre property site -- project

18 site or --

19 MR. CARROLL: I'm talking --

20 MS. ROESSLER: -- or what are you talking about?

21 MR. CARROLL: I believe I said the Mandalay

22 Generating Station property, but if I didn't --

23 MS. ROESSLER: Okay.

24 MR. CARROLL: -- I'm now referring to the entirety

25 of the Mandalay Generating Station property, which includes

1 the project site.

2 MS. ROESSLER: So, you're referring to the Mandalay  
3 outside the project site? Just if we can talk in terms of  
4 outside the project site or inside, that would be helpful.

5 MR. CARROLL: So, to be clear, I am referring to  
6 the entirety of the Mandalay Generating Station property.  
7 And in my question, and if this is a repeat or a new  
8 question, let me just ask the question.

9 My question is that could it be that the activities  
10 that have occurred either on the project site proper or in  
11 the vicinity of the project site on the remainder of the  
12 Mandalay Generating Station property have affected the  
13 suitability of any habitat that might have existed on the  
14 project site in its initial state or in -- by "initial  
15 state," I mean before touched by man.

16 MS. ROESSLER: It's still overly broad and asking  
17 him to speculate about activities that may have occurred on  
18 the project site and --

19 MR. CARROLL: Well, I think it's apparent from --

20 MS. ROESSLER: -- now you're asking for --

21 MR. CARROLL: -- from the photo.

22 MS. ROESSLER: -- outside the project site.

23 Perhaps you could break it up. Are you referring  
24 to just outside the project site, and those speculative  
25 activities, we don't know what they are, that may have

1 affected something in the past? I'm just trying to  
2 understand.

3 MR. CARROLL: Mr. Hunt, do you have any -- do you  
4 have a sense of the types of activities that have occurred  
5 and are occurring on the Mandalay Generating Station property  
6 by virtue of observing -- based on your observation of the  
7 image on the screen, do you have a sense of the types of  
8 activities that is have occurred and are occurring within the  
9 Mandalay Generating Station property?

10 MR. HUNT: Yes.

11 MR. CARROLL: And is it possible that those  
12 activities have affected the project site in a way such that  
13 there is no longer suitable habitat -- or I'm sorry.

14 Is it possible that those activities that have  
15 occurred on the Mandalay Generating Station property have  
16 affected the suitability of the habitat on the project site  
17 as it may have existed prior to the occurrence of those  
18 activities?

19 MS. ROESSLER: Objection.

20 What activities? You asked him if he had a sense  
21 of them --

22 MR. CARROLL: The activities --

23 MS. ROESSLER: -- but he didn't say what they were.

24 MR. CARROLL: -- that he just testified he  
25 understands --

1 HEARING OFFICER KRAMER: Overruled.

2 MR. CARROLL: -- to have occurred based on his  
3 observations of the image.

4 MS. ROESSLER: I would like to be able to finish  
5 what I'm saying, if possible.

6 MR. CARROLL: I'm sorry.

7 MS. ROESSLER: Thank you.

8 I'm just trying to understand. You asked him if he  
9 had a sense of activities and then just asked him based on  
10 that sense, but you didn't actually get him to say what -- it  
11 would help for the follow-up to know what he thinks is  
12 happening on the site. Because we're all staring at a  
13 picture.

14 MR. CARROLL: Well --

15 MS. ROESSLER: I think it would clarify for the  
16 transcript later.

17 MR. CARROLL: I don't think it's relevant what I  
18 think has happened on the site.

19 MS. ROESSLER: I didn't -- I said what he is --

20 MR. CARROLL: The witness testified that he has a  
21 sense of what's happened on the site based on his  
22 observations of the photo. And I'm asking him, based on his  
23 sense of what's happened on the site --

24 HEARING OFFICER KRAMER: Objection overruled.

25 MR. HUNT: It depends on what activities you're

1 talking about. I can look at that photo and say there's  
2 probably a low or no probability of finding special status  
3 species in the parking lot itself.

4 But there are other sites -- other areas of the  
5 site that look like they've been graded and then left fallow,  
6 if you will, for some period of time and are being  
7 recolonized by native and non-native plants. And, so, you've  
8 got a variable situation here of potential habitat and then  
9 other areas that are blitzed, to use a scientific term, with  
10 asphalt or whatever, and that wouldn't support special status  
11 species.

12 MR. CARROLL: With respect to the project site  
13 proper, is it possible that the activities that have occurred  
14 and are occurring, and, by that, I mean the development and  
15 operation of a power plant on the remainder of the Mandala  
16 Generating Station property, have affected the suitability of  
17 the habitat on the project site as it may have existed prior  
18 to those activities?

19 MR. HUNT: Are you asking me if what is there now  
20 is an altered version of what was there originally?

21 MR. CARROLL: Not exactly. I'm asking you whether  
22 the development and operation of a power plant site could  
23 have impacted the suitability of habitat on the project site  
24 relative to how it may have existed prior to that activity.

25 MS. ROESSLER: Objection. Calls for speculation

1 and overly broad.

2 A power plant, there's so many factors involved in  
3 a power plant. Are you asking about this specific three-acre  
4 site?

5 MR. CARROLL: Yes.

6 MS. ROESSLER: And its specific history?

7 MR. CARROLL: Yes.

8 HEARING OFFICER KRAMER: Overruled. He can -- if  
9 he needs to qualify his answer, he can do so.

10 MR. HUNT: I would say there's some activities of  
11 the Mandalay Generating Station that have altered things from  
12 their original condition. And, again, it depends on the type  
13 and the intensity of the activity. There are some parts of  
14 the site that are completely built up and are used on a daily  
15 basis.

16 MR. CARROLL: That's not my question. So, let me  
17 restate it.

18 My question is, is it possible that the activities  
19 on the entirety of the Mandalay Generating Station property  
20 have affected the project site, the Puente Project site, in  
21 such a way to impair the suitability or diminish the quality  
22 of the habitat that may have existed on the project site  
23 prior to the occurrence of those activities? So, I'm not  
24 talking about a particular activity, I'm not talking about  
25 whether areas of the Mandalay Generating Station property

1 outside of the project site have been affected. I'm focused  
2 specifically on the project site and the conditions on the  
3 project site. And I'm asking you whether it's possible that  
4 the activities on the remainder of the Mandalay Generating  
5 Station property could have affected the suitability of the  
6 habitat on the project site.

7 MR. HUNT: In short answer, yes, because --

8 MR. CARROLL: Thank you.

9 MR. HUNT: Can I expand on that, please?

10 MR. CARROLL: I don't -- I think we've belabored  
11 that enough.

12 MS. ROESSLER: Will --

13 MR. CARROLL: I'll move on.

14 MS. ROESSLER: Let him finish his answer. I  
15 believe we gave you the same courtesy with Ms. Love  
16 yesterday. We tried not to cut her off.

17 MR. CARROLL: Please expand.

18 MS. ROESSLER: Thank you.

19 MR. HUNT: Sure. There are portions of the project  
20 site that may have been lay-down areas for equipment or  
21 stockpiled soil in the past. So, that would affect, you  
22 know, what was there originally. Those have been removed and  
23 there's been a number of years that the site has lain fallow.

24 So, you have, again, the situation where the site  
25 is embedded in habitats that contain special status species.

1 There is processes such as windblown sand that are coming in.  
2 And over time, that site would be overtaken and habitat  
3 conditions gradually improving for certain special status  
4 species or vegetation communities, that sort of thing.

5 MR. CARROLL: So, that wasn't my question. I  
6 didn't ask you -- that is a separate issue. The question  
7 that you just responded to pertains to activities that have  
8 occurred on the project site proper. And that wasn't my  
9 question.

10 So, let me restate my question and, hopefully, the  
11 short answer continues to be what you stated before.

12 Have activities on the Mandalay Generating Station  
13 property -- I'm sorry. Is it possible that activities that  
14 have occurred on the Mandalay Generating Station property  
15 outside of the project site proper have affected the  
16 suitability of habitat on the project site proper relative to  
17 its condition prior to the occurrence of those activities?

18 MR. HUNT: Are you saying are there ongoing  
19 activities that may be affecting habitat suitability on the  
20 project site?

21 MR. CARROLL: Ongoing or past.

22 MR. HUNT: Yeah.

23 MS. ROESSLER: Objection. Just speculation.

24 You're asking him to speculate about what  
25 activities are going on and what those potential activities,



1 which we don't know what they are, could potentially affect  
2 what's on the site.

3 HEARING OFFICER KRAMER: Overruled.

4 MR. CARROLL: Well, he's answered question --

5 HEARING OFFICER KRAMER: Overruled.

6 MR. CARROLL: -- once, so we can move on here.

7 But let me --

8 MR. HUNT: It would depend on what species you're  
9 talking about. If you're getting to a particular species.

10 MR. CARROLL: And would it have affected the  
11 suitability of the habitat for certain species?

12 MR. HUNT: It could for certain species. But,  
13 again, it would depend on the intensity and frequency of the  
14 disturbance, if you will.

15 MR. CARROLL: So, is it your testimony that the  
16 suitability of the habitat on the project site could have  
17 been affected by the operations on the remainder of the  
18 Mandalay Generating Station property?

19 MR. SMITH: Objection.

20 Mr. Carroll, could we just clarify, I'm confused at  
21 this point as to whether when you say the "project site,"  
22 you're now referring to the three-acre portion. Because in  
23 some of your previous questions you were referring to the MGS  
24 property, which I understood to be the more developed  
25 portion. So, could you just clarify that for us?

1 MR. CARROLL: Sure. I'm conforming to the  
2 convention that I think we both agreed to yesterday, which is  
3 that when I refer to the "project site," it's the three-acre  
4 site. But, look, I think notwithstanding the hesitancy to do  
5 so, the question has been answered. Let me move on.

6 MS. ROESSLER: Objection to your characterization  
7 of the witness's answer.

8 HEARING OFFICER KRAMER: He didn't -- he simply  
9 said his question was answered, he didn't say what the answer  
10 was.

11 MS. ROESSLER: He characterized our witness as  
12 hesitating to answer. I'm just objecting to that for the  
13 transcript.

14 MR. CARROLL: I'm sorry. To be clear, I wasn't  
15 referring to the witness's testimony.

16 MS. ROESSLER: Okay.

17 MR. CARROLL: I believe you testified, and I  
18 believe -- you did testify that there were ESHA on the  
19 project site; is that correct?

20 MR. HUNT: Yes.

21 MR. CARROLL: And could you please describe as you  
22 have for the One Parameter wetland and the dune swale wetland  
23 the criteria for determining the existence of an ESHA?

24 MR. HUNT: Yeah. That would be habitat that's  
25 supporting special status species.

1           MR. CARROLL: Okay. So, the determination that an  
2 ESHA exists is dependent upon a determination that the area  
3 supports special status species?

4           MR. HUNT: Right.

5           MR. CARROLL: Thank you.

6           And I believe you also testified that -- well, let  
7 me rephrase the question.

8           With respect to your conclusion that there are ESHA  
9 on the site, what information is it that you're relying upon  
10 to arrive at that conclusion?

11          MR. HUNT: I'm relying on my years of field  
12 experience immediately adjacent to the project site, as well  
13 as the descriptions of habitat that's present on the site, as  
14 I've already testified in the other -- I gleaned from those  
15 other documents.

16          MR. CARROLL: What are the types of impacts -- or,  
17 I'm sorry. What are the types of activities that would occur  
18 during project construction that might have an impact on the  
19 species or the habitats about which you've expressed  
20 concerns?

21          MR. HUNT: What types of construction activities?

22          MR. CARROLL: Yes. So -- yes. Is that clear, or  
23 should I restate it?

24          MR. HUNT: I think so.

25          Things like bulldozing, that is, initial site

1 grading to achieve whatever the plan specifications are, that  
2 would be removing substrate, removing vegetation, possibly  
3 removing species along with it that are in the soil. That  
4 would be the main thing. It's initial site preparation is  
5 where most of the impacts occur.

6 MR. CARROLL: And what's your understanding of the  
7 scope of grading and site preparation that's required for  
8 development of the project?

9 MR. HUNT: A 3. -- an approximately three-acre area  
10 in the -- within the bound of the fenced area and then  
11 demolition and removal of the outfall.

12 MR. CARROLL: So, let me -- I want to make sure I  
13 understand your -- so, let me rephrase the question.

14 What's your understanding of the extent to which  
15 the site must be graded to make it suitable for development?  
16 And, by that, I mean what's your understanding of the need to  
17 alter elevations, the quantity of import or export of the  
18 soils, that type of thing.

19 MR. HUNT: I don't know what the particulars are in  
20 terms of import or export of soils.

21 MR. CARROLL: Okay.

22 MR. HUNT: But I would imagine there is some site  
23 grading of the actual three-acre site involved. There may be  
24 preparation of areas around the three-acre site. I don't  
25 know all the particulars of what is going to be involved.

1           MR. CARROLL: Okay. So, you, when you testified  
2 that three acres of the site will be affected, that's based  
3 on your conclusion that there are three acres of the site  
4 that qualify as a sensitive habitat as opposed to your  
5 understanding of what areas will be affected by project  
6 construction?

7           MR. HUNT: That includes the 2.03-acre wetland, the  
8 .52-acre dune swale area, as well as other ancillary  
9 habitats, coastal -- Coyote Brush Scrub elsewhere on the site  
10 in that three-acre area.

11          MR. CARROLL: Okay.

12          MR. HUNT: Yeah.

13          MR. CARROLL: Okay. But, again, when you testify  
14 as to the acreage that would be impacted by the project, that  
15 figure is based on the acreage that qualifies for some sort  
16 of a -- and this is just my term -- a sensitive habitat  
17 including all the various ones that we've talked as opposed  
18 to any understanding you have with respect to the effects of  
19 the project?

20          MR. HUNT: I'm not understanding how your --

21          MR. CARROLL: Okay. Do you know whether or not the  
22 site needs to be elevated or raised to develop the project?

23          MR. HUNT: I have no idea.

24          MR. CARROLL: Do you know whether or not it's  
25 necessary to import soil or export soil to the site to

1 develop the project?

2 MR. HUNT: I believe I read something that they may  
3 be importing soil for flooding concerns such that the project  
4 elements might be built on a pad of some sort.

5 MR. CARROLL: Okay. But you're not familiar with  
6 the specifics of the extent of the site preparation that  
7 needs to be undertaken to develop the project site?

8 MR. HUNT: Not beyond my assumption that it would  
9 include initial clearing of the site itself.

10 MR. CARROLL: Thank you.

11 And with respect to operation of a project such as  
12 the Puente Power Project, what aspects of the operation of  
13 the project would, in your view, have the potential to affect  
14 either the species or the habitat that you've expressed  
15 concerns about?

16 MR. HUNT: You're talking about operation?

17 MR. CARROLL: Yes.

18 MR. HUNT: There's things like noise from the site  
19 itself, lighting of the site in what would otherwise be an  
20 unlit area, and human presence, that could be daytime or  
21 nighttime, associated with the facility itself. So, it's  
22 pretty much those three factors.

23 MR. CARROLL: And what's your understanding of the  
24 maximum anticipated noise levels associated with operation of  
25 the site.

1 MR. HUNT: I don't have that figure at hand.

2 MR. CARROLL: Do you know where on the project site  
3 or in the vicinity of the project site the maximum noise  
4 levels are expected to occur?

5 MR. HUNT: No, I don't.

6 MR. CARROLL: And what's your understanding of the  
7 lighting that would be associated with the project upon  
8 completion?

9 MR. HUNT: I'm not familiar with exactly what the  
10 lighting might be. Mitigation measures say the lighting  
11 should be shielded. In my experience, there is a wide  
12 variety of shielding of lights. And exactly how a particular  
13 species, I'm talking about birds here, Least  
14 Bell's -- California Least Tern and Snowy Plovers, how they  
15 would react to lights, it really is an unknown topic, unknown  
16 subject.

17 MR. CARROLL: But you don't have any specific  
18 information related to the lighting associated with the  
19 project once it's completed?

20 MR. HUNT: No, I don't.

21 MR. CARROLL: And with respect to human presence,  
22 what's your understanding of the extent to which human  
23 presence will be increased or decreased once operation of the  
24 Puente Project commences relative to the baseline condition  
25 as it exists today?

1           MR. HUNT: I don't know if human presence will be  
2 increased or decreased. But construction is occurring in an  
3 area that is now unoccupied, and it only takes one person,  
4 say, in a pickup truck or one person walking around out there  
5 to cause disturbance.

6           MR. CARROLL: And I was in that question really  
7 referring to operation. So, your testimony is you don't know  
8 whether human presence once operation commences would be  
9 increased or decreased relative to the baseline condition.

10          MR. HUNT: I don't know if it will be increased or  
11 decreased, but I'm saying that in an area that's otherwise  
12 unoccupied right now, you're going to have people out there,  
13 so I guess that would be an increase in that particular area.

14          MR. CARROLL: And with respect -- again, with  
15 respect to operations, are there any other aspects of the  
16 operations, you mentioned lighting, noise, and human  
17 presence, about which you would be concerned or which could  
18 have impacts on either the species or the habitat that we've  
19 been discussing?

20          MS. ROESSLER: Objection.

21           Are you referring to -- just so I'm clear -- the  
22 three-acre project site or are we offsite talking about the  
23 outfall area?

24          MR. CARROLL: Yes.

25           So, the activities that I'm referring to would be



1 on the project site, the potential for affects that I'm  
2 asking you about could be anywhere.

3 MS. ROESSLER: So, you're talking about in  
4 the -- after it's already been constructed operations phase?

5 MR. CARROLL: Yes.

6 I mean, to be clear, to my mind a large part of  
7 what we're trying to determine here is what the effects of  
8 the project will be. And, so, these questions are intended  
9 to elicit your understanding to the extent that you have it  
10 on any of the specifics, what the effects of the project  
11 would be on habitat or species either on or off the project  
12 site once it commences operations.

13 And you've mentioned lighting, noise, and human  
14 presence. And I just wanted to give you an opportunity to  
15 identify any others before we moved on.

16 MR. HUNT: Yes. Relocating the outfall to the  
17 Edison Canal, the element where stormwater would be  
18 discharged into the canal itself, there's a potential for  
19 affect there.

20 MR. CARROLL: Thank you.

21 Would you agree that -- well, let me -- let's stick  
22 with that.

23 Is it your view that the removal of the existing  
24 ocean outfall, of which there is an image on the screen, is  
25 a -- would result in positive impacts to the area from a

1 biological perspective?

2 MR. HUNT: Yes, I do.

3 MR. CARROLL: And with respect to the proposed  
4 discharge to the Edison Canal, I believe you indicated, and I  
5 think your word was "conceivable," through a series of  
6 assumptions, that the discharge to the canal could affect  
7 foraging habitat of the Least Tern. Do you recall that  
8 question?

9 MR. HUNT: Yes.

10 MR. CARROLL: Do you think that it is likely that  
11 that -- that the discharge from the project to the Edison  
12 Canal would affect the foraging habitat of the Least Tern?

13 MR. HUNT: For that particular species, I would say  
14 it may affect. I wouldn't use the word "likely."

15 MR. CARROLL: Okay. And do you have any specific  
16 knowledge as to the volume of discharge that would go into  
17 the Edison Canal once the project commences operations?

18 MR. HUNT: I don't have a specific number in front  
19 of me. I seem to recollect reading something that it was a  
20 fraction of an acre foot per year.

21 MR. CARROLL: Is that a quantity of -- what  
22 familiarity do you have with the -- I don't know what the  
23 word is -- but the capacity of the Edison Canal --

24 MR. HUNT: I have no --

25 MR. CARROLL: -- the total volume of water at any

1 time contained in the Edison Canal?

2 MR. HUNT: I have no idea what the capacity is, but  
3 I do know -- I also read something in one of the documents, I  
4 cannot put my finger on the exact document, that there are 65  
5 to 75 storm drain outlets distributed throughout the Edison  
6 Canal. So, that when we have a significant rain event,  
7 there's a significant freshwater inflow into the canal  
8 itself.

9 MR. CARROLL: So, just so I'm clear on what you're  
10 talking about, you're referring to discharges in the canal  
11 that are currently occurring?

12 MR. HUNT: Yes.

13 MR. CARROLL: Thank you.

14 MR. HUNT: Offsite. Not the project site.

15 MR. CARROLL: So, I appreciate that you don't have  
16 a quantitative sense of the total capacity of the canal.

17 Given your understanding, I think you indicated  
18 that you understood it to be a fraction of an acre foot per  
19 year or something along those specs. Is that a quantity of  
20 discharge from the plant to the Edison Canal that you would  
21 expect to impact the canal in a way that would trigger the  
22 series of events that you laid out earlier where there was  
23 sufficient freshwater to affect the salinity, which would in  
24 turn affect the food for the Least Tern, which would in turn  
25 affect the suitability of that foraging habitat for the Least

1 Tern?

2 MS. ROESSLER: Objection.

3 Sorry. Answer if it's in your expertise.

4 I just think asking him for an opinion on water  
5 quality of the discharge into the canal is outside his  
6 expertise.

7 MR. CARROLL: Well, I'm --

8 HEARING OFFICER KRAMER: Overruled.

9 He's already spoken of his concerns, and Mr.  
10 Carroll is just following up to try to clarify that.

11 MS. ROESSLER: His concerns on the effect of the  
12 species, but not on his knowledge on the impact into the  
13 canal, specifically on water quality from a discharge and the  
14 capacity of the canal. That's all I wanted to clarify.

15 Go ahead.

16 MR. HUNT: I think it could, because the outfall is  
17 going to be located at the terminal end of the canal, if you  
18 will. That is an area that is isolated from the ocean and  
19 probably receives very little freshwater input at this point.  
20 You're going to be supplementing it with storm drain outfalls  
21 at that location.

22 MR. CARROLL: Let me move on to another area  
23 related to the Edison Canal.

24 And you identified two water bodies where I believe  
25 your testimony was where one would expect the Tidewater Goby

1 to be present, one was the Santa Clara River and the other I  
2 don't recall.

3 MR. HUNT: Yes. South of the Edison Canal at  
4 Ormond Beach, J Street, J Street drain area.

5 MR. CARROLL: And I believe it was your testimony  
6 that -- I don't remember whether you attached a likelihood to  
7 it -- that the Tidewater Goby could make their way from one  
8 or both of those water bodies to the Edison Canal?

9 MR. HUNT: Yes. It would likely be a down-shore  
10 process. So, the Santa Clara River might be the contributor,  
11 although the J Street Drain and Ormond Beach and  
12 geographically closer to the mouth of the Edison Canal.

13 MR. CARROLL: So, just explain sort of physically  
14 how that would occur? What would that voyage of the  
15 Tidewater Goby look like?

16 MR. HUNT: As I said, based on -- again, this is a  
17 fairly secretive animal. Based on what biologists know about  
18 populations in suboptimal areas experiencing local extinction  
19 and then recolonization from other sources, and these are  
20 up-shore sources, what seems to be happening is that when  
21 there's a large freshwater input to the near-shore  
22 environment from, say, river outfalls, you get Gobies moving  
23 out of these estuaries and going into the near-shore area,  
24 going down shore, and recolonizing other habitats that have  
25 suitable salinity.

1           In the case of the Edison Canal, it communicates  
2 with the Pacific Ocean, these Gobies could be moving down  
3 shore at a time when the Edison Canal itself is experiencing  
4 large freshwater inputs from storm drains. So, it's  
5 conceivable that the Gobies could colonize that source.

6           That's not to say they would establish a permanent  
7 population there, but could be a short-term occurrence of the  
8 species there.

9           MR. CARROLL: What's your understanding of  
10 the -- so, in other words, if I understand -- am I correct  
11 that your testimony is that the Goby would enter the Edison  
12 Canal at its source at the Pacific Ocean?

13          MR. HUNT: Yes.

14          MR. CARROLL: What's your understanding of the  
15 distance from the point at which the Edison Canal connects to  
16 the Pacific Ocean and the point at which it terminates at the  
17 project site -- or, I'm sorry -- at the Mandalay Generating  
18 Station property?

19          MR. HUNT: I think it's about -- excuse me -- two  
20 miles.

21          MR. CARROLL: Okay. So, in other words, the  
22 Tidewater Goby would make their way from one of these other  
23 estuaries to the ocean, then down the coast into the canal  
24 and over the distance that you just indicated, up to the area  
25 of the Mandalay Generating Station property. That's the

1 theoretical path?

2 MR. HUNT: Yes. Gobies have been found as much as  
3 three miles upstream in some of these major river courses.

4 MR. CARROLL: River courses similar to a manmade  
5 canal that includes a significant harbor and marina?

6 MR. HUNT: I'm saying that that Edison Canal under  
7 significant rain events may mimic a river.

8 MR. CARROLL: Thank you.

9 MR. HUNT: Uh-huh.

10 MR. CARROLL: I'm getting close to the end here.  
11 Just bear with me a moment.

12 (Pause in the proceedings.)

13 MR. CARROLL: Mr. Hunt, I just have I  
14 believe one more area that I wanted to cover with  
15 you. In your opening testimony you note that the  
16 Ventura and Santa Clara Rivers provide abundant  
17 sources of sand for long-shore transport to near-  
18 shore areas; is that correct?

19 MR. HUNT: Yes.

20 MR. CARROLL: And so this sand is -- is this  
21 the sand that accretes on the beach in front of the  
22 Mandalay Generating Station to form the beach that we  
23 see there in the area of the outfall?

24 MR. HUNT: Yes.

25 MR. CARROLL: And I believe you stated that

1 the dunes in this area formed -- and this is a quote,  
2 "The dunes at this location have formed and  
3 persist because of a unique combination of geological  
4 and geomorphological factors that have created a dune  
5 field consisting of young dunes along the coast and  
6 old dunes inland."

7 Could you just expand upon that a little bit  
8 and explain to us your understanding of the genesis  
9 of the formation of the dunes fronting the Mandalay  
10 Generating Station Project?

11 MR. HUNT: Sure. As I said in my testimony,  
12 it requires a unique combination of factors. You  
13 have to have a sand source. You have to have a  
14 receptive shoreline and proper orientation of the  
15 shoreline to the wind. And there's only a handful of  
16 locations along California where you get those  
17 situations, such as San Francisco. The City of San  
18 Francisco is built on sand dunes, Monterey Bay, the  
19 Guadalupe area in Santa Barbara County, the Ventura-  
20 Oxnard Dune Field, LAX and Santa Barbara -- San Diego  
21 Harbor. And in all of these, these were formed  
22 approximately around the same time.

23 What happens is you have sediment coming out  
24 of these rivers. It gets distributed in a near-shore  
25 environment. You experience sea level dropping with



1 glacial maximum. We're talking on the order of tens  
2 of thousands to hundreds of thousands of years. The  
3 sea level is fluctuating. When the sea level drops,  
4 you have the continental shelf near-shore environment  
5 exposed. Receptive winds are picking up that  
6 sediment and blowing it inland. And you have this  
7 process going on more or less continuously to this  
8 day. Although sea level is relatively stable, on the  
9 short term you still have transport of sediment by  
10 waves or whatever, littoral currents. Wind is then  
11 transporting that inland.

12           The source is the ocean, so the dunes would  
13 be youngest at the ocean and oldest interior. And so  
14 these interior dunes can be on the order of tens of  
15 thousands to, say the Guadalupe Dunes, the interior  
16 ork (phonetic) of dune sheet is 500,000 to 600,000  
17 years old.

18           MR. CARROLL: And so did -- the phenomenon  
19 that you just described, do they contribute to -- and  
20 I'm trying to understand which portions of the  
21 property, and you've used some terms like inland  
22 dunes and some other phrases.

23           So the phenomenon that you just described,  
24 do those phenomena influence all of the physical  
25 conditions that we see here, including the width of

1 the beach, the height of the dunes?

2 MR. HUNT: Yes, they do. What we see along  
3 the near-shore, that is the youngest area, you have  
4 dunes forming of a particular configuration. They're  
5 called lobate dunes. And they're formed by that  
6 spotty -- they're stabilized, I should say, by that  
7 spotty kind of vegetation that you see on the image.  
8 That is, sand is accumulating around those particular  
9 plants. As you move inland, sand budget is  
10 declining. You get more vegetation occurring and  
11 stabilization of the dunes. The dunes can assume a  
12 subdued topography of ridges and depressions in  
13 between them.

14 MR. CARROLL: And can you explain a little  
15 bit further the role that the vegetation has in the  
16 stabilization of the dunes, specifically in this area  
17 in front of the Mandalay Generating Station?

18 MR. HUNT: Sure. Once vegetation -- the  
19 wind is blowing that sand that's active, neighbors  
20 that have built houses all along there are constantly  
21 battling with their homes being engulfed in sand.  
22 The parking lots, you'll go out there and there will  
23 be a foot to two feet of sand covering parking lots.  
24 That blowing sand is stopped by the vegetation. And  
25 what you get is a hummock forming around the plant

1 itself. And the plant increases in elevation as the  
2 sand -- parts of it are dying, being buried or  
3 whatever, it's growing upward. And you have this  
4 kind of hummocky appearance to the beach itself.

5 MR. CARROLL: And as I understood your  
6 explanation that you provided a moment ago, this  
7 phenomena is unique in some respects to this site,  
8 given its positioning, its angle towards the ocean;  
9 is that correct?

10 MR. HUNT: Yes.

11 MR. CARROLL: And what are the unique  
12 aspects associated with this particular area in front  
13 of Mandalay that contribute to the phenomena that  
14 you've described and the conditions that we currently  
15 see at the site?

16 MR. HUNT: Sure. It's a west or northwest-  
17 facing coastline. And it has -- the beach itself is  
18 of low profile. So originally you had this coastal  
19 plain with the Santa Clara River moving from south to  
20 north across this plain, a low-elevation plain that  
21 makes a receptive topographic feature for  
22 accumulation of sand, but it has to be oriented in  
23 the proper way.

24 MR. CARROLL: Okay. And I believe your  
25 testimony -- well, let me state my characterization

1 and you can confirm or correct it, that this is a  
2 phenomenon that has been occurring, I think you said  
3 going back to the Pleistocene or Holocene periods. In  
4 other words, these conditions and the phenomena  
5 contributing to those conditions have been going on  
6 for how many years?

7 MR. HUNT: Hundreds of thousands of years,  
8 maybe up to millions of years.

9 MR. CARROLL: Would you -- do you have any  
10 reason to believe that those phenomenon and the  
11 conditions that result from those phenomenon would  
12 significantly change, say in the next 200 years?

13 MS. ROESSLER: Objective. Causes  
14 speculation in the next -- what's going to happen in  
15 the 200 years. I'm just trying to understand where  
16 you're going with this.

17 MR. CARROLL: I'm asking him --

18 HEARING OFFICE KRAMER: Overruled.

19 MR. CARROLL: -- if he has.

20 HEARING OFFICE KRAMER: Overruled.

21 MR. HUNT: Well, I could say something like  
22 if we experienced sea-level rise, you might have a  
23 truncation of the sand budget coming to this area,  
24 because not as much would be exposed. You can have  
25 higher wave levels, so they'd be eating away at the

1 coastal dunes.

2 Is that getting to what -- your question?

3 MR. CARROLL: Well, I guess what I'm really  
4 asking is that given the period of time over which  
5 you indicated these phenomenon had occurred and the  
6 conditions resulting from those phenomena had existed  
7 hundreds of thousands of years, would it be  
8 reasonable to believe that the sorts of phenomena  
9 that you just described, sea-level rise, would  
10 materially affect the situation that we have here  
11 over the next 200 years, say?

12 MS. ROESSLER: Objection. He's not here to  
13 testify on sea-level rise. I believe we're getting  
14 to that after Biology.

15 MR. CARROLL: Well, I didn't raise sea-level  
16 rise, he did. But he included a lot of direct  
17 testimony on the unique nature of the dune structure  
18 in this immediate vicinity. I'm just exploring that  
19 a little bit further.

20 MS. ROESSLER: Not as a sea-level rise  
21 expert, though.

22 HEARING OFFICE KRAMER: Okay.

23 MS. ROESSLER: So I'd like to --

24 MR. CARROLL: I withdraw the questions  
25 related to sea-level rise, and thank you for the

1 additional information related to the conditions at  
2 the project site.

3 We have not further questions at this time.

4 HEARING OFFICE KRAMER: Thank you. Let me  
5 un-mute Ms. Belenky, unless she can un-mute herself,  
6 and ask her, one, if she has any questions and, two,  
7 how long she expects her cross examination to take?

8 MS. BELENKY: Hi. Can you hear me okay?

9 HEARING OFFICE KRAMER: Yes.

10 MS. BELENKY: Yes. I have just a very few  
11 questions, but I'd be happy to hold them if you're  
12 going to have a break, whichever way you prefer.

13 HEARING OFFICE KRAMER: How many minutes do  
14 you think it will take?

15 MS. BELENKY: Three to five?

16 HEARING OFFICE KRAMER: Go ahead.

17 MS. BELENKY: Okay. Thank you.

18 Mr. Hunt, you testified, and this was  
19 several hours ago at the beginning of your testimony,  
20 regarding the reconnaissance surveys. You stated,  
21 and I'm just trying to quote from memory, that they  
22 may have been adequate to our vegetation mapping. I  
23 believe that was the term you used; is that correct?

24 MR. HUNT: Could you repeat the question? I  
25 didn't quite understand every word.

1 MS. BELENKY: Oh, I'm sorry. Maybe it will  
2 be better -- wait, let me -- hold on one sec. Is  
3 this better? Can you hear me?

4 COMMISSIONER SCOTT: No, that's actually not  
5 better.

6 MS. BELENKY: Okay. Is this better now?

7 COMMISSIONER SCOTT: Yes.

8 MS. BELENKY: Okay. Great.

9 Mr. Hunt, you testified near the beginning  
10 of your testimony that the Applicant's reconnaissance  
11 surveys may have been adequate for vegetation  
12 mapping. I believe that was the term you used?

13 MR. HUNT: Yes, that's correct.

14 MS. BELENKY: Is it your opinion that those  
15 surveys were sufficient to identify rare plants?

16 MR. HUNT: No, it's not.

17 MS. BELENKY: Thank you.

18 MR. HUNT: And I should --

19 MS. BELENKY: So is it correct --

20 MR. HUNT: I want to expand on that. It may  
21 be sufficient for certain species, but there are --  
22 it's my understanding that there are certain species,  
23 such as the milk vetch, which are difficult to  
24 identify in the field. I'm not impugning that Ms.  
25 Love can't identify it. I think she's a good

1 botanist. But this species was considered extinct  
2 for several decades and was recently discovered. So  
3 it has specialized habitat requirements, specialized  
4 seasonal occurrence. And I'm not entirely convinced  
5 that all of the site visits they made were done at  
6 the proper time to detect that species. So it would  
7 depend on the species you're talking about.

8 MS. BELENKY: Thank you. And I just want to  
9 explore one other area. Is reconnaissance survey  
10 information alone generally the basis for determining  
11 whether or not focused or protocol surveys are done?

12 MR. HUNT: No. In this particular  
13 situation, as a biologist I would look at the context  
14 of the project site. And as I've said numerous times  
15 in my testimony, the site sits in an extremely  
16 sensitive habitat area. I would probably approach  
17 this project by saying that focused surveys for a  
18 number of say wildlife species should be done right  
19 off the bat because of its potential to harbor these  
20 species.

21 If the site was sitting out in an  
22 agricultural field, it would be a different story.  
23 You might do a reconnaissance-level survey then and  
24 proceed on that basis.

25 MS. BELENKY: Thank you. Given the



1 information you have here, including the  
2 reconnaissance surveys that were conducted by the  
3 staff and the Applicant, is it your opinion that  
4 focused or protocol surveys are needed for special  
5 status species, including plant species, such as the  
6 Ventura milk vetch?

7 MR. HUNT: Yes, I think they should be.

8 MS. BELENKY: Thank you.

9 I have no further questions.

10 HEARING OFFICE KRAMER: Okay. Any redirect?

11 MS. WILLIS: Mr. Kramer, before we move on,  
12 Kerry Willis for Staff, I just had two clarifying  
13 questions.

14 HEARING OFFICE KRAMER: Go ahead.

15 MS. WILLIS: Dr. Hunt, thank you for your  
16 patience. And you may have already answered these  
17 questions, and I just want to make sure I've  
18 understood.

19 You stated in your testimony, especially  
20 under the cross examination of Mr. Carroll, that you  
21 observed the site looking through the fence starting  
22 around 1984 onward, and about a dozen times. What  
23 was the most recent time that you made that type of  
24 observation at the site?

25 MR. HUNT: 2016. But prior to that, 2009 --

1 2008, I should say.

2 MS. WILLIS: So you looked at it just this  
3 past year?

4 MR. HUNT: Yes. I was on another site  
5 southeast of Harbor and 5th and drove over to Harbor  
6 Boulevard and again looked through the fence itself  
7 with binoculars.

8 MS. WILLIS: And how long did you observe  
9 the site for, how many --

10 MR. HUNT: At that time, maybe 20 minutes,  
11 15 minutes.

12 MS. WILLIS: And what would be the most  
13 recent date you conducted focus surveys in the  
14 vicinity of the site?

15 MR. HUNT: That would be 2008.

16 MS. WILLIS: Thank you. That was it.

17 MR. HUNT: Okay.

18 HEARING OFFICE KRAMER: Redirect?

19 MS. ROESSLER: I'm sorry. I thought you  
20 still had another question.

21 Yes, I have a few questions.

22 HEARING OFFICE KRAMER: Go ahead.

23 MS. ROESSLER: Mr. Hunt, I know we've --  
24 you've testified extensively already about your  
25 experience with the site and the surrounding area

1 over the last 30 years.

2 Just to clarify, is it correct to say that  
3 you have been around the entire site in the vicinity?

4 MR. HUNT: Yes.

5 MS. ROESSLER: And that you've conducted  
6 studies for special status species on all sides or --

7 MR. HUNT: Yes.

8 MS. ROESSLER: -- of the vicinity?

9 MR. HUNT: Yes.

10 MS. ROESSLER: Thank you.

11 In regards to the dune swale wetland, is it  
12 correct to say that you have testified that the  
13 hydrology was the parameter or one of the parameters  
14 you were relying on in determining that the dune  
15 swale is a wetland?

16 MR. HUNT: Right, using vegetation as the  
17 indicator. That coyote bush, as I said, was a  
18 phreatophyte, which is tapping into groundwater.

19 MS. ROESSLER: Okay. Thank you for  
20 clarifying.

21 And you were here for Ms. Love's testimony  
22 yesterday. Isn't it correct that she stated that no  
23 focused surveys were done by her for special status  
24 species on the site?

25 MR. HUNT: Yes.

1 MR. CARROLL: I'm sorry, I object to the  
2 question. I believe that is a mischaracterization of  
3 Ms. Love's testimony. I seem to recall that she  
4 indicated that focused surveys were conducted. I  
5 don't recall for which specific species, but I do  
6 specifically recall her mentioning conducting focused  
7 surveys. But, you know, the transcript speaks for  
8 itself.

9 MS. ROESSLER: I agree with the transcript  
10 speaking for itself. Okay. Thank you.

11 So in addition to reconnaissance surveys  
12 having been done on the site by the Applicant's  
13 biologists and the staff biologist, can you just --  
14 isn't it the presence of the ESHA surrounding the  
15 site from your years of field work that also forms  
16 part of your opinion or establishes the base for your  
17 opinion for the presence of ESHA on site and the need  
18 to do focused surveys on site?

19 MR. HUNT: Yes, it does.

20 MS. ROESSLER: In terms of a biologist's  
21 evaluation of a site, we understand they do  
22 reconnaissance surveys, maybe as a first step. Given  
23 this particular site and everything that you know  
24 about it, was it prudent or best practices, best  
25 methodology to abstain from doing focused surveys for

1 special status species on the project site?

2 MR. HUNT: No, I don't. If I had done a  
3 reconnaissance-level site visit first, I would follow  
4 that up with focused surveys.

5 MS. ROESSLER: Are focused surveys the most  
6 reliable information in terms -- for identifying the  
7 presence of special status species on a site?

8 MR. HUNT: They are.

9 MS. ROESSLER: And just to address the  
10 activities in terms of is it your understanding that  
11 constructing this project will destroy, kill, cause  
12 mortality of the, potentially, of the ten special  
13 status species that you have identified could be  
14 present on site?

15 MR. HUNT: Yes, it will affect them in one  
16 way or the other, either loss of foraging habitat for  
17 say birds to loss of direct mortality with ground-  
18 dwelling species.

19 MS. ROESSLER: Is it your understanding that  
20 construction of the site will destroy, eliminate,  
21 remove the 2.03-acre wetland on site?

22 MR. HUNT: Yes.

23 MS. ROESSLER: And isn't it true from your  
24 experience in surveys you've conducted that you have  
25 found, for example, the silvery legless lizard in

1 disturbed habitats?

2 MR. HUNT: Yes, some habitats being very  
3 disturbed. For example, on the Guadalupe Dunes, it  
4 was a practice in the old days, quote unquote "old  
5 days" to spray the dune field with oil to keep the  
6 sand from moving. And you go out to these sites and  
7 the asphalt is now degrading, broken up, whatever,  
8 and there are legless lizards underneath that  
9 asphalt.

10 MS. ROESSLER: So it's fair to say that just  
11 because the site has been previously disturbed, it  
12 does not mean that a biologist should not expect a  
13 silvery legless lizard to appear or rule out doing a  
14 survey for one --

15 MR. HUNT: Not --

16 MS. ROESSLER: -- on the basis of  
17 disturbance?

18 MR. HUNT: Not at all, given that the  
19 species formerly occurred there. I think any  
20 biologist would say 100 percent certainty of it  
21 formerly occurring there before the site was  
22 developed. It definitely occurs off site,  
23 immediately off site. And there are not barriers to  
24 dispersal onto the site, so, yes.

25 MS. ROESSLER: You mentioned that you last

1 visited the site in 2016.

2 MR. HUNT: Uh-huh.

3 MS. ROESSLER: And I think you also  
4 mentioned 2008 and 2009.

5 Do you have reason to believe that there  
6 would have been some substantial or significant  
7 change between those two dates that would have  
8 changed your reasoning in regards to the presence of  
9 suitable habitat or any special status species on the  
10 project site?

11 MR. HUNT: No, but I'll qualify that by  
12 saying that if there was soil stockpiled on the site  
13 and that had been removed, that can be construed as  
14 possibly improving conditions for particular  
15 habitats.

16 MS. ROESSLER: Okay. And bear with me, I'm  
17 almost done.

18 So just to sum up here, is it your opinion  
19 that the site would likely have suitable habitat or  
20 foraging habitat for -- or possibly present, the ten  
21 special status species that you discussed, which  
22 include the four terrestrial ones and the six avian  
23 ones?

24 MR. HUNT: Yes.

25 MS. ROESSLER: Thank you.

1           That's all.

2           HEARING OFFICE KRAMER:   Okay.   Our last --  
3 thank you, Mr. Hunt.

4           Our last witness for biology is Mr. Street.  
5 He was checked in.   I told him we'd probably take him  
6 after lunch.   And I want to ask the parties, for his  
7 convenience, since he hung around for quite a while  
8 last night and then again today, can we begin with  
9 him when we start the Soil and Water, as well?   Does  
10 anyone object to that?   Okay.   So hearing none --

11          MR. STREET:   I'm still here.

12          HEARING OFFICE KRAMER:   Okay.

13          MR. STREET:   And I'm happy to go either  
14 before or after lunch.

15          HEARING OFFICE KRAMER:   Okay.   And do you  
16 want to try to get finished soon, or is this so  
17 fascinating that you're going to be here regardless?

18          MR. STREET:   Well, I'll be here and  
19 available for questions until about 4:30 today.

20          HEARING OFFICE KRAMER:   Okay.   So we're  
21 probably smart to accommodate you and get you -- get  
22 both topics finished with you right after lunch.

23          So we're going to take a lunch break.  
24 Because -- we're going to cut it down to 20 minutes,  
25 but we're also going to tell you that we will not be



1 offended if you are eating while you are sitting at  
2 the table here. So with that, we will be on a 20-  
3 minute lunch break. I'll put the timer up on the  
4 screen. Thank you.

5 (Off the record at 12:25 p.m.)

6 (On the record at 12:45 p.m.)

7 COMMISSIONER SCOTT: All right, while we're  
8 waiting for the parties to get started, I will  
9 confirm with our court reporter that, yes, we are  
10 recording.

11 I see that we do have a few members of the  
12 public here, in the audience. If you were wanting to  
13 make a public comment, and you'd like to do so now,  
14 we can go ahead and do that.

15 So, I see there's about three of you there.  
16 If you'd like to make a public comment for today,  
17 please come on up and do so. And if not, that's  
18 okay, too.

19 COMMISSIONER DOUGLAS: And you are welcome  
20 to wait, and you will have other opportunities. But  
21 this could go a little bit late, and so you're  
22 welcome to come up now, if you'd like.

23 COMMISSIONER SCOTT: And if you would please  
24 state and spell your name, if you're comfortable with  
25 that, for our court reporter, to make sure she gets

1 it right in the transcript?

2 MS. GODWIN: Yes. My name is Shirley  
3 Godwin, S-h-i-r-l-e-y. And Godwin is G-o-d-w-i-n.

4 I basically changed what I was going to say  
5 the other night because I listened to a lot of  
6 testimony here.

7 I just wanted to mention a couple of things.  
8 That, as a long-time resident here, and I don't know  
9 if that was addressed this morning because I didn't  
10 get here in time for that, but testimony from one of  
11 the NRG representatives, regarding the alternate site  
12 at Del Norte. I was rather puzzled to hear that it  
13 was not superior because of the cultural and historic  
14 resources on the site. And they mentioned the  
15 Carnegie Library and the Oxnard Historical District.  
16 They are quite a long ways from the Del Norte site.  
17 They're in downtown Oxnard. I don't know exactly how  
18 many miles. But even when traffic is light, it's  
19 about 20 minutes to drive between. The Del Norte  
20 site is actually between -- beside our trash transfer  
21 and recycling center, surrounding by industrial uses,  
22 and some oil fields across 5th, not too far from  
23 there. But it is hardly a cultural site.

24 I think, sometimes, some of the experts are  
25 more likely to go online to research, rather than

1 actually go out to the sites. And, so, sometimes we  
2 hear things that are rather startling here, that  
3 don't really match what we know is the reality, as a  
4 resident.

5 I wanted to mention, because it's raining  
6 lightly this morning, it's a high tide, if this had  
7 been -- these last storms, and a high tide like  
8 today, had been like it was in 1969, we wouldn't even  
9 been having this conversation. We've been here, in  
10 Oxnard, for 55 years, and I particularly remember the  
11 '69 storm because so much damage was done on our  
12 coast. Not from a tsunami, but basically from the  
13 sky, and the extensive rain, and coastal flooding.  
14 In Ventura, the harbor was wiped out and all the  
15 boats in the harbor. The sewer plant was knocked out  
16 for months and raw sewage went into the ocean.

17 But one of the things that interested me was  
18 the power plant was not operational for several weeks  
19 there because of the coastal flooding.

20 And I had mentioned, a couple of nights ago,  
21 when I testified, that we live -- we still live in  
22 the same house we've actually lived in, since 1966,  
23 due north of the Mandalay Power Plant -- I don't mean  
24 Mandalay, Ormond Beach Power Plant. We saw it under  
25 construction. And I remember wondering at the time,

1 because this construction and testing took quite a  
2 long time, which we were very aware of because we  
3 could see and hear the testing, whether it was  
4 operational or not. Because at least in the  
5 newspaper they talked about the Mandalay Power Plant  
6 being shut down, temporarily, because of the  
7 flooding. So, it doesn't seem like any coastal site  
8 is a great place. Thank you.

9 COMMISSIONER SCOTT: Thank you, Mrs. Godwin.

10 Let me just double check, we are going to  
11 take public comment, right now, if there are a few --  
12 Mr. Ward, please come on up.

13 MR. WARD: Thanks for recognizing me.

14 COMMISSIONER SCOTT: Oh, of course.

15 MR. WARD: My name is Kevin Ward. I'm a  
16 citizen of Oxnard and have been for 16 years, now.  
17 You know, these days we can't assume that the people  
18 in power really have our best interests at heart.

19 Changes at the Federal level are keeping  
20 pace with the whirlwind changes in our climate.  
21 Their rapid implementation, or as quick as a stroke  
22 of a pen, or a tsunami worsening our dilemma of  
23 Anthropocene climate disturbance.

24 In only a week, since we began this latest  
25 round of public comment and hearing for the merits of

1 the people of Oxnard to maintain control over their  
2 environment, much has changed with regard to  
3 regulations of the fossil fuel industry. Safe  
4 practices seem to be in refugee status.

5           This process has been very important and, in  
6 time, what we've done here may be just a nostalgic  
7 memory of at least the attempt to justly address the  
8 concerns of community and an old world industry. It  
9 appears that much about our standards of civility  
10 have already changed toward an attitude of  
11 intimidation to make a point.

12           Soon, those who have adamantly and  
13 justifiably opposed to projects, such as NRG, LNG,  
14 DAPL, and KXL may be deemed economic terrorists.  
15 That is the language currently used towards Standing  
16 Rock First Americans, and even U.S. Vets, who have  
17 had the courage to defend the basic human needs for  
18 water, and for their citizenry, us.

19           Now, I hate to see that. I'm not a Vet, nor  
20 a construction worker anymore. I was a roofer and  
21 industrial painter in Arizona, for 10 years. But I'm  
22 a taxpaying citizen of Oxnard, who has seen the  
23 environmental degradation from Refugio Beach to  
24 Porter Ranch, and I object to the idea that this is  
25 just the price of progress.

1           Solar is our answer to our energy needs.  
2 Wind is the answer. Waves are the answer. Oxnard  
3 has plenty of all three.

4           Tesla, not known, I guess, for their support  
5 of unions, now has a battery pack for three grand,  
6 that can sustain a rooftop array for days. And it  
7 processes sunlight, even with minimal exposure.  
8 Every rooftop retrofitted with panels and a battery  
9 unit could supply iron workers, or anyone else, with  
10 continuous work, much longer than any construction or  
11 demolition NRG has to offer with this project.

12           NRG should consider not only dismantling  
13 their erector set, but restoring the beach area as if  
14 it had never been there. It should eliminate all  
15 wastewater disposal to either the sea, or Oxnard's  
16 suffering infrastructure. It should devote itself to  
17 really reaching out to the community, rather than  
18 sliding their schemes under the radar, and by  
19 offering solar power, or wind power directly to those  
20 in the community, instead of, say, Las Vegas.

21           Any losses might be chalked up to paying  
22 California back for the irregularities of 2000. But  
23 if you really live in Oxnard, then you know that some  
24 things are priceless, like the white, Hollywood-like  
25 beaches, the rare and significant wetlands, and the

1 pearls of marine diversity, the Channel Islands, in  
2 the Santa Barbara Channel.

3 So, it's really up to us all, even the  
4 attorneys for NRG, the Commission, to establish a  
5 safer footing against the coming tide of global  
6 warming catastrophe. Anything that is not addressing  
7 that is retrograde, short-sighted, and detrimental.

8 Oxnard is one of the four best growing areas  
9 in the world. Removing all signs of an oil-dependent  
10 past is what it and its citizens deserve. Please  
11 deny this project.

12 COMMISSIONER SCOTT: Thank you.

13 I'm going to turn back to Hearing Officer  
14 Kramer and we will pick up with, I believe, Mr.  
15 Street.

16 HEARING OFFICER KRAMER: Okay, Mr. Street,  
17 are you there? Hold on. Can you unmute yourself?  
18 Maybe not. Let me do it for you.

19 MR. STREET: I'm here.

20 HEARING OFFICER KRAMER: Okay. You were  
21 sworn yesterday, correct?

22 MR. STREET: I was sworn.

23 HEARING OFFICER KRAMER: Okay. Did you want  
24 to make any opening statement about Biology or just  
25 take cross-examination?

1 MR. STREET: I'm ready to take questions.

2 HEARING OFFICER KRAMER: Okay, Mr. Carroll.

3 DIRECT EXAMINATION BY APPLICANT

4 MR. CARROLL: Thank you. Hello, Mr. Street,  
5 this is Mike Carroll, on behalf of the Applicant.

6 I'm going to begin today, a little like we  
7 began yesterday, in terms of understanding the  
8 posture with which your -- or, the posture in which  
9 you're appearing to present the Coastal Commission's  
10 report. And, so, is it correct that you're here on  
11 behalf of the Coastal Commission to sponsor the  
12 Coastal Commission's report on the Puente Project  
13 into the record, and to answer the questions to the  
14 best of your ability, but you are not -- I don't know  
15 your background, but that you are not a biologist  
16 and, necessarily, prepared and available to get into  
17 the details of the analysis related to biological  
18 resources. Am I characterizing the situation  
19 correctly? I'm just trying to figure out what the  
20 appropriate scope of questioning is.

21 MR. STREET: Yes, you're more or less  
22 correct. You know, my primary purpose in  
23 participating was to sponsor our report. I should  
24 say the Commission's report into the record.

25 And also to answer questions about the



1 report. So, I can highlight the content of the  
2 report and, to some degree, clarify what's there.

3 With regard to, you know, Biological  
4 Resources, I would be referring to that section of  
5 the report and also to Attachment B of that report,  
6 which is a memorandum prepared by the Commission's  
7 ecologist, Dr. Jonna Engel, which describes the  
8 wetlands status of the site from her perspective, or  
9 from the Commission's perspective.

10 MR. CARROLL: Okay. So, am I correct in my  
11 assumption that you are not a -- that your education  
12 and training is not in the area of biology, that you  
13 don't hold a degree in biology and don't have any  
14 unique expertise in that area? And I don't mean to  
15 say it in a negative way. I'm just trying to  
16 understand the scope of your expertise and, again,  
17 the posture in which you're appearing on behalf of  
18 the Coastal Commission.

19 MR. STREET: I do have some training in  
20 biology. But my advanced degrees are in geological  
21 and environmental scientists. So, I would not  
22 describe myself as a biological expert.

23 But, again, my purpose here is to present  
24 our report and answer questions related to that  
25 report.

1           MR. CARROLL: So, is it fair to say that the  
2 scope of your ability to respond to questions is  
3 limited to restating what's contained -- with respect  
4 to Biological Resources, restating what's contained  
5 in the body of the report and in the appendix created  
6 by Ms. Engel, but you would not be in a position to  
7 delve into the methodologies that she implemented, or  
8 the specific actions that she undertook to arrive at  
9 her conclusions, or the basis of her conclusions,  
10 those types of things?

11           MR. STREET: Insofar as those bases are  
12 presented in the Commission's report and Dr. Engel's  
13 memo, I can address those.

14           MR. CARROLL: Okay. I guess, under the  
15 circumstances, I am just -- because it's somewhat of  
16 an ambiguous situation, I'm going to ask you some  
17 specific questions related to the conclusions  
18 contained in the report and the appendix prepared by  
19 Ms. Engel. And let me clarify, are you -- I take it  
20 Ms. Engel, obviously, is not on the phone?

21           MR. STREET: Yes, Dr. Engel is not with me  
22 today.

23           MR. CARROLL: It's not Dr. Engel. And is  
24 anyone else with you today, or are you alone?

25           MR. STREET: I'm currently alone on the

1 phone here. There's a possibility that Deputy Chief  
2 Counsel, Louise Warren, will join me. But if and  
3 when that happens, I will announce her presence.

4 MR. CARROLL: Okay. Can you, then, briefly  
5 expand upon -- you mentioned a moment ago that you do  
6 have some training in the area of biology. Can you  
7 expand upon your training, education and experience  
8 within the field of Biological Resources?

9 MR. STREET: Well, I'm not entirely sure  
10 this is relevant to the Commission's 30413(d) report.  
11 But, sure, I certainly don't mind. You know, I have  
12 an undergraduate degree in earth systems science,  
13 from Stanford. And, at the same time, I completed a  
14 master's degree in the same subject. And my primary  
15 area within that field of study was in ecosystem  
16 ecology.

17 I conducted some undergraduate research in  
18 both coastal ecosystems and terrestrial ecosystems.

19 Later on, I've completed a PhD in geological  
20 and environmental sciences at Stanford and my  
21 research was interdisciplinary. It involved some  
22 biological field work, but the primary emphasis was  
23 not biology. And I've been an environmental  
24 scientist with the Coastal Commission for three  
25 years. And, in that time, have had to review a wide

1 variety of coastal development permit applications  
2 that involved biological resources. I hope that  
3 summary helps.

4 MR. CARROLL: That's helpful, thank you.  
5 So, with respect to those portions of what we're  
6 generally referring to here as the Coastal Commission  
7 Report, and by that I mean the final report that was  
8 submitted to the Energy Commission. With respect to  
9 the analysis and the conclusions that are contained  
10 in Section D of that report, and the appendix to the  
11 report, which is Appendix C, titled, "Wetlands  
12 Delineation Memorandum," from Dr. Jonna Engel, is it  
13 fair to say that the analysis and the conclusions  
14 contained in those portions of the report that the --  
15 are those of Ms. Engel? In other words, the analysis  
16 and conclusions -- well, I guess that's the best way  
17 to phrase it. That the analysis and the conclusions  
18 in the report are those of Ms. Engle and not yours?

19 MR. STREET: I think the most accurate way  
20 to phrase it that that analysis and conclusions  
21 contained in the report are those of the Coastal  
22 Commission, itself. But those were informed by the  
23 analysis provided by Dr. Engel, as well as Coastal  
24 Commission staff.

25 MR. CARROLL: And, so, the recommendations

1 of the staff, that led to the adoption of the report  
2 from the Coastal Commission, pertaining to biology,  
3 were developed by staff on the basis of the work  
4 conducted by Ms. Engel. Is that accurate?

5 MR. STREET: Yes, in part. I would say that  
6 the Commission's findings were based on Dr. Engel's  
7 site visit and her -- the evaluation she provided.  
8 But also on the information contained in the PSA, and  
9 also the wetland delineation provided by NRG's  
10 consultant, AECOM, as well as the site visits that  
11 were conducted by the Energy Commission staff. The  
12 purpose of which, I understand, was to review and  
13 confirm the findings of NRG's consultant.

14 MR. CARROLL: And, so, are you familiar with  
15 the methodologies that Ms. Engel employed in  
16 conducting her analysis related to the biological  
17 issues discussed in the report?

18 MR. STREET: Can you be more specific,  
19 please?

20 MR. CARROLL: With respect to the conclusion  
21 that 2.03 acres of the project site constitute a  
22 Coastal Commission wetland, are you familiar with the  
23 methodology that Ms. Engel -- or, I'm sorry, Dr.  
24 Engel employed in arriving at that conclusion?

25 MR. STREET: In her declaration, Dr. Engel

1 stated that she visited the site, and walked the site  
2 with Energy Commission biologists and AECOM  
3 biologists, in which she examined the vegetation that  
4 was there, and the soils that were there. So, yes.

5 MR. CARROLL: And are you -- are you  
6 familiar with the Coastal Commission's one-parameter  
7 definition of wetland?

8 MR. STREET: Yes.

9 MR. CARROLL: And what is your understanding  
10 of that definition?

11 MR. STREET: Well, on page 11 of the report  
12 that the Coastal Commission adopted, it lists both  
13 the definition for the Coastal Act and the expansion  
14 on that definition that's contained in the  
15 Commission's administrative regulations. I can read  
16 those, if you want, but they are already in the  
17 record.

18 MR. CARROLL: Okay. I don't think that's  
19 necessary. So, let me stop with the questioning for  
20 a moment, Mr. Street.

21 I'm not sure that it's valuable for us to  
22 pursue this line of questioning. We do have  
23 questions, specific questions about the analysis, the  
24 conclusions, and the recommendations in the Coastal  
25 Commission report related to Biological Resources.

1 They are, you know, very specific questions, akin to  
2 those that have been asked of the witnesses that have  
3 been before us on this topic over the last couple of  
4 days.

5           It's clear that Mr. Street's ability to  
6 respond to those questions is relatively limited to  
7 restating what's contained in the report, on the  
8 basis of Ms. Engel's work. Ms. Engel is not being  
9 made available as a witness.

10           On that basis, I don't want to take the  
11 Committee's and the parties' time asking further  
12 questions, which will only seem to confirm that. So,  
13 I don't -- it's not our intention to proceed with  
14 further questioning. But I need to indicate that we  
15 have great concerns about the status of these aspects  
16 of the Coastal Commission's report, under those  
17 circumstances.

18           We have had various witnesses testify, over  
19 the last couple of days, about conclusions that they  
20 have reached based on conclusions contained in the  
21 Coastal Commission's report. And we have no basis  
22 for exploring those conclusions and probing the  
23 validity of those conclusions. They amount to  
24 hearsay.

25           And, so, we do have some grave concerns

1 about that which we'll, you know, obviously raise at  
2 a future point. But under the circumstances, I don't  
3 see any value in continuing to question Mr. Street,  
4 who I certainly give credit to for being the person  
5 on the line to respond to all these questions. And I  
6 don't mean this in a negative way, but who clearly  
7 isn't qualified to answer the sorts of questions that  
8 we would like to ask about the biological assessment  
9 contained in the Coastal Commission's report.

10 HEARING OFFICER KRAMER: Okay, thank you.

11 The Environmental Coalition listed Mr.  
12 Street as a possible subject of cross-examination by  
13 them. Do you have any questions for him?

14 MS. ROESSLER: Yes, I do, thank you.

15 HEARING OFFICER KRAMER: Okay, please go  
16 ahead.

17 MS. ROESSLER: Thank you. I'd also like to  
18 state for the record, just in terms to the Coastal  
19 Commission's report, there was a public process  
20 available where all parties were invited to  
21 participate and question to specific methodologies.  
22 For example, for the wetland delineation.

23 CROSS-EXAMINATION BY ENVIRONMENTAL COALITION

24 MS. ROESSLER: That aside, Mr. Street, this  
25 is Alicia Roessler. Sorry, I know you can't see us.



1 I'm sitting with my colleagues, Matt Smith and Brian  
2 Trautwein.

3 I just wanted to ask you a few questions  
4 involving your report. Specifically, can you just  
5 describe your, I guess, title and responsibilities at  
6 the Coastal Commission?

7 MR. STREET: Yes, I am an Environmental  
8 Scientist in the Energy, Ocean Resources, and Federal  
9 Consistency Division with the Commission.

10 My responsibilities are broad. But one of  
11 the primary responsibilities is to review and help  
12 prepare staff recommendations on items that are going  
13 to be brought before the Commission, including  
14 coastal development permits, appeals, and in this  
15 case, a report to the Energy Commission under Section  
16 30413(d) of the Coastal Act.

17 MS. ROESSLER: Thank you. And you are one  
18 of three authors of that report that we've been  
19 discussing, already, for the Coastal Commission. Is  
20 that correct?

21 MR. STREET: I think it depends on what you  
22 mean. If author means the person who's been passed  
23 over the keys, then I'm -- yes, I'm the primary  
24 author. But the analysis contained in the report was  
25 the product of a number of staff members in

1 contribution.

2 MS. ROESSLER: Okay, thank you. And I think  
3 we kind of already established, but was Dr. Engel the  
4 one who performed the biological evaluation for the  
5 report?

6 MR. STREET: Dr. Engel was a primary  
7 contributor. She is the staff member who performed  
8 the site visit. But myself, and other staff members,  
9 also contributed to the analysis contained in the  
10 recommendation that the Commission later adopted as  
11 its own report.

12 MS. ROESSLER: Okay, thank you. So, as  
13 coauthor and someone who worked with Dr. Engel on  
14 this -- on the report, are you familiar with the  
15 scope of the biological evaluation performed by the  
16 Commission for the report -- or, sorry, by staff,  
17 sorry, for the report?

18 MR. STREET: Yes.

19 MS. ROESSLER: Did the report's biological  
20 evaluation confirm the presence of a 2.03 acre  
21 Coastal Act jurisdictional wetland on site?

22 MR. STREET: Yes. In the Commission's  
23 report, on page 13, that is exactly what was found.

24 MS. ROESSLER: Thank you. The report's  
25 biological evaluation of the site did not include a

1 survey for the presence of any on-site wetlands,  
2 other than that 2.03 acre wetland, did it?

3 MR. STREET: Well, in Appendix C, to the  
4 report, Dr. Engel states that she walked the project  
5 site and examined the soils and vegetation. But she  
6 doesn't specifically mention anything other than that  
7 2.03 acre portion of the project site.

8 MS. ROESSLER: So, based on your knowledge,  
9 did Dr. Engel look outside the 2.03 acres, on-site,  
10 to evaluate whether or not there was a Coastal  
11 Commission jurisdictional wetland?

12 MR. CARROLL: I object. There is no basis  
13 in anything that I have heard for Mr. Street to  
14 testify as to where Ms. Engel looked, other than what  
15 he just said, which is in the report that she walked  
16 the project site.

17 MS. ROESSLER: I just asked him if he was  
18 familiar with the scope of the biological evaluation  
19 performed by the report. He answered yes. Maybe we  
20 could just let Mr. Street answer the question.

21 MR. CARROLL: And, then, you asked him if he  
22 knew where Ms. Engel looked while she was there, and  
23 I objected on the basis that he, based on what I've  
24 heard, would have absolutely no basis for answering  
25 the question as to where Ms. Engel looked when she

1 was there.

2 MS. ROESSLER: I asked to his knowledge, is  
3 he aware of whether or not Ms. Engel looked outside  
4 the two acre site. If it's not in his knowledge, he  
5 can say no.

6 HEARING OFFICER KRAMER: Okay. Mr. Street,  
7 if you have personal knowledge to answer the  
8 question, go ahead and answer it.

9 MR. STREET: Other than what is in the  
10 Coastal Commission's report, and the attachment  
11 containing Dr. Engel's memorandum, I don't have  
12 personal knowledge of where she looked while she was  
13 on site.

14 MS. ROESSLER: Thank you. So, just to be  
15 clear, you have no personal knowledge of whether or  
16 not Dr. Engel looked outside the two acre wetland on  
17 the project site?

18 I'm not just asking what the report said,  
19 I'm asking about your personal knowledge.

20 MR. STREET: Well, as I've stated before,  
21 I'm not sure it's my role to contribute opinions and  
22 personal knowledge but --

23 MS. ROESSLER: Well, it's related to the  
24 scope of the report, is all I'm trying to get at.

25 MR. STREET: And to that point, I think that

1 you made, or others have made earlier, is that the  
2 time for questioning the basis of the Coastal  
3 Commission's report was most appropriately at the  
4 Coastal Commission's hearing.

5 But I will say that I do not have personal  
6 knowledge of the scope of Dr. Engel's investigations  
7 beyond what was contained in her memorandum.

8 MS. ROESSLER: So, you were not on a phone  
9 call with Dr. Engel and --

10 MR. CARROLL: Objection. Objection.

11 MS. ROESSLER: Let me finish my question,  
12 please.

13 MR. CARROLL: I'm sorry. No, I'm not -- I  
14 don't have to --

15 MS. ROESSLER: You don't even know what I'm  
16 going to say.

17 HEARING OFFICER KRAMER: Let her finish the  
18 question.

19 MS. ROESSLER: Thank you.

20 MR. CARROLL: But can you admonish the  
21 witness not to answer the questions until parties  
22 have an opportunity to object.

23 HEARING OFFICER KRAMER: Yeah, Mr. Street,  
24 let's wait until we talk this out.

25 MS. ROESSLER: I'm asking Mr. Street whether

1 or not, and this is in order to get to the veracity  
2 of his truth that he had no personal knowledge of the  
3 scope of Dr. Engel's work, so I'm asking whether or  
4 not he was on a phone call with Dr. Engle, and Brian  
5 Trautwein, where they discussed Dr. Engle's, the  
6 scope --

7 MR. CARROLL: Objection.

8 MS. ROESSLER: I'm still not done with my  
9 question.

10 MR. CARROLL: I'm sorry.

11 MS. ROESSLER: Please give me the personal  
12 courtesy to finish.

13 MR. CARROLL: I'm sorry, but within the  
14 context of the question --

15 MS. ROESSLER: You can be as sorry as you  
16 want.

17 MR. CARROLL: Within the context of the  
18 question, the party is about to disclose hearsay  
19 evidence.

20 MS. ROESSLER: You're still not letting me  
21 finish my question.

22 HEARING OFFICER KRAMER: Mr. Carroll, let  
23 her finish the question. Her question is not  
24 testimony.

25 MR. CARROLL: I withdraw the objection. I

1 apologize.

2 MS. ROESSLER: So, let me try for a third  
3 time. Mr. Street, I'm asking whether or not you have  
4 personal knowledge as to the scope of Dr. Engel's  
5 work, and whether or not you were on a phone call  
6 with Dr. Engel and Brian Trautwein, where the scope  
7 of Dr. Engel's work, specific to the Puente Project  
8 site, was discussed? Were you on that phone call?

9 HEARING OFFICER KRAMER: Okay, please wait,  
10 Mr. Street.

11 MS. CHESTER: I'm going to object. Assumes  
12 facts not in evidence, which phone call are we  
13 talking about? We don't -- we have not heard any  
14 testimony about any phone calls.

15 MR. CARROLL: And I'm going to object on  
16 multiple bases. First of all, under questioning, Mr.  
17 Street just testified that he has no knowledge of the  
18 scope of Ms. Engel's investigation beyond what's in  
19 the report.

20 As to the veracity of his statement, I am  
21 prepared to take, at face value, Mr. Street's  
22 statements that he's making here, under oath.

23 With respect to whether he was present on a  
24 phone call, there's been no foundation laid that  
25 there was a phone call. And with respect to anything

1 that may have been said in the phone call, it would  
2 be hearsay evidence.

3 MS. ROESSLER: May I respond, please.

4 HEARING OFFICER KRAMER: Yeah, and can you  
5 make an offer of proof?

6 MS. ROESSLER: Yes, I can. Attached to  
7 Intervener's Response to the -- I think it was the  
8 staff's motion to strike, there was a supplemental  
9 declaration of Brian Trautwein that discusses, in  
10 addition to his original declaration, which attached  
11 Dr. Jonna Engel's e-mail, from January 26th, and  
12 establishes the foundation for Mr. Street being on  
13 the phone call.

14 HEARING OFFICER KRAMER: Do you happen to  
15 have the --

16 MS. ROESSLER: So, it's Exhibit 4030 is the  
17 e-mail. And that original Exhibit 4030 was an e-mail  
18 that was submitted with the declaration from Brian  
19 Trautwein, testifying and establishing foundation for  
20 it.

21 To corroborate that, when staff tried to  
22 strike, in our discussions earlier about this e-mail,  
23 Exhibit 4030 from Dr. Engel, we did a supplemental  
24 declaration. And that supplemental declaration  
25 establishes, as a fact, that Mr. Street was on the



1 phone call and had personal knowledge of that e-mail  
2 before it was sent. And that's what I was trying to  
3 establish.

4           It was admitted and I'm using it to refresh  
5 Mr. Street's memory of the fact that he was present  
6 on the phone conversation and has personal knowledge  
7 of the scope and limits of the Coastal Commission's  
8 biological evaluation for that report. Which  
9 directly included information that Dr. Engel had  
10 said that she only came out to confirm the two acre  
11 wetland. And that's exactly what I'm trying to ask.  
12 And it is all related to the report and the scope of  
13 the report.

14           HEARING OFFICER KRAMER: Response from Mr.  
15 Carroll or Ms. Willis?

16           MR. CARROLL: I'm not sure what the value of  
17 the information would be, since it would essentially  
18 be hearsay upon hearsay. But I think it is highly  
19 inappropriate, in a situation where we have a member  
20 of the staff, of a sister agency, who is presenting  
21 the report of that agency. He has testified, under  
22 oath, that he has no knowledge as to the matter that  
23 Ms. Roessler is inquiring into.

24           And, Ms. Roessler, in order to impugn the  
25 veracity of what the witness has said, is trying to

1 bring into the record a phone conversation that  
2 occurred outside the scope of the Coastal Commission  
3 proceedings, in a non-public phone conversation, that  
4 none of the other parties were privy to, let alone  
5 able to participate in.

6           So, either the Coastal Commission report  
7 stands for what it says, which is what I believe Mr.  
8 Street has said, or it doesn't. And if it does, then  
9 it's the end of the inquiry. If it doesn't, then we  
10 need to have Ms. Engel, and some of the other experts  
11 who participated in the preparation of that report,  
12 available here so that all of the parties can ask  
13 them questions and cross-examine them.

14           And it shouldn't be the situation that one  
15 party is able to bring in information that they  
16 believe they have, based on a private conversation  
17 that they had with members of the Coastal Commission  
18 staff.

19           So, either the report stands for itself, or  
20 all of the contributors to the report are brought  
21 before the Committee to testify, so that all of the  
22 parties have an opportunity to question them about  
23 it. And it's completely inappropriate for one party  
24 to have an unfair advantage in that regard, based on  
25 a private conversation that they had with members of

1 the staff.

2 MS. WILLIS: Mr. Kramer, this is Kerry  
3 Willis, staff counsel. We just finally pulled it up,  
4 because we don't have hard copies of this. On  
5 paragraph 4, of Mr. Trautwein's declaration, it  
6 appears, at least from the declaration that there  
7 were several phone calls on January 24th. "On or  
8 about January 24th, I spoke with Jonna Engel on the  
9 telephone. We discussed whether focus surveys for  
10 special status species had been conducted on the  
11 project site. On January 24th, I e-mailed Dr. Engel  
12 copies of Mr. Hunt's opening and rebuttal testimony  
13 in this proceeding, and described the presence of  
14 ESHA on the site. Later that day, Dr. Engel called  
15 me. Mr. Street was also on the phone. We discussed  
16 Mr. Hunt's opening and rebuttal testimony, as well as  
17 the content of the 30413(d) report, particularly with  
18 regard to ESHA, the presence of a dune swale wetland  
19 and rare species. I asked if Dr. Engel could respond  
20 in writing about Mr. Hunt's findings and how they  
21 relate to the 30413(d) report. Dr. Engel said she  
22 would probably be able to do that and would work with  
23 Mr. Street to send an e-mail, responding to my  
24 questions in writing."

25 I don't see where it says that Mr. Street

1 was on the phone call where they discussed the focus  
2 surveys, and special status species, and how that was  
3 conducted on the site.

4 HEARING OFFICER KRAMER: Okay. I see Mr.  
5 Street's shown as a cc on the e-mail.

6 Well, without Dr. Engel, this is all just  
7 hearsay. And anything that Mr. Street could report  
8 about what Dr. Engel said would, similarly, be  
9 hearsay.

10 MS. ROESSLER: I'm just inquiring about the  
11 scope of the report. I'm not asking Mr. Street to  
12 repeat her findings. It is relevant. And we are not  
13 asking that the report is not taken at face value.  
14 We're not disputing the conclusions in the report,  
15 just so we're all clear.

16 What we're interested in, and I think  
17 everyone should be interested in, especially since  
18 the FSA, in particular, relies on the report and  
19 makes some assumptions about the scope of the work  
20 done in that report. And that is where this inquiry  
21 is going. And I think it's in the public's interest,  
22 and everyone's interest, to know if they relied on  
23 conclusions in that report, whether or not those  
24 conclusions cover the entire site or just part of the  
25 site. Whether or not the report actually did look

1 for special status species, or whether it was limited  
2 to only confirm a two acre wetland on site.

3 That's all we're trying to find out. We  
4 want to prevent assumptions and put facts into  
5 evidence.

6 MR. CARROLL: And I can certainly understand  
7 why Ms. Roessler would want to do that. And there  
8 are lots of aspects to the report that we also would  
9 like to have additional information. But what we  
10 have been told is that we will not have an  
11 opportunity.

12 We disagree, fundamentally, with the  
13 determination that there's a 2.03 acre wetland on the  
14 site. We are provided absolutely no opportunity,  
15 whatsoever, to probe that determination.

16 Ms. Roessler is trying to argue that perhaps  
17 there was also a dune swale wetland on the site. And  
18 she's trying to bring into evidence information  
19 related to an off-the-record phone conversation that  
20 she had to support that.

21 So, we don't have any off-the-record  
22 conversations to support our case on whether or not  
23 there is a one-parameter wetland on the site. And we  
24 don't think it's appropriate for other parties to  
25 bring in off-the-record phone conversations to make

1 their case as to whether or not there's a dune swale  
2 wetland on the site.

3 MS. ROESSLER: That's not -- I, certainly --  
4 you mischaracterized my words. I'm not using this  
5 evidence to establish there's a dune swale on site.  
6 I am using it to establish --

7 MR. CARROLL: Well, look, that's clearly  
8 where this is headed.

9 MS. ROESSLER: -- the scope. That's your  
10 assumption. The scope of the work. I'm not  
11 challenging -- I'm not challenging anything else. We  
12 simply want to know what's the scope of the  
13 CoastalCommission's work. We're not challenging  
14 their conclusions, that's it.

15 MR. CARROLL: Okay. And the witness has  
16 testified that the scope of the work is as identified  
17 in the report, and that he has no personal knowledge  
18 beyond that.

19 MS. ROESSLER: Now, you're testifying on  
20 behalf of Mr. Street?

21 MR. CARROLL: No, I'm just repeating what  
22 Mr. Street has said.

23 HEARING OFFICER KRAMER: What point are you  
24 trying to make? That's what an offer of proof would  
25 --

1 MS. ROESSLER: Oh, you need an offer. I'm  
2 trying to refresh his memory that he actually is  
3 personally aware of the scope of Dr. Engel's work.

4 HEARING OFFICER KRAMER: And this goes  
5 where? To what point?

6 MS. ROESSLER: And this goes to the scope of  
7 the report and the conclusions that were relied on n  
8 the FSA to make very critical conclusions about the  
9 significant impacts of this project.

10 HEARING OFFICER KRAMER: Okay. Well, we  
11 have Dr. Engel's actual words in an e-mail where, I  
12 gather, nobody's disputing that she wrote this e-  
13 mail. What could Mr. Street add to that, that  
14 wouldn't be a greater degree of hearsay?

15 MS. ROESSLER: Well, it's not hearsay if  
16 he's reporting on a personal conversation he was part  
17 of.

18 HEARING OFFICER KRAMER: Okay, but he didn't  
19 --

20 MS. ROESSLER: I'm asking what his knowledge  
21 is. I'm not asking him to repeat what Dr. Engle  
22 said.

23 HEARING OFFICER KRAMER: Well, we're -- we  
24 keep looking at the clock here, at least some of us.  
25 And, so --

1 MS. ROESSLER: I only have a few questions.  
2 I would have been done by now.

3 MR. CARROLL: I think this is so  
4 inappropriate and egregious that someone would try to  
5 bring into these proceedings a phone conversation  
6 that was had, to which the rest of the parties were  
7 not aware of, were not able to participate in, in an  
8 attempt to undermine or somehow modify a report from  
9 a sister agency, which they have presented to this  
10 Committee.

11 MS. ROESSLER: It's a public agency. We  
12 represent thousands of local residents. We are a  
13 public interest, nonprofit organization, three of  
14 them.

15 HEARING OFFICER KRAMER: Okay.

16 MS. ROESSLER: There's nothing inappropriate  
17 about having one public organization reach out to  
18 another. It is common practice to ask them to  
19 clarify.

20 HEARING OFFICER KRAMER: Okay, time out.  
21 That part of the discussion I don't think is relevant  
22 to our decision.

23 If you would just wait a moment, we will  
24 have one.

25 (Colloquy between Hearing Officer and



1           Commissioners.)

2           HEARING OFFICER KRAMER:   Okay, we're -- I'm  
3 not sure if it means sustaining the objection.  I  
4 guess it does.  But we are going to, on behalf of the  
5 Committee, ask Mr. Street if he has any comments he's  
6 willing to make about the scope of the surveys that  
7 were conducted in preparation of the -- or in  
8 preparation for the creation of the Coastal  
9 Commission's report.

10           MR. STREET:  I do have some comments I could  
11 make.

12           HEARING OFFICER KRAMER:  Please go ahead.

13           MR. STREET:  All I was trying to say before  
14 is that my personal knowledge of the scope of Dr.  
15 Engle's review is consistent with what was reported  
16 in the main body of the Commission's report, and in  
17 Dr. Engel's memorandum, as an attachment to the  
18 report.  Wherein I think it's very clear that the  
19 thrust of her review was to evaluate the wetlands  
20 delineation.

21           But she also states that she walked the site  
22 and the biologists that were present discussed the  
23 soils and vegetation in the area.

24           HEARING OFFICER KRAMER:  Okay, thank you.

25           Let's move on to another topic.

1 MS. ROESSLER: Thank you.

2 Mr. Street are you aware if, in that  
3 evaluation, any surveys were done for special status  
4 species by the Coastal Commission staff, by Dr.  
5 Engel?

6 MR. STREET: I mean, as is stated in the  
7 report, and in Dr. Engel's memorandum, she examined  
8 the site vegetation. But her primary purpose was to  
9 evaluate the wetlands determination that had been  
10 done previously.

11 So, if you want to call that a survey, you  
12 can. But, you know, I think the nature and scope of  
13 what she did is reflected in the report.

14 MS. ROESSLER: So, you're not aware of any  
15 focus surveys for special status species wildlife?  
16 Maybe that would distinguish. Because it's not  
17 mentioned in the report.

18 MR. STREET: The Commission's findings on  
19 wetlands and ESHA were based on the information that  
20 was available at the time, which includes Dr. Engel's  
21 site visit. It includes the surveys that were done  
22 by NRG's consultant. And it includes the information  
23 from Energy Commission staff, that was included in  
24 the PSA.

25 I'd also like to mention that Louise Warren

1 has joined me, in the room.

2 MS. ROESSLER: Okay, thank you. Okay. So,  
3 since neither the FSA or the Applicant's biologist  
4 has done focus surveys for special status species, it  
5 sounds like the Coastal Commission staff did not  
6 conduct their own focus surveys for special status  
7 species, as that is not mentioned anywhere in the  
8 report. And that will be -- I'll just let you answer  
9 that.

10 MR. CARROLL: Was that a question? If that  
11 was a question, then I object.

12 MS. ROESSLER: Is that correct? Is that  
13 correct?

14 MR. CARROLL: Asked and answered. And  
15 leading the witness.

16 HEARING OFFICER KRAMER: Sustained.

17 MS. ROESSLER: And, really, leading the  
18 witness. That's fresh for four days.

19 MR. CARROLL: When one adds some additional  
20 phrases and then states, perhaps --

21 MS. ROESSLER: So, the objection is  
22 sustained.

23 MR. CARROLL: I withdraw -- I withdraw the  
24 objection as to leading the witness. Objection,  
25 asked and answered.

1 MS. ROESSLER: I'm not saying I'm not  
2 guilty, but I'm pretty sure we all are on that one.

3 Okay. Are you aware of whether or not Dr.  
4 Engel conducted any surveys for the presence of ESHA  
5 on site? And I should say, as it relates to the  
6 report. Sorry, I should preface that.

7 MR. STREET: And in her memorandum, that's  
8 attached to the report, she examined the soil and  
9 vegetation, and was primarily there to confirm the  
10 wetland delineation.

11 MS. ROESSLER: Okay. So, it sounds like  
12 it's fair to say Dr. Engel was primarily there to  
13 confirm the wetland delineation. Is that correct?

14 MR. STREET: I think that's fair to say.

15 MS. ROESSLER: Are you familiar with -- well  
16 -- sorry, I'm trying to trim my question.

17 Okay. So, given that the wetland identified  
18 in the report is the two acre wetland and that was  
19 Dr. Engel's primary focus for the evaluation for the  
20 report, is it fair to say she did not look at --

21 MR. CARROLL: Objection, assumes facts not  
22 in evidence.

23 MS. ROESSLER: I am still talking. Thank  
24 you.

25 MR. CARROLL: The witness did not testify

1 that that was her primary --

2 MS. ROESSLER: I'm still talking. I'm not  
3 done with my question. It would be really great if I  
4 could finish it. Perhaps I could possibly finish it  
5 and rephrase, so you wouldn't object.

6 MR. CARROLL: I apologize.

7 MS. ROESSLER: Thank you.

8 Is it fair to say that Dr. Engel only  
9 evaluated the two acre wetland on site, and not the  
10 additional, remaining, approximate acre on site for  
11 either the presence of a wetland or ESHA?

12 MR. CARROLL: Objection, asked and answered.  
13 The witness has already testified that Dr. Engle  
14 walked the project site.

15 MS. WILLIS: Yeah, I would join that  
16 objection.

17 MS. ROESSLER: I think that's different.  
18 Walking the site, I think as we've established over  
19 two days, is very different than doing surveys and  
20 making conclusions about ESHA.

21 HEARING OFFICER KRAMER: But hasn't he also  
22 said, in several ways, that he's not aware of any  
23 surveys she's conducted beyond walking the site,  
24 which he said, if you chose, could characterize as a  
25 survey of sorts. Oh, sustained.

1 MS. ROESSLER: Okay. It's okay, we'll be  
2 done.

3 HEARING OFFICER KRAMER: Thank you.

4 Ms. Belenky. Can we unmute her in case she  
5 --

6 MS. BELENKY: Hi. I have no questions for  
7 the witness, thank you.

8 HEARING OFFICER KRAMER: Okay, thank you.  
9 I'm going to mute you, then.

10 All right. That concludes Biology, I  
11 believe.

12 MR. CARROLL: Mr. Kramer, I actually have  
13 just a couple of quick questions for Mr. Street, that  
14 I believe he is in a position to answer.

15 HEARING OFFICER KRAMER: Oh, okay.

16 MR. CARROLL: Mr. Street, do you recall the  
17 date that the Coastal Commission staff released its  
18 draft report?

19 MR. STREET: I'm sorry, I forgot to turn on  
20 my -- unmute my phone. I don't recall, off the top  
21 of my head. It would have been in late August, maybe  
22 the 27th. But I would have to look it up for the  
23 exact date.

24 MR. CARROLL: If I told you it was August  
25 26th, would you have any reason to disbelieve that?

1 MR. STREET: No.

2 MR. CARROLL: And do you recall the date  
3 that the report came before the Coastal Commission  
4 for action?

5 MR. STREET: It was September 9th, of 2016.

6 MR. CARROLL: And in the intervening period,  
7 between August 26th and September 9th, was there, at  
8 any point, a public workshop or a public hearing at  
9 which the public was able to question staff regarding  
10 the draft report?

11 MR. STREET: On September 9th, of 2016, the  
12 Coastal Commission held its public hearing, as is its  
13 custom and, I believe, its duty under the law.

14 MR. CARROLL: And prior to the matter coming  
15 before the Coastal Commission, were there any Coastal  
16 Commission staff-conducted proceedings with respect  
17 to the draft report?

18 MR. STREET: No.

19 MR. CARROLL: Do you recall whether Ms.  
20 Engel was in attendance at the September 9th meeting  
21 of the Coastal Commission?

22 MR. STREET: I don't recall.

23 MR. CARROLL: Thank you.

24 HEARING OFFICER KRAMER: Thank you. Okay.

25 Let's then, move on to the topic of Soil and Water

1 Resources, combined with Geological and  
2 Paleontological Resources.

3 And, Mr. Street is also listed as a, not a  
4 direct witness, but a cross-examinant under that  
5 topic. So, Mr. Carroll, do you want to ask any  
6 questions you have of him, please?

7 MR. CARROLL: Yes, thank you. Mike Carroll,  
8 on behalf of the Applicant.

9 Mr. Street, this is perhaps a little  
10 unorthodox, but given our timing constraints here,  
11 I'm going to try and expedite the discussion by asking  
12 you whether or not the situation with respect to Dr.  
13 Ewing, and the portions of the report related to what  
14 I will generally refer to as sea level rise and  
15 coastal hazards, including her appendix, are  
16 essentially the same as the situation that we have  
17 just discussed with respect to Dr. Engel, and those  
18 portions of the report, including her appendix  
19 related to Biological Resources?

20 And, so, I don't know if that question makes  
21 sense to you, but if it does and you can answer  
22 it, that might expedite the discussions here.

23 MR. STREET: I'm not entirely sure that I  
24 understand the question. I don't think that it would  
25 be fair to characterize it as completely analogous.



1 MR. CARROLL: Okay.

2 MR. STREET: Dr. Engel was asked to, you  
3 know, use her expertise and her observations to  
4 confirm, or I should say, better yet, to review a  
5 specific determination about the presence or absence  
6 of wetlands. And I wouldn't say that's exactly the  
7 role that Dr. Ewing performed.

8 MR. CARROLL: That wasn't what I meant. But  
9 I understand that the question was too vague. So,  
10 let me back up and I'll try to move as quickly as I  
11 can.

12 But do you have any particular expertise in  
13 -- well, what was your role with respect to the  
14 preparation of the portions of the report that  
15 pertain to sea level rise and coastal hazards?

16 MR. STREET: Well, I -- with Dr. Engle, and  
17 other staff members, I reviewed a variety of reports  
18 and evidence that was available to us, and formulated  
19 the staff recommendation that was later adopted, with  
20 minor alterations, from the original staff  
21 recommendation, into the Commission's final report.

22 MR. CARROLL: But as to the substance of the  
23 analysis related to coastal hazards and sea level  
24 rise, that work was done by Dr. Ewing?

25 MR. STREET: No, not entirely. She

1 contributed, but I was heavily involved in that as  
2 well, and other staff members were involved.

3 MR. CARROLL: Who were the other staff  
4 members that were involved in that effort?

5 MR. STREET: I don't think that's relevant.  
6 I mean, okay, I guess there's no harm in mentioning.  
7 I mean, my direct supervisor, Mark Delaplaine, who's  
8 a Manager with my division, as well as my -- as  
9 Allison Dettmer, who's the Deputy Director. I  
10 consulted Tom Lester, who is another Environmental  
11 Scientist in my division.

12 MR. CARROLL: Okay, thank you.

13 MR. STREET: And there may have been others.

14 MR. CARROLL: Okay, thank you for that. So,  
15 with respect to the work that you did analyzing sea  
16 level rise and coastal hazards, can you please  
17 explain to us the scope of that work?

18 MR. STREET: Yes. I reviewed the  
19 information provided in the PSA, as well as a variety  
20 of other sources of information. As stated in the  
21 section of the Coastal Commission's report dealing  
22 with this, which is Section E, beginning on page 24,  
23 we looked at the existing 2010 FEMA from that, as  
24 well as the 2016 draft map that was available.

25 And we considered a flood hazard modeling

1 study carried out by consultants for the California  
2 Coastal Conservancy, of the Santa Clara River Parkway  
3 area, which also include the project site.

4 We looked at the Coastal Resilience Ventura  
5 study and Dr. Revell's analysis that was done for the  
6 City of Oxnard.

7 And we considered the USGS COSMOS 3.0  
8 prototype results that were include in the PSA.

9 And we also considered the information and  
10 comments provided by NRG, following the release of  
11 our staff recommendation.

12 MR. CARROLL: Okay. So, is it fair to say  
13 that you --

14 MR. STREET: Well, I'm not sure, I'm not  
15 going to claim that that's necessarily a  
16 comprehensive list of everything we consulted. But,  
17 you know, there is a list of documents, file  
18 documents that's included as an attachment to the  
19 Coastal Commission's report.

20 MR. CARROLL: I understand, thank you. Is  
21 it fair to say, then, that the Coastal Commission  
22 staff, in conducting the coastal hazard analysis in  
23 its report, relied on preexisting information and did  
24 not undertake any -- well, let me just leave it at  
25 that, relied on preexisting information?

1           MR. STREET: We relied on preexisting  
2 information. I think that we contributed a bit of  
3 interpretation and analysis of that information. But  
4 we didn't carry out our own modeling studies, or  
5 field work, or anything like that.

6           MR. CARROLL: Thank you. No further  
7 questions at this point.

8           HEARING OFFICER KRAMER: Thank you.

9           Staff, you didn't show any cross, but do you  
10 have any questions?

11          MS. CHESTER: No, we do not.

12          HEARING OFFICER KRAMER: Okay. City of  
13 Oxnard?

14          MS. FOLK: No questions.

15          HEARING OFFICER KRAMER: Okay, Environmental  
16 Coalition and the other Interveners are not in this  
17 one.

18          So, thank you -- do you have any redirect?  
19 Actually, there was no redirect because there was no  
20 direct.

21          MR. Street, thank you for visiting with us.

22          MR. STREET: I'm happy I could participate.  
23 Good luck.

24          (Laughter.)

25          HEARING OFFICER KRAMER: Well, thank you.

1           Okay. Now, we can go, then, to the  
2 Applicant's -- would this be a panel, Mr. Carroll?

3           MR. CARROLL: No, this is Mr. Mineart.

4           HEARING OFFICER KRAMER: Okay.

5           MR. CARROLL: I'm sorry.

6           HEARING OFFICER KRAMER: I have three names.

7           MR. CARROLL: Yes, so this is a panel. Mr.  
8 Mineart, Ms. Connell, and Mr. Skov. But unless there  
9 are objections -- well, let me explain the  
10 composition of the panel.

11           The topic is Soil and Water Resources. Ms.  
12 Connell did the water supply analysis for the  
13 project. Mr. Skov is the geology expert for the  
14 project, but not including tsunamis. Mr. Mineart is  
15 the coastal hazards expert.

16           Since the topic was Soil and Water, we  
17 identified our entire Soil and Water team. But  
18 unless there are objections from the party, in the  
19 interest of time, I would suggest that we not put on  
20 direct testimony from Ms. Connell, as to water  
21 supply, or Mr. Skov, as opposed to geological  
22 resources, and move straight to what I believe is the  
23 heart of the matter, which would be Mr. Mineart on  
24 coastal hazards.

25           MS. FOLK: That's fine with the City.

1 HEARING OFFICER KRAMER: Okay. Mr. Mineart,  
2 you were not previously sworn, were you?

3 MR. MINEART: No, I wasn't.

4 HEARING OFFICER KRAMER: Okay, if you could  
5 raise your right hand. Do you swear or affirm that  
6 the testimony you are about to give in this  
7 proceeding is the truth to the best of your ability?

8 MR. MINEART: I do.

9 HEARING OFFICER KRAMER: Thank you.

10 DIRECT EXAMINATION BY APPLICANT

11 MR. CARROLL: Thank you. Mr. Mineart, could  
12 you please state and spell your name for the record,  
13 identify your current employer and your position?

14 MR. MINEART: My name is Phillip Mineart.  
15 That's P-h-i-l-l-i-p, and Mineart's M-i-n-e-a-r-t. I  
16 work for AECOM, who's a consultant to NRG. And I  
17 work in the field of hydrology, hydraulics, fluid  
18 mechanics, hydrodynamics, coastal engineering, sea  
19 level rise and climate change.

20 MR. CARROLL: And what experience do you  
21 have that's relevant to today's proceeding.

22 MR. MINEART: I've been working in this  
23 field for over 30 years. Working on projects related  
24 to hydrodynamics, sediment transport, work in  
25 environmental restoration, and then coastal

1 engineering.

2 MR. CARROLL: And what, specifically, has  
3 your role been with respect to the Puente Project?

4 MR. MINEART: As one of the technical leads  
5 for the Puente Project, specifically for coastal  
6 hazards and some other water resources issues. As  
7 part of that project, I reviewed historic photos,  
8 survey data. We looked at data related to the growth  
9 of Mandalay Beach and the dunes. We looked at the  
10 information that might relate to the stability of the  
11 dunes. And any recent studies on tsunamis. And I  
12 also worked with some of my colleagues, who are  
13 tsunami experts, who are working with some of the  
14 State agencies on developing the new tsunami maps. I  
15 worked with them on the tsunami hazard.

16 MR. CARROLL: Thank you. And do you have in  
17 front of you the documents marked for identification  
18 as Applicant's Exhibit Number 1116, Expert  
19 Declaration of Phillip Mineart Regarding Coastal and  
20 Riverine Hazards, and Applicant's Exhibit Number  
21 1138, Expert Declaration of Phillip Mineart in  
22 Response to Report of Dr. Revell, including -- and,  
23 then, also, Applicant's Exhibit Number 1136, which  
24 was an Appendix A, of Exhibit -- I'm sorry, Appendix  
25 A of Exhibit Number 1128, with some nonsubstantive

1 changes to formatting issues. Do you have all of  
2 those documents in front of you?

3 MR. MINEART: I believe they're in here,  
4 yes.

5 MR. CARROLL: And was that testimony  
6 prepared by you or under your supervision?

7 MR. MINEART: Yes, it was.

8 MR. CARROLL: And do you have any changes or  
9 corrections that you want to make to your prepared  
10 testimony?

11 MR. MINEART: No, I don't.

12 MR. CARROLL: And what other materials,  
13 other than those I've just mentioned, have you  
14 reviewed to prepare for the hearing today?

15 MR. MINEART: Besides my opening testimony,  
16 I reviewed Dr. Revell's opening testimony and I  
17 reviewed his rebuttal to my testimony.

18 MR. CARROLL: Can you please briefly  
19 describe the site elevation of the project site?

20 MR. MINEART: Yes, the site is -- looking at  
21 the P-3 site, first, the site is around elevation 14  
22 feet, and AVD-88. And just for reference, that we  
23 refer to AVD-88, that's somewhat equivalent to mean  
24 low or low water, so it would be like 14 feet above  
25 mean low or low water. That puts it somewhere in the



1 neighborhood of maybe 9 to maybe 13 feet above the  
2 normal tide levels in the Bay. You know, the tides  
3 vary, so it varies how far it is above the Bay.

4 And it's about 5 feet higher than what the  
5 highest water levels have been observed at the nearby  
6 tide gauges at, say, Santa Barbara or Santa Monica.

7 It's not in any 100-year flood zone, either  
8 the Riverine flood zone from the Santa Clara River,  
9 nor the coastal flood zone, as defined by FEMA. The  
10 actual part of the project site that's going to be  
11 developed isn't in a 500-year flood zone for the  
12 coastal areas. But there's a little corner of the  
13 property that's actually in the riverine 500-year  
14 flood zone. But that piece of the property isn't  
15 planned on being developed.

16 MR. CARROLL: And could I ask, Mr. Kramer,  
17 if we can put on the screen the image that staff  
18 provided last evening, that we had on during the  
19 biological resources discussion, just for reference?

20 HEARING OFFICER KRAMER: There's more to it  
21 than that.

22 MR. CARROLL: And while that's being brought  
23 up, what features protect the site from flood and  
24 what are their elevations?

25 MR. MINEART: Yeah, so the site's protected

1 from flood by several features. On the north side of  
2 the site and the east side of the site there's a  
3 manmade berm. It's an elevation around 17 to 18 feet  
4 in elevation.

5 On the south side of the site, it's three-  
6 quarters of the site is bordered by the Edison Canal.

7 And then, on the west side of the site we  
8 have the dunes, the beach dunes, and they're an  
9 elevation roughly 20 to 30 feet.

10 MR. CARROLL: Dealing more specifically with  
11 flood risk, you've stated that the entire MGS, the  
12 Mandalay Generating property, or the MGS property,  
13 including the proposed project site, and by project  
14 site I'm referring to the approximately three acre  
15 site on which the Puente Project would be sited. And  
16 you should assume, throughout my questions of you,  
17 when I refer to the project site, it's that  
18 approximately three acre site to which I'm referring.

19 So, dealing more specifically with the flood  
20 risk, you've stated that the MGS property, including  
21 the project site, are outside of the FEMA 100-year  
22 flood plain, is that correct?

23 MR. MINEART: That's correct.

24 MR. CARROLL: And is it also outside of the  
25 500-year coastal flood plain?

1           MR. MINEART: The site is, it's true,  
2 outside of the 500-year coastal flood plain. As I  
3 said, there's just a small corner that's in the 500-  
4 year riverine flood plain.

5           MR. CARROLL: And what do you mean when you  
6 say 100-year flood plain, and how is that concept  
7 relevant to your analysis?

8           MR. MINEART: The 100-year flood plain is  
9 just defined by FEMA, as it's the flood plain that as  
10 a 1 percent chance of being flood in any given year.  
11 And, then, the 500-year, by extension, it's the flood  
12 plain that has a .2 percent chance of being flooded  
13 in any given year.

14          MR. CARROLL: And does the City of Oxnard  
15 have a flood protection regulation?

16          MR. MINEART: Yes, all cities that are part  
17 of FEMA's flood insurance program, so all cities that  
18 are a part of that program has to have a flood  
19 ordinance. And, so, Oxnard has its flood plain  
20 ordinance. And in that ordinance, they'll define  
21 usually where the flood plains are, such as on FEMA  
22 flood insurance rate maps, which is what we've been  
23 referring to when we talk about the 100-year flood  
24 plain or the 500-year flood plain.

25          MR. CARROLL: And are those special flood

1 hazard areas that you've just referred to, as those  
2 referred to as SFHAs?

3 MR. MINEART: Right, special flood hazard  
4 areas is what FEMA refers to as areas that are  
5 included on their flood maps.

6 MR. CARROLL: And will the project impact  
7 any of these SFHAs?

8 MR. MINEART: No. As I said, the site is  
9 primarily outside of the flood -- special flood  
10 hazard areas, except for that one corner. And none  
11 of the construction on the site would impact any of  
12 the surrounding flood plains or flood areas.

13 MR. CARROLL: Has significant flooding, to  
14 your knowledge, ever occurred at the MGS property?

15 MR. MINEART: As far as I know, to my  
16 knowledge, it's only been flooded once, and that was  
17 there was a large flood event in 1969 of the Santa  
18 Clara River. And during that flood, there was a  
19 break out down by the mouth of the river that caused  
20 some flooding on the site, by way of McGrath State  
21 Beach.

22 Since that time, they built that berm, which  
23 I mentioned earlier, that's on the north side, east  
24 side of the property. They built that berm after  
25 that flood to prevent any future flooding. And as

1 far as I know, from talking to the plant operations  
2 people, is there's been no flooding on the site since  
3 then, from any of the large floods we've had. Some  
4 in the sixties, some floods in the seventies, later  
5 in the eighties and nineties. There was no flooding  
6 from any of those sites. And, then, we had some  
7 large El Nino events, such as '83, where the largest  
8 waves or record were recorded. There was not  
9 flooding on the site from any of those, since then.

10 MR. CARROLL: What are the flooding risk  
11 that you evaluated with respect to the project site?

12 MR. MINEART: Well, we looked at riverine  
13 flooding, which would be flooding from the Santa  
14 Clara River. We looked at tidal flooding. We looked  
15 at wave runoff, a wave flooding storm surge. We  
16 looked at tsunamis. And, then, we looked at the  
17 possibility of dune failure due to one of these  
18 events.

19 MR. CARROLL: Beginning with riverine  
20 flooding, can you please tell us about the potential  
21 for flooding from the Santa Clara River?

22 MR. MINEART: Yeah, the Santa Clara River, I  
23 guess as you know, runs to the north of the site.  
24 most of the river, for it to flood the side, it would  
25 have to break out of its banks. It would either

1 break out of its banks to the east of the site, which  
2 is two or three miles away from the Puente site. Or,  
3 it possibly could break out near the mouth, like it  
4 did in 1969, but that's over a mile away from the  
5 site.

6 MR. CARROLL: And would the waters  
7 associated with such an event be deep?

8 MR. MINEART: You'd expect them, because of  
9 the distance from the site, you'd expect the water to  
10 be shallow, especially if they break out up above the  
11 Oxnard Plain, and it flows across the Plain, you'd  
12 expect all of it would be shallow.

13 MR. CARROLL: And when you say shallow, what  
14 do you mean by that, approximately?

15 MR. MINEART: A couple of feet, maybe.

16 MR. CARROLL: Okay. On FEMA's flood  
17 insurance rate map, or the FEMA FIRM, Community Panel  
18 Numbers 06111C0885E, and 06111C0905E --

19 MR. MINEART: Got it.

20 MR. CARROLL: -- a portion of the MGS site,  
21 including a very -- a small portion of the -- I'm  
22 sorry, a portion of the MGS property, including a  
23 very small portion of the project site, on which  
24 nothing is planned for development, is shown in the  
25 FEMA Zone X. Can you please explain what that means?

1 MR. MINEART: Yeah, Zone X, it's kind of a  
2 catchall for various flooding types that could occur.  
3 So, it could be a 500-year flood plain. It could be  
4 areas of shallow flooding, less than one-foot deep.  
5 Or, it could be areas that are flooded due to small  
6 watershed. If there's a small watershed, less than a  
7 square mile in area, they might include that as a  
8 Zone X.

9 MR. CARROLL: And what are the implications  
10 of being within that zone for the project site?

11 MR. MINEART: Well, there's just the one  
12 corner that is in the site. And these are generally  
13 areas that FEMA consider low hazard because either  
14 they're rarely, if ever, flooded, or, if it's  
15 flooding, it's very shallow and not considered a  
16 hazard.

17 MR. CARROLL: And for that small portion of  
18 the project site that would be within the 500-year  
19 flood plain, how would you describe the risk of  
20 flooding associated with --

21 MR. MINEART: Yeah, we looked into -- what  
22 we looked into that was why is it in the flood plain,  
23 the 500-year, there's just that one corner. So, we  
24 looked at older topographic maps. We went back to  
25 1950s topographic maps, some from the 1970s. And,

1 then, of course, the modern topography. And we also,  
2 from FEMA, got the original working maps, the  
3 original flood working maps that they used to create  
4 the flood plain, back when they originally created  
5 it.

6           So, we looked at all those maps, and looked  
7 at the topography and tried to figure how did they  
8 draw the line? And like I said, the lines don't  
9 follow any of the contours of the maps, any of the  
10 maps from the fifties, from the seventies, or the  
11 modern maps. And in the original FEMA working maps,  
12 actually the site isn't in the flood plain. It's  
13 outside the 500-year flood plain in the original  
14 working maps. So, somewhere along the history of  
15 drawing the maps, they drew a line across there, but  
16 it doesn't follow any contours or any logical way.

17           MR. CARROLL: And, so, is it your testimony  
18 that you -- it's unclear the basis upon which that  
19 small portion of the project is within the 500-year  
20 flood?

21           MR. MINEART: Right. We looked at all of  
22 those maps and tried to figure out why it was there,  
23 and there was no real basis for that line being  
24 there, for being in the 500-year flood plain.

25           MR. CARROLL: And FEMA's in the process of



1 updating their flood maps, is that correct?

2 MR. MINEART: That's right.

3 MR. CARROLL: And you reviewed both the,  
4 what I'll refer to as the old map and the draft new  
5 map, is that correct?

6 MR. MINEART: For the coastal flooding.

7 MR. CARROLL: Thank you.

8 MR. MINEART: And I'd say the original maps,  
9 which are in effect, now, they show a coastal flood  
10 elevation of 13 feet. The 13 feet isn't the flood  
11 elevation, it's usually the water's not at 13 feet.  
12 The water's much shallower. But the wave run up on  
13 the beach would be --

14 MR. CARROLL: You know, I apologize. I'm  
15 going to withdraw the last question because I  
16 realized I was taking you into coastal flooding, as  
17 opposed to riverine. So, I'm going to withdraw the  
18 last question and let's strike the question and  
19 response to that question. We'll get to that later.

20 MR. MINEART: Okay.

21 MR. CARROLL: But I want to stick to  
22 riverine flooding, so that we can keep this  
23 organized.

24 So, again, sticking with riverine flooding,  
25 you further created and ran a two-dimensional -- or,

1 did you create a model to analyze riverine flooding  
2 and try to determine why a portion of the site might  
3 be identified on the FEMA as within the 500-year  
4 riverine flood zone?

5 MR. MINEART: We did. As I said, mentioned,  
6 we look at the old maps and the old topography,  
7 trying to figure out why that piece was in the 500-  
8 year flood plain. So, our next step was actually to  
9 develop a model of the area to determine, if we  
10 modeled it using the FEMA input data, could we  
11 reproduce the 500-year flood plain. So, we created  
12 the 2-D model of the project area, much bigger than  
13 the project area. We included the Channel Island  
14 Harbor area, and all the agricultural fields around  
15 us.

16 And we modeled the area. And what we found  
17 was none of the MGS site was in the 500-year flood  
18 plain. The FEMA maps actually reproduced most of  
19 what was on the FEMA maps, except for that little  
20 piece that curves over onto the MGS property. That  
21 didn't show up. But most of the rest of the map  
22 looked very similar to the FEMA map, in terms of the  
23 500-year flood plain. That's really what we were  
24 concerned with.

25 And the water mostly ends up in the Edison

1 Canal and it just disappears out to the ocean.

2 That's what the model ended up telling us.

3 MR. CARROLL: Okay. So, is it fair to  
4 summarize your testimony with respect to riverine  
5 flooding, is it fair to say that no portion of the  
6 project site is within the 100-year riverine flood  
7 plain. A very small portion of the project site, not  
8 slated for development, is within the 500-year flood  
9 plain. And in your expert opinion, there's no  
10 plausible explanation for why that small portion of  
11 the flood site would be within the 500-year riverine  
12 flood plain?

13 MR. MINEART: Correct.

14 MR. CARROLL: Okay, let's move from riverine  
15 flooding to coastal flooding, or potential coastal  
16 flooding.

17 Can you describe the beach that fronts the  
18 Mandalay property, including the project site, and  
19 its recent history?

20 MR. MINEART: Yeah, so I guess you can see  
21 the picture up on the screen right now. So, the  
22 left-hand side of the picture would be the dunes.  
23 You can see the dunes, where it's vegetated. There's  
24 a little line to the left of the dunes. That's kind  
25 of the fence line. There's an old road that went

1 there.

2           And, then, to the left of that you can see  
3 some new dunes forming. I think, maybe, Dr. Hunt had  
4 mentioned that, earlier. There's new dunes that are  
5 forming in front. And, then, we have the beach, a  
6 300-wide each and then it goes out to the ocean.  
7 So, that's what we would define as the protective  
8 area for the Mandalay site. And the sand on the  
9 beach primarily comes from the Santa Clara River.  
10 And there's also sand from the beach that's come from  
11 the dredging of the Ventura Harbor.

12           MR. CARROLL: And do you believe that loss  
13 of sediment at the beach in front of the project site  
14 is likely?

15           MR. MINEART: It seems highly --

16           MR. CARROLL: Let me add one more qualifier.  
17 Well, I'm sorry, let me leave it at that. Do you  
18 believe that loss of sediment at the beach in front  
19 of the MGS site is likely?

20           MR. MINEART: It seems unlikely, given that  
21 what we looked at was dredging records, and river  
22 discharge records over the last several decades. And  
23 there's been an abundance of sediment. And we looked  
24 at the growth of the beach over the last 60 years,  
25 and it's been continually growing over that time. At

1 least fits and starts, maybe, but it's been  
2 continually growing.

3 So, there's no reason to believe that any of  
4 that will change in the near future, so I expect the  
5 beach not to change that much.

6 MR. CARROLL: And were you in the room  
7 earlier today, when Mr. Hunt was testifying under the  
8 subject of Biological Resources?

9 MR. MINEART: I was.

10 MR. CARROLL: And did you hear Mr. Hunt's  
11 explanation of the phenomenon that, in his view, have  
12 contributed to the circumstances that exist with  
13 respect to the dunes at the beach, in front of the  
14 project site?

15 MR. MINEART: Yes, I was here to hear that.

16 MR. CARROLL: And do you agree with his  
17 assessment?

18 MR. MINEART: Yes, he gave a good  
19 explanation of the formation of the dunes, I thought.

20 MR. CARROLL: And what's your understanding  
21 of that, of the phenomenon that resulted in the  
22 conditions that exist now?

23 MR. MINEART: Well, I think one of the  
24 important things he pointed out was these dune fields  
25 form for a lot of reasons. But one of the important

1 aspects of it is there has to be a sufficient supply  
2 of sediment, you know, sand, to get these dunes to  
3 form. You know, they form from, as he said, wind  
4 blows, sand blows off the beaches and off the dunes,  
5 and it gets caught by vegetation. And as it does,  
6 the dunes grow and the beach grows. At least the  
7 dunes grow due to that catching of sediment. So,  
8 there has to be an abundance of sediment continually  
9 coming down on the beach to have those dunes grow.

10           Because, as you know, the longshore  
11 transport, many beaches will just carry the sediment  
12 by, and the beach will maybe stay stable, or shrink,  
13 or grow and shrink, and there's not enough sediment  
14 available for the dunes to actually form. But they  
15 formed here, and according to his explanation, I  
16 think he provided a really good explanation why it  
17 happened.

18           MR. CARROLL: And the circumstances that  
19 have contributed to the formation of the dune and the  
20 beaches, are they unique, in some ways, to this  
21 particular location?

22           MS. FOLK: I'm going to object that we have  
23 not qualified Mr. Mineart as an expert in the  
24 formation of dunes and coastal processes.

25           MR. MINEART: Well, Dr. Hunt gave an

1 explanation and I'll just accept his explanation,  
2 then, if that's acceptable.

3 HEARING OFFICER KRAMER: Okay. Let the  
4 lawyers argue and the Committee rule. But do you  
5 want to --

6 MR. CARROLL: I guess I understood that to  
7 the extent we had objections to the qualifications of  
8 a witness, they would be made prior to the  
9 commencement of the testimony. So, I did not realize  
10 that there were any objections to Mr. Mineart's  
11 expert qualifications.

12 MS. FOLK: This has to do with a specific  
13 line of questioning that you had gone into. I  
14 intended to -- I did intend to ask him some questions  
15 about his qualifications. But my main point was he's  
16 relying on the testimony -- as he just said, relying  
17 on the testimony of Mr. Hunt, who also was not  
18 qualified as an expert in sea level rise, and dune  
19 formation. And I don't believe that Mr. Mineart has  
20 submitted his qualifications as to that particular  
21 issue.

22 MR. CARROLL: Well, Mr. Mineart's CV was, of  
23 course, attached to his declarations filed in this  
24 matter. We believe that he does have sufficient  
25 expertise to testify to all of the matters covered in

1 his testimony, including the dune and beach  
2 structures fronting the site, and the genesis of  
3 their development, and the likely consequences of any  
4 phenomenon that might impact them.

5 So, we believe that this is within the scope  
6 of his testimony -- I'm sorry, within the scope of  
7 his expertise.

8 MS. FOLK: I believe that he just responded  
9 that he was making his -- forming his opinion based  
10 on what he had heard from Mr. Hunt. You know, if we  
11 want to accept it that that's what he's basing it on,  
12 that's fine. But it's not he, himself, has not been  
13 qualified on the issue.

14 HEARING OFFICER KRAMER: So, are you  
15 objecting to his testimony or to the --

16 MS. FOLK: Well, I'm just objecting to his  
17 expertise as to the formation of the dunes in front  
18 of the site, and the historical processes.

19 HEARING OFFICER KRAMER: Okay. So, that's  
20 something you were going to go into during your  
21 cross-examination?

22 MS. FOLK: I do have questions about his  
23 experience evaluating coastal processes.

24 HEARING OFFICER KRAMER: Well, the Committee  
25 can take all that into account and giving the proper



1 weight to his testimony on this, and other topics.

2 MR. CARROLL: Mr. Mineart, without any  
3 reference to the testimony of Mr. Hunt, that was  
4 provided today, in your own opinion are there  
5 circumstances that are unique to this particular area  
6 of the beach? Meaning that in front of the project  
7 site, that have contributed to the formation of the  
8 beach and dune structures that we see there today?

9 MR. MINEART: Yes. I would say one of the  
10 major processes that contributes to is just there's  
11 an overabundance of sediment. Some of the sediment  
12 balance studies people have done, had indicated that  
13 there seems to be more sediment moving into this  
14 area, than is moving out. And one of the  
15 explanations might be that the formation of these  
16 dunes is taking up the dunes in the -- is taking up  
17 some of that excess sediment. It's a sediment rich  
18 area, and dunes tend to be forming in areas that have  
19 a richness of sediment.

20 MR. CARROLL: Okay, thanks.

21 MR. MINEART: Including, then, the other  
22 wind and other wave factors are going to, but they  
23 have to definitely have a richness of sediment to  
24 form.

25 MR. CARROLL: Thank you. And are you

1 familiar with the location of the existing ocean  
2 outfall at the facility?

3 MR. MINEART: I am.

4 MR. CARROLL: And is that the structure that  
5 we see in the lower left-hand corner on the image,  
6 that's on the screen?

7 MR. MINEART: Right. You can see the  
8 outline of the riprap that forms the structure and  
9 then the water that's in it.

10 MR. CARROLL: And do you know whether, at  
11 the time that the MGS facility was constructed, that  
12 ocean outfall was at the shoreline?

13 MR. MINEART: Yes. When it was constructed,  
14 if you look at the photos back from the 1950s, you  
15 can see that the outfall structure was a structure to  
16 the waterline, which made sense at the time of  
17 construction, since you would like to discharge your  
18 water to the ocean. And so at the time, the water  
19 level as around the edge of the riprap.

20 MR. CARROLL: And can you please just  
21 describe, so the edge of the riprap being?

22 MR. MINEART: Looking at that figure, you  
23 can see where the water, the grayish water,  
24 surrounded by brown is, and then you can see the  
25 rectangle. So, the water line at the time it was

1 constructed was up to the edge of that rectangle and  
2 where that brown and grayish water, purple water is.

3 MR. CARROLL: And, so, do you mean, as we're  
4 facing the screen, the right-hand side of that  
5 rectangular area?

6 MR. MINEART: It would be at the left-hand  
7 side of the rectangle. So, the rectangle ended at  
8 the waterline.

9 MR. CARROLL: Okay, thank you. If the  
10 Applicant were to remove the --

11 MR. MINEART: Right there, right where that  
12 hand was.

13 (Laughter.)

14 MR. MINEART: Yeah, that was the water line  
15 when it was constructed.

16 MR. CARROLL: Okay.

17 HEARING OFFICER KRAMER: Okay, so to  
18 describe that for the transcript, this is Paul  
19 Kramer. It's basically draw a line between the ends  
20 of what looks like a fence to complete the rectangle.  
21 It's also a little bit to the west of where the water  
22 course appears to narrow in width a little bit.

23 MR. CARROLL: If the Applicant were to  
24 remove the outfall, as has been proposed in  
25 connection with the Puente project, do you believe

1 that that would have any impact on the beach or dunes  
2 in the surrounding area?

3 MR. MINEART: Yes, I think it would have a  
4 positive impact on the beach. If you look at the --  
5 this picture of when the -- that's up there, now.  
6 You can see to the, I guess, north of the outfall,  
7 there's that brown area, which is water that's ponded  
8 to the north. And, then, you can't see to the south,  
9 but if you looked, if the picture went to the south,  
10 you'd see a similar structure, probably, in the sand  
11 to the south.

12 And what those are caused by, is you can see  
13 here, when the water's discharging, because of the  
14 sand buildup on the beach, when the water discharges  
15 from that outfall, it usually can't go straight out  
16 to the ocean. Oh, okay, there you can see. There  
17 you can see that to the north and the south you can  
18 see those two little, like, I call them crescent-  
19 shaped areas.

20 So, what happens is they discharge water  
21 when the plant is operating. Because of the buildup  
22 of sand on the beach, the flow from the discharge  
23 gets diverted, usually parallel to the ocean. It  
24 usually gets diverted to the south, as it is in the  
25 picture, now. You can see the flow's being diverted

1 to the south. Sometimes it will be to the north.  
2 And when it does that, it cuts itself a channel down  
3 the beach. And you can see, sometimes the channel's  
4 where it is now. Sometimes it will swing way inland,  
5 and that's where you can see that little crescent  
6 shape, and where there's some brownish there, where  
7 water's ponded.

8           And, so, when it does that, it cuts these  
9 various channels, every time they turn the power  
10 plant on. And, so, it ends up with those cut areas  
11 in the beach.

12           When they get rid of the outfall and get rid  
13 of the discharge, that flow will no longer be going  
14 down the beach, cutting those channels. So, I expect  
15 that those two crescent-shaped, you see one in the  
16 north, one in the south, as they fill in the  
17 sediment, they'll just eventually look like the beach  
18 does just to the north of the site and just to the  
19 south of the site. And the beach will look the same  
20 everywhere along there.

21           MR. CARROLL: Thank you. And, again,  
22 sticking with the topic of coastal flooding, can you  
23 explain what the VE Zone is?

24           MR. MINEART: Yes, a VE Zone is what FEMA  
25 uses when it describes areas that are in a coastal

1 flood zone, a coastal flood area where they have a  
2 one percent chance of flooding, with the addition of  
3 wave impact, or wave velocity they call it. And they  
4 have certain standards of what that means.

5 And, so, the way they usually define it on  
6 the map is it will be a wave run up. So, they'll  
7 have -- there will be the flooded area, plus the  
8 amount of water the wave runs up the beach.

9 MR. CARROLL: And the project site is  
10 designed in the VE Zone, correct?

11 MR. MINEART: No, it's not, actually. The  
12 VE Zone ends at the dune. The existing map has an  
13 elevation of 13 feet on the dunes. The new,  
14 preliminary maps, they've increased that to 20 feet.  
15 But it's still on the face of the dunes, on the beach  
16 or ocean side of the dunes. So, the site, itself,  
17 isn't in a VE Zone.

18 MR. CARROLL: I see, thank you. And, so,  
19 what is the elevation of wave run up for the site?

20 MR. MINEART: Thirteen feet, as I said. On  
21 the existing maps, the effective FEMA flood maps it's  
22 13 feet. The new, preliminary maps have an elevation  
23 of 20 feet. But, again, that's the wave run up  
24 height, it's not the flood depth.

25 MR. CARROLL: And based on that, is the

1 project site vulnerable to flooding, coastal  
2 flooding, in your opinion?

3 MR. MINEART: No. No, I don't think so.  
4 One think I'll just say, maybe, to help visualize  
5 what this site looks like when we talk about coastal  
6 flooding, we're looking at a -- just to the west of  
7 the site, of course the first thing you see is the  
8 dunes, is the high dunes that I said, you know, maybe  
9 20 to 30 foot elevation, so in that range.

10 But they're also about a hundred foot thick  
11 at the base. And then, after that you have this kind  
12 of incipient dunes, or forward dunes forming, and  
13 then you have a 300-foot beach. So, for coastal  
14 flooding to occur, those are all the things that have  
15 to be overcome for it to flood the site from the  
16 coastal area. So, no, I don't anticipate flooding  
17 from the coast.

18 HEARING OFFICER KRAMER: Okay. And for the  
19 record, again, now on the screen for a few minutes  
20 has been the second graphic -- or, rather satellite  
21 view from Exhibit 2024, page 3 of 3.

22 MR. CARROLL: And it is -- while it's  
23 helpful to have the image, it's difficult to get a  
24 sense of the three dimensions of the image. So,  
25 could you just explain for us, moving from the

1 waterline towards the project site, roughly the  
2 distance and the elevation of the beach and the dunes  
3 in that area.

4 MR. MINEART: Yeah, so starting from the  
5 waterline, you know, the waterline varies with the  
6 tides. Right, sometimes it's a little further in,  
7 sometimes it's a little further out. So, that would  
8 be, you know, up to mean high or high water, which I  
9 believe is in the neighborhood of five feet. So,  
10 that would be way out there past the dune.

11 Then, there's about 300 feet of sand before  
12 you get up to where you start seeing vegetation. And  
13 you can see on the map, there's little speckled,  
14 brown speckled areas, that's where the dunes are high  
15 enough up that they don't see wave action very often,  
16 so vegetation has a chance to establish itself.

17 And you can see it's capturing the wind.  
18 And that varies in width because, if you can see  
19 those crescent-shaped areas that the outfall cuts, it  
20 cuts into that area. So, in some places it's  
21 narrower where the outfall has kind of cut into, and  
22 in some places it's wider.

23 So, you're in to probably 400 feet when you  
24 get to the edge of the dune, from the water,  
25 somewhere in the neighborhood of 400 feet. And,



1 then, you have a 100-foot wide dune. So, it's  
2 probably 500 feet out to the project site.

3 MR. CARROLL: And recognizing that it  
4 varies, but approximately how high are the dunes?

5 MR. MINEART: Yeah, the dunes vary from 20  
6 some, 25 feet, up to over 30 feet.

7 MR. CARROLL: Thank you. I want to now move  
8 to one of the other coastal hazards that you said you  
9 analyzed, which is the risk of tsunami. Can you  
10 please tell us about the tsunami risk at the project  
11 site?

12 MR. MINEART: Yeah. The first thing we  
13 looked at, actually, for tsunami risk was we looked  
14 at the State of California tsunami evacuation map.  
15 And in that map, we're not in the evacuation zone.  
16 So, at least the state of the knowledge, the state of  
17 the practice for tsunami evacuation, the site is not  
18 in the tsunami zone.

19 Now, so we also looked at what are other  
20 sources of tsunamis that we should be considering.  
21 And we looked at two things. One is we looked at  
22 recent studies of how big should a tsunami be and  
23 would it flood the site. And the second thing we  
24 looked at was what's the likelihood or probability of  
25 that tsunami occurring.

1           So, there's several -- we looked at two  
2 different sources. One, we look at teletsunamis, or  
3 those are tsunamis that are generated by distant  
4 earthquakes, up in Alaska or Chile. So, they could  
5 cause a tsunami.

6           But from what we've been able to conclude  
7 and from talking to my colleagues who work in the  
8 field of tsunamis, none of those would be large  
9 enough to flood the site.

10           You can also get a tsunami from a local  
11 source, such as the Goleta 2 landslide. That's one  
12 that a lot of people like to talk about. That could  
13 generate a fairly large tsunami. However, it doesn't  
14 -- landslide tsunamis tend to be highly directional  
15 and that the largest and most damaging part of it  
16 would be the direction the landslide occur in. Which  
17 in the Goleta landslide happens to be, unfortunately,  
18 into Goleta. So, that's where the biggest damage  
19 would, even though it would spread out down the  
20 beaches and go further down. So, we looked at that  
21 one.

22           And, then, we also looked at the latest  
23 studies. There have been some studies that have come  
24 out within the last year or so, and I know one was in  
25 the L.A. Times, I think a year or so ago, as we were

1 in the process of writing this report. So, we looked  
2 at those studies, too, to see if any of them were  
3 relevant to our project.

4 So, Goleta is one, but it could produce a  
5 large tsunami. It's not focused at Oxnard, but it  
6 still could produce a large tsunami. It's an  
7 extremely unlikely event. It has a return period in  
8 the neighborhood of 3 to 10 thousand years. So,  
9 that's usually beyond what we would consider design  
10 standard to look at a 3 to 10 thousand year event.

11 We looked at some of the new studies that  
12 have come out. Except those new studies tend to be  
13 academic in nature. They're still kind of figuring  
14 out what's going on with the new faults they've  
15 discovered. So, those tsunamis aren't really ready  
16 for prime time, yet, in terms of using them as part  
17 of your design effort. Because I talked with my  
18 colleagues down in L.A., that all they do is tsunami  
19 modeling and tsunami analysis, and they went through  
20 those studies and just said, they're just still  
21 developing the methods. So, we didn't include those,  
22 even though I think we did discuss them in our  
23 report.

24 MR. CARROLL: So, based on the analysis that  
25 you have just summarized, have you concluded that the

1 risk of tsunami to the project site is insignificant?

2 MR. MINEART: Yeah, we concluded it's low.

3 Well, we kind of looked at two things. The tsunamis  
4 that are, we call them frequent tsunamis, and those  
5 are tsunamis that have return periods of, say, a  
6 thousand years, 800 years, 1,500 years. Tsunamis of  
7 that return period are small, too small to flood the  
8 site.

9 Larger tsunamis, which we still don't think  
10 would flood the site, but they would be larger  
11 tsunamis, having return periods of 2,500 years, 3,000  
12 years, up to 10,000 years. Even though we don't  
13 think they'd flood the site, we also feel those are  
14 too infrequent to use as --

15 MR. CARROLL: And, so, when you say a return  
16 period of a certain number of years, what does that  
17 mean?

18 MR. MINEART: So, a thousand-year return  
19 period has a .0001 percent chance of occurring in any  
20 given year. So, it's beyond a 100th 10th of a  
21 hundred-year event.

22 MR. CARROLL: Okay, thank you. I want to  
23 turn, now, to sea level rise and ask you whether or  
24 not, in your assessment of various flooding hazards,  
25 you incorporated any assumptions about future sea

1 level rise. Now, what is the potential sea level  
2 rise within the vicinity of the project?

3 MR. MINEART: Yeah, so we did look at sea  
4 level rise. We looked at, you know, I think the near  
5 term said the next -- 2030, it's in the neighborhood  
6 of, I think, 2 to 7 inches. And looking at the year  
7 2050 or 2060, the maximum high end is two feet. And  
8 that's what we considered. We considered two feet of  
9 sea level rise as part of our analysis, for the  
10 extreme upper end for 2050, which would be the life  
11 of the project.

12 MR. CARROLL: And, so, you incorporated that  
13 assumption, related to sea level rise, into your  
14 assessment of all of the risks that we've discussed.

15 MR. MINEART: Yes, we did. So, we looked at  
16 tsunamis, we looked at tidal flooding, wave run up,  
17 all of those, with the addition of two feet of sea  
18 level rise.

19 MR. CARROLL: And out to what year did you  
20 analyze potential sea level rise?

21 MR. MINEART: We went out to 2050, which  
22 would be the 30-year life of the project.

23 MR. CARROLL: Thank you. And can you please  
24 describe what you see as -- well, describe as a worst  
25 case scenario, taking into consideration sea level

1 rise, in terms of potential impacts to the project  
2 site, perhaps with reference to the image that's on  
3 the screen?

4 MR. MINEART: Yeah, so we did look at -- so,  
5 we looked at, well, what would it take to flood the  
6 site? What would be the worst case we could look at,  
7 that might cause flooding.

8 So, if we look at the map, you know, I think  
9 I went over some of the distances. You know, there's  
10 a 300-foot wide beach, and then there's these four  
11 dunes, they're separate dunes, then we have another  
12 100 feet of dunes.

13 I will say, this beach has grown several  
14 hundred feet during the 60 years the plant has been  
15 there. But during that period, we've had about four  
16 inches of sea level rise since the plant was built.  
17 So, even with that four inches of sea level rise,  
18 we've seen the beach grow by about 300 feet.

19 But forgetting that, and the worst case  
20 we'll just forget that the beach is growing. Let's  
21 just assume with sea level rise the beach shrinks and  
22 gets smaller. There was some, I believe in the  
23 Ventura County Resilience Study, they have a table in  
24 there for Mandalay Road. Which wasn't right in front  
25 of us, but it's nearby. And I think they showed

1 about 150 feet, something like that, of beach erosion  
2 due to sea level rise in 2050 or 2060.

3 So, we said, okay, let's say it erodes 150  
4 feet, there's still 150 feet of beach left. But what  
5 if it's in the winter, and a big storm comes, so  
6 maybe it erodes that away, too. And, so, we've got  
7 the 300 feet gone. So, now, when a wave comes, a big  
8 wave comes, it can actually break close to the dunes.  
9 Nowadays, with all the beach there, the wave's going  
10 to break, you know, much further offshore.

11 We'll now assume all the beach is gone, it  
12 erodes. So, now, it will run up the dune. If you  
13 run up a steep surface, it's quite possible to run up  
14 -- instead of, you know, sea level rise is two feet.  
15 But, actually, the run up might be more than two  
16 feet. It might actually run up, five, six, or seven  
17 feet. So, it could be three times the amount of sea  
18 level rise. So, instead of adding two feet to the  
19 run up, we said, we'll, we'll add six or seven feet  
20 to the run up and see where that puts us.

21 And that puts us that much closer, six or  
22 seven feet closer to the top of the dune. But we  
23 still concluded that it would be close to the top of  
24 the dune, but the dune's still 100 feet wide. So, we  
25 said, even under that, what we call our worst case

1 scenario, we still don't expect flooding.

2 MR. CARROLL: Thank you. Is increased storm  
3 activity a risk that might impact the scenario that  
4 you -- or impact the analysis that you just  
5 described?

6 MR. MINEART: Yeah, so we did look into  
7 that. But now, the Natural Resource Council's recent  
8 report on sea level rise included lots of -- there's  
9 lots of information there besides sea level rise.  
10 And one of the things they looked at was this  
11 increasing storminess. You know, there's a general  
12 feeling that as climate change happens that it will  
13 get stormier, and there will be more periods of  
14 stormy weather and, therefore, there will be more  
15 periods of high water level, high than normal. You  
16 know, extreme water levels we called them.

17 And, so, we looked at what they reported.  
18 And they didn't report any information for Southern  
19 California, but they did include tables, some figures  
20 for the increasing storminess in San Francisco Bay  
21 Area. And we assume, well, it's probably similar  
22 down here, although maybe the numbers would be  
23 slightly different. But, presumably, the patterns  
24 are the same.

25 And they did show, according to them, you



1 know, what they call extreme water levels occur a few  
2 hours a decade, now. These are extreme water levels.  
3 They might increase to only 250 hours a decade by  
4 halfway through the century and it will increase even  
5 more than that by the end of the century.

6 But the important we got away from that was  
7 most of that increase occurs in the last half of the  
8 century, according to the study they did in the  
9 Natural Resource Council 2012 study.

10 So, since our lifespan of this project is  
11 around 2050, so it looks like most of that  
12 storminess, that increased water level should be  
13 occurring later in the century, after the life --  
14 after we'd expect this project to be finished.

15 MR. CARROLL: Okay. So, just to summarize  
16 your testimony, then, is it that the worst case  
17 scenario, that you've just described, even taking  
18 into consider these extreme events, that even under  
19 those circumstances is it your conclusion that  
20 flooding would not over top the dunes or, obviously,  
21 inundate the site?

22 MR. MINEART: Right. That's what we  
23 concluded, that even under this extreme, we took  
24 worse case conditions, we think the dunes are stable  
25 and large enough to provide adequate protection.

1           MR. CARROLL: And those worse case  
2 scenarios, are those likely events?

3           MR. MINEART: No, we put together a stream -  
4 - they're really unlikely events, that's why we  
5 called it a worst case.

6           MR. CARROLL: Okay, thank you. I want to  
7 move on, now, has your role with the project included  
8 review of expert materials prepared by Dr. Revell,  
9 who's one of the City's witnesses in this case?

10          MR. MINEART: Yes, it has.

11          MR. CARROLL: And based on your review of  
12 Dr. Revell's materials, what is your overall  
13 impression of his analysis of the exposure of the  
14 site to coastal hazards?

15          MR. MINEART: I think, well, there's two  
16 parts. I think they've over-emphasized the hazard,  
17 over-estimated the amount of hazard we face. And I  
18 think they've underestimated the stability of these  
19 dunes. These dunes are fairly large and stable, and  
20 I think they've underestimated the stability of the  
21 dunes.

22          MR. CARROLL: In your opinion, what is the  
23 basis of Dr. Revell's over-estimation of the flooding  
24 risk that you just mentioned?

25          MR. MINEART: Well, there's many things in

1 the study, but one of the major components of the  
2 study is this reliance on this Ventura County  
3 Resilience Study, or Resilience Study, I think  
4 Ventura they call it, that was put together by the  
5 Nature Conservancy or at least partially funded by  
6 them.

7           And they did a lot of modeling, and they did  
8 a lot of analysis of data in that study. And the  
9 study is primarily a planning study. You know, it  
10 looked at the entire coastline of Ventura, which is a  
11 fairly large area. And they came up with some  
12 estimates of what they thought the flood hazard zone  
13 was.

14           So, we looked at those studies and how they  
15 relate to not just the coast of Ventura, but how did  
16 they relate to our particular parcel, NRG's  
17 particular parcel.

18           So, when you look at the maps and  
19 presentations on our particular parcel, they don't  
20 fit with reality. The project, the modeling done  
21 shows the site flooding at an event like the 1983  
22 storm, which was a big storm. It caused a lot of  
23 damage in Ventura and Santa Barbara Counties. A lot  
24 of damage a Oxnard Shores. But it didn't look at  
25 all at the site. The only damage to the site was

1 some of the riprap needed to be repaired on the  
2 outfall. Otherwise, there was there was no impact to  
3 the site. Yet, the model showed the site as  
4 flooding.

5 The model shows the site flooding under  
6 existing conditions, if a similar storm were to  
7 occur. Well, the beach is much bigger, now, than it  
8 was in 1983. So, it's even less likely we fail to  
9 flood.

10 But in any case, the model showed it  
11 flooding and it didn't flood. So, it didn't  
12 represent our particular site accurately. So, any  
13 analysis based upon that we'd have to conclude isn't  
14 very accurate.

15 MR. CARROLL: And what about Dr. Revell's  
16 prediction that sea level rise might lead to erosion  
17 of the beach and dunes?

18 MR. MINEART: Yeah, I think it's commonly  
19 assumed in coastal engineering that sea level rise  
20 causes beach erosion. As the seas get higher, they  
21 break further, the waves break further onto the beach  
22 and you see the beaches erode back. And that might  
23 be true on most beaches.

24 However, as I mentioned earlier, we've had  
25 four inches of sea level rise since the plant was

1 constructed and the beach is about 300 feet wider  
2 than it was. So, in spite of the fact that we've had  
3 this historic rate of sea level rise, the beach has  
4 been growing.

5           What that indicates is the source of sand  
6 coming down to this beach exceeds the rate at which  
7 the sea is rising. So, we're accumulating sand on  
8 the beach at a faster rate than seas are rising.

9           It seems counter intuitive that land would  
10 get higher, with the sea rising. But, actually, in  
11 Northern California, if you look at the Natural  
12 Resources Council study, you'll see that actually  
13 seas are falling up there, too. And it's not because  
14 the sea's getting lower, it's just land's getting  
15 higher. And the land gets higher faster than the sea  
16 rises.

17           And we have that same condition with this  
18 beach here. At least historically, for the last 60  
19 years, the beach has been rising and growing faster  
20 than the sea's been rising. So, there's no reason to  
21 believe at least that isn't going to continue for a  
22 while. I mean, the beach may eventually catch up,  
23 the sea level rise. But we expect, at least for the  
24 short term, it will continue to grow. Maybe at a  
25 slower rate, if the sea starts rising faster.

1           MR. CARROLL: Thank you. So, based on all  
2 of the assessment that you have done, and with  
3 reference to all of the various hazards that you've  
4 analyzed and described today, what is your assessment  
5 of the exposure of the project site to inundation as  
6 a result of any of the phenomenon that we've  
7 discussed, including the impact of sea level rise on  
8 those phenomenon?

9           MR. MINEART: Yeah, we would say that the  
10 probability of flooding is low. It has a low  
11 probability of flooding from any of the sources,  
12 whether it's riverine or coastal.

13          MR. CARROLL: And the basis of that  
14 conclusion is primarily?

15          MR. MINEART: Well, primarily, it's based on  
16 the observations we looked at. We did some  
17 calculations of wave run up, how we think, you know,  
18 waves can come up on the dunes.

19                 But, primarily, the system is an accreting  
20 system. The beaches are getting bigger. The dunes  
21 are expanding out towards the ocean. Everything is  
22 moving away towards a high, more protected  
23 environment, not to a less protected environment.

24          MR. CARROLL: Thank you. That concludes our  
25 direct testimony. Mr. Revell's [sic] available for

1 cross-examination. I'm sorry, Mr. Mineart.

2 (Laughter.)

3 MR. CARROLL: I'm just trying to move this  
4 along.

5 MS. FOLK: Yeah, you just wish he were your  
6 expert.

7 (Laughter.)

8 CROSS-EXAMINATION BY CITY OF OXNARD

9 MS. FOLK: Okay, this is going to take me a  
10 second here. So, there are a few exhibits that I may  
11 want to refer to during Mr. Mineart's cross. And do  
12 you want me to give you the numbers, now, so that we  
13 can be ready if we need to?

14 HEARING OFFICER KRAMER: That sounds better,  
15 then I can queue them up.

16 MS. FOLK: Okay. So, it's Exhibit 1059,  
17 Exhibit 3025, and Exhibit 2000, which is the FSA, I  
18 believe.

19 HEARING OFFICER KRAMER: Okay.

20 MS. FOLK: Good afternoon, Mr. Mineart.

21 MR. MINEART: Hello.

22 MS. FOLK: I'm going to ask you a few  
23 questions about your experience with respect to  
24 analyzing sea level rise in the context of an open  
25 coastal environment.

1           And other than the current project, have --  
2 what experience do you have looking at the effect of  
3 sea level rise in an open coastal environment?

4           MR. MINEART: Yeah, I guess -- I recently  
5 looked at a project up in Pacifica. We looked at two  
6 parts of this project. It's been a -- it was an old  
7 landfill that's been restored, or covered up, and  
8 turned into a park. But it's on the coast. It's  
9 actually on the coast. And we looked at two parts of  
10 that.

11           One part, we looked at how climate change  
12 would affect the runoff at the site. And, so, just  
13 how it's going to handle climate change. And, so, we  
14 looked at future rainfall patterns.

15           And the second part of this study was that  
16 there's a giant sea wall that protects it, and faced  
17 directly into the ocean. And my task was to look at  
18 is the sea wall stable under existing conditions?  
19 It's a very large sea wall. And would the sea wall  
20 be stable under future conditions, with sea level  
21 rise.

22           MS. FOLK: And is it fair to say that that  
23 experience involved the evaluation of the integrity  
24 of coastal dunes?

25           MR. MINEART: It had to do with the



1 integrity of the structure.

2 MS. FOLK: The structure. An engineered  
3 structure, is that correct?

4 MR. MINEART: Yeah, it was an engineered  
5 structure.

6 MS. FOLK: It did not involve coastal dune  
7 erosion, did it?

8 MR. MINEART: No, it did -- no, it didn't  
9 involve coastal dune erosion, no.

10 MS. FOLK: Okay.

11 MR. MINEART: Also, we --

12 MS. FOLK: And when you did that work, did  
13 you do that work for the project developer or the  
14 project owner?

15 MR. MINEART: No, we did it for the city.

16 MS. FOLK: Okay.

17 MR. MINEART: I'll also just say, I recently  
18 completed a project in Seal Beach, where we looked at  
19 -- the question they'd ask us would the beach erode  
20 due to waves -- would the project increase erosion  
21 due to --

22 MS. FOLK: I believe in your CV it indicates  
23 that was with the inland turning, for the turning  
24 basin, is that correct?

25 MR. MINEART: Yes, that's right, I think it

1 was called the turning basin, right.

2 MS. FOLK: Yes. And a turning basin is not  
3 the open ocean, I would assume.

4 MR. MINEART: No, the construction -- there  
5 was two parts of the construction. part of it was  
6 inside, where they were going to build new piers and  
7 wharfs. And, then, there would be a turning basin.  
8 And, then, one of the options was, since it was a  
9 Navy Base and the public had access to the Navy Base,  
10 and that's the only way out from the residences, they  
11 were going to build a new outlet from the residential  
12 areas through the beach. They would go through the  
13 beach and then make a new outlet to the ocean, on the  
14 beach, and then they would build a breakwater.

15 And they'd asked us, if we build this  
16 breakwater and build this new outlet through the  
17 beach, what will be the impact on the beach?  
18 Because there's residences, just like the Oxnard  
19 Shores, there's residences that are near the beach.

20 MS. FOLK: And, again, did that involve the  
21 effect of sea level rise on coastal dunes?

22 MR. MINEART: It was sea level rise, but it  
23 was on the beach.

24 MS. FOLK: Okay. And would you say that  
25 it's typical to rely on dunes as a protective

1 structure for a facility, as an engineer?

2 MR. MINEART: I don't know that anybody  
3 builds dunes to protect a structure, I've never heard  
4 --

5 MS. FOLK: I didn't ask whether they build  
6 them. I said, is it typical to rely on them as a  
7 protective structure for a facility?

8 MR. MINEART: Yeah, I don't know if it's  
9 typical, but I assume any structure build behind  
10 dunes would rely on them for protection.

11 MS. FOLK: And what do you base that  
12 assumption on?

13 MR. MINEART: I mean, I'm just guessing. I  
14 don't know the particular structures that have been  
15 built behind dunes for the express purpose of  
16 protection. I don't know of any cases of that.

17 MS. FOLK: Okay. And is it your testimony  
18 in this proceeding, based on the report that you  
19 prepared for NRG, at the PUC?

20 MR. MINEART: That was the point of the  
21 earlier reports we did, yes.

22 MS. FOLK: Okay. And did you update that  
23 report with additional study --

24 MR. MINEART: We didn't update that specific  
25 report. But over the last year, you're familiar,

1 we've responded to the requests from the City for  
2 many things.

3 MS. FOLK: Okay.

4 MR. MINEART: And as part of doing that,  
5 we've done some more analysis.

6 MS. FOLK: Okay. And you testified that the  
7 project is not in the flood zone based on the 2010  
8 FEMA map, is that correct?

9 MR. MINEART: Right, except that we said  
10 that little parcel in the corner.

11 MS. FOLK: Parcel in the corner, yes. And  
12 the 2010 FEMA's map was -- is that based on a wave  
13 run up at the site, of 13 feet?

14 MR. MINEART: The 2010, right coastal flood  
15 map is based on 13 feet, right.

16 MS. FOLK: And it's my understanding you  
17 also testified that the preliminary maps, the wave  
18 run up height now goes from 3 feet to 20 feet, is  
19 that correct?

20 MR. MINEART: That's right.

21 MS. FOLK: And, so, that's in a period of  
22 five to six years, is that correct?

23 MR. MINEART: Well, that's the -- the new  
24 estimate has gone from 13 to 20 feet.

25 MS. FOLK: Yeah.

1           MR. MINEART: I wouldn't say that the  
2 environment has changed such that the seas have risen  
3 from 13 to 20 feet. They did a new analysis and they  
4 came up with a new number. It could be due to a  
5 number of things, but they did do an analysis.

6           MS. FOLK: And do you know what caused that  
7 change? It is a 50 percent increase.

8           MR. MINEART: It is a large increase. No, I  
9 agree with you there. They did a fairly elaborate  
10 analysis this time. They did 50 years of wave  
11 hindcasting and forecasting to come up with a 50-year  
12 hourly record. And they analyzed that 50-year record  
13 to come up with what they thought the total water  
14 level, which would be the run up. And from that  
15 analysis from that data, they came up with 20 feet.

16           If you look at how they did the previous  
17 one, the previous one was a much simpler analysis,  
18 and they came up with the 13 feet, because it was  
19 done a long time ago before they had all the  
20 computers available. And, so, they came up with 13  
21 feet from that previous analysis.

22           The difference, you can't attribute,  
23 necessarily, to sea level rise. It's two different  
24 analyses and one's much more sophisticated, the new  
25 one. And, then the old one, which was done with much

1 simpler methods, just because of the methods  
2 available at the time.

3 MS. FOLK: But you aren't familiar with all  
4 the methodology and the --

5 MR. MINEART: I'm familiar with what they  
6 did in the new one. I read the reports from the old  
7 one. But I'm somewhat familiar with what they did on  
8 the new one.

9 MS. FOLK: And did the FEMA maps, the  
10 preliminary FEMA maps, do they include sea level  
11 rise?

12 MR. MINEART: They do not.

13 MS. FOLK: And do the new, preliminary FEMA  
14 maps include coastal dune erosion caused by high  
15 velocity waves?

16 MR. MINEART: My understanding is, when FEMA  
17 developed the new maps, they do include dune  
18 erosion where they think it's appropriate. They did  
19 not include it at this site, at least --

20 MS. FOLK: And what's that understanding  
21 based on?

22 MR. MINEART: I've talk to some of the  
23 people who worked on the maps. I asked them.

24 MS. FOLK: Have you reviewed the technical  
25 data that you can --

1           MR. MINEART: No, I just asked them. I  
2 haven't reviewed the --

3           MS. FOLK: Can you just let me finish my  
4 question? I'm sorry. Fair enough, you get excited  
5 and you want to -- I understand.

6           So, my question was, have you reviewed the  
7 technical data to confirm that they include coastal  
8 dune erosion as a result of high velocity waves?

9           MR. STREET: I haven't reviewed their  
10 calculations of dune erosion. I've just -- my  
11 understanding is, where they thought it was  
12 appropriate, they did some calculations.

13          MS. FOLK: But you haven't independently  
14 confirmed that?

15          MR. MINEART: I haven't reviewed it, no.

16          MS. FOLK: No. Do you know what method for  
17 dune erosion they used?

18          MR. MINEART: My understanding is they used  
19 this -- the methods you've seen it. That they call  
20 the KOMAR method, or something, which is a geometric  
21 method. Which all it does, it just extends the beach  
22 flow pass through the dune, to the heights where the  
23 wave would equal. So, it assumes the dune is eroded.  
24 I believe it's the same method as using the Coastal  
25 Resilience Study. I believe it's the same method.

1           And they modify that or tweak that to try to  
2 incorporate a time element. To say, of if it's --  
3 instead of using unlimited time, they tried to  
4 incorporate, oh, they think it's going to be a 20-  
5 hour storm, or a 36-hour storm, or they had some  
6 method to come up with it and they tried to correct  
7 for the time element.

8           MS. FOLK: Okay.

9           MR. MINEART: And, so, they end up with  
10 numbers that are smaller, just because of this time  
11 piece they put in there.

12           MS. FOLK: And the FEMA maps, the  
13 preliminary 2016 maps, do you know what data point  
14 they used with respect to the topography in front of  
15 the project site?

16           MR. MINEART: You mean -- I'm not sure what  
17 you mean by data point?

18           MS. FOLK: What was the date of the top  
19 topography?

20           MR. MINEART: Well, they use the 2009 or  
21 2011 LIDAR, depending on whether it's the day it was  
22 published or the day it was taken. But I believe  
23 that's what they used.

24           MS. FOLK: Do you know which day that it  
25 actually reflects?



1 MR. MINEART: No, I don't. I don't.

2 MS. FOLK: Okay. Do you know that it  
3 reflects a beach condition from early November 2009?

4 MR. MINEART: Yeah, I'm guessing. I think  
5 that's -- I believe that is what they used because  
6 that was the standard date at the time. That's what  
7 people were using, so I'm assuming they used that  
8 data.

9 MS. FOLK: And are you aware of the concept  
10 of the most likely winter profile?

11 MR. MINEART: Uh-huh.

12 MS. FOLK: And are you aware that the FEMA  
13 guidelines requiring the mapping of flood risk based  
14 on the most likely winter profile?

15 MR. MINEART: I've heard that that is right.  
16 That is in the Pacific Coast guidelines.

17 MS. FOLK: And would you consider an early  
18 November 2009 date to be representative of the most  
19 likely winter profile?

20 MR. MINEART: I can't comment on whether  
21 that particular survey was the most -- was that, or  
22 not.

23 MS. FOLK: Well, do you normally consider a  
24 November date to be --

25 MR. MINEART: Well, I mean, one survey like

1 that wouldn't necessarily come up with that profile,  
2 no, no.

3 MS. FOLK: And do you know how the  
4 topography in front of the project site has changed  
5 since November 2009?

6 MR. MINEART: The only thing I know from  
7 2009, there was a 2014 LIDAR dataset, which I did  
8 look at. And, then, I just saw the data that was in  
9 Revell's testimony. He had a map in there and I've  
10 seen that map.

11 MS. FOLK: Uh-hum. Have we had any major  
12 storm events since 2009?

13 MR. MINEART: What was that?

14 MS. FOLK: Have we had any major storm  
15 events since 2009?

16 MR. MINEART: I'm not sure when the last big  
17 storm was in Southern California. We've been in a  
18 drought for a while. But I believe it's possible  
19 we've had some big wave events since then.

20 MS. FOLK: Okay. And are you familiar with  
21 the storm event of December 2015?

22 MR. MINEART: Yeah, I remember when we  
23 talked about that, back when --

24 MS. FOLK: Can we pull up Exhibit 3025, and  
25 go to Figure 4?

1 HEARING OFFICER KRAMER: Is it at the end or  
2 --

3 MS. FOLK: 3025, and it's Figure 4. Page 7,  
4 if that makes it easier. Yeah, that's the page, if  
5 you scroll down a little bit more.

6 Did you review these photos from Mr.  
7 Revell's testimony?

8 MR. MINEART: I read this report. Yes, I  
9 looked at these photos.

10 MS. FOLK: And you understand this is taken  
11 during the December 2015 storm event?

12 MR. MINEART: Well, he said that in the  
13 caption, so I --

14 MS. FOLK: And can you see that the access  
15 road for the project, in front of the dunes is --

16 MR. MINEART: Well, I see that rack line. I  
17 don't know if it's a road or not. I can't tell. But  
18 I see the rack line.

19 MS. FOLK: You can see the tracks on there,  
20 correct?

21 MR. MINEART: Oh, I see down below and I see  
22 the tracks on the beach. Is that what you're talking  
23 about?

24 MS. FOLK: Yeah.

25 MR. MINEART: Yeah, I see those.

1 MR. CARROLL: I'm going to object to  
2 questioning that describes what is depicted in the  
3 photo. There's been no foundation later for  
4 characterization of a road, or road tracks. I think  
5 if the --

6 MS. FOLK: Okay, if you want to --

7 MR. CARROLL: If you'd like to ask the  
8 witness his understanding of the photo, that's fine.  
9 But I object to counsel's characterization of what is  
10 in the photo.

11 MS. FOLK: Okay, that's fine.

12 HEARING OFFICER KRAMER: It sounds like  
13 you've agreed to withdraw the question?

14 MS. FOLK: I'd ask if you've reviewed the  
15 photo?

16 MR. MINEART: Yes, I have.

17 MS. FOLK: And I would ask if you can see  
18 what is in front of the dunes, in between the water?

19 MR. MINEART: I've seen -- you've described  
20 them as tracks, so I assume that's what they are. I  
21 wouldn't have necessarily known that, otherwise.

22 MS. FOLK: Okay. And can you scroll up to  
23 the photo above?

24 And, again, are those the dunes that are  
25 immediately in front of the Mandalay units?

1 MR. MINEART: It appears to be.

2 MS. FOLK: Yes. And does it appear to you  
3 that there are tracks at the foot of the dunes  
4 there?

5 MR. MINEART: Yes. I can see that, yes.

6 MS. FOLK: And you can also see the water  
7 there?

8 MR. MINEART: Yes, I can see some water  
9 there, too, right.

10 MS. FOLK: And does the beach look like it's  
11 300 feet wide in that particular photo?

12 MR. MINEART: No, not at this particular  
13 location. I'm guessing that this is -- like, I don't  
14 know exactly where this was taken, but I'm guessing  
15 it might be that crescent area I call it, that  
16 crescent area to the south where discharges cut  
17 channels in the beach. I'm guessing that's where --  
18 but I don't know for sure where that picture was  
19 taken. It just says here "the facility", obviously,  
20 because you can see the facility in it.

21 MS. FOLK: Okay. And have you done any dune  
22 erosion modeling in front of the site?

23 MR. MINEART: We did look into the dune  
24 erosion using the same methods that was used in the  
25 Coastal Resilience Study. We used some of those same

1 methods and did our own calculations, to see if we  
2 would get similar results.

3 MS. FOLK: And are those docketed as Exhibit  
4 1059? You may not know that.

5 (Laughter.)

6 MS. FOLK: Obviously, I didn't know that  
7 until five minutes ago.

8 MR. MINEART: They were docketed, yeah.

9 MS. FOLK: Okay. So, I'd like to pull up  
10 1059. And go to page 34 in the PDF.

11 And can you tell me what the effect of a  
12 100-year storm event would be on dune erosion? Oh,  
13 I'm sorry.

14 HEARING OFFICER KRAMER: This figure?

15 MS. FOLK: Oh, is it? Is it possible to  
16 rotate the view. Thank you.

17 MR. MINEART: Oh, okay, actually got it.  
18 Yeah, so this is from -- we looked at this. This  
19 must be from our analysis where we had looked at --  
20 we did like a Monte Carlo analysis of what all  
21 different combinations might be, and then we  
22 calculated dune erosion using the same method as was  
23 used in, I think, the Coastal Resilience Study for  
24 Ventura. So, we wanted to see what kind of results  
25 we would get, make those assumptions. I don't

1 necessarily agree with those assumptions. But I  
2 wanted to at least see what we would get using those  
3 assumptions, and that was the purpose of this  
4 analysis.

5 MS. FOLK: Okay. And do you know what beach  
6 slopes were assumed as part of that analysis?

7 MR. MINEART: You know, I don't remember.  
8 There were probably, in single digits, four or five  
9 percent, but I don't really remember.

10 MS. FOLK: Okay.

11 MR. MINEART: It should be in the report,  
12 but I just don't remember.

13 MS. FOLK: Okay. So, you said four or five  
14 percent.

15 MR. MINEART: I think so, but I wouldn't  
16 swear to it. Because a lot of the beaches seem to be  
17 in that range, but I don't really remember.

18 MS. FOLK: You don't believe you used 10  
19 percent?

20 MR. MINEART: I don't think so, but I can't  
21 promise. We did more than one slope, but I can't  
22 promise that -- I can't say that none of them were  
23 that steep. I'm just not sure.

24 MS. FOLK: Okay. And we do agree that the  
25 slope of the beach would affect the amount of dune

1 erosion.

2 MR. MINEART: Yes.

3 MS. FOLK: And this dune erosion we're  
4 talking about here, correct?

5 MR. MINEART: This is -- we used the method  
6 of KOMAR, which is dune erosion, that's right.

7 MS. FOLK: And is it true, under this  
8 modeling, that with sea level rise dune erosion could  
9 be as much as 280 feet in front of the project site?

10 MR. MINEART: That's right. So, using this  
11 method we used here, a 100-year event would be like  
12 you said.

13 MS. FOLK: And is this the FEMA-approved  
14 method for estimating dune erosion?

15 MR. MINEART: No. No, I mean, FEMA uses a  
16 similar method except my understanding is, and I have  
17 the technical report they wrote, and I just haven't  
18 finished reading it, is they started with the same  
19 method. But because the KOMAR method -- what it  
20 assumes is, if you have a wave wash up onto a dune,  
21 the wave can erode the entire dune, if it was high  
22 enough. And, even though, physically, that's not  
23 possible. But in terms of for planning purposes, it  
24 works because you'd say, well, if it's possible for a  
25 dune to erode, maybe you don't want to build a house



1 on it. So, we use that method.

2 But I believe what FEMA did was, they said,  
3 well, you know, waves don't last forever. You can  
4 just let it keep running forever. So, they put a  
5 time element in. And they did some kind of -- they  
6 call it a convolution. And they put a time element.  
7 And, then, they end up with much smaller numbers  
8 because there's a time. It could only be an hour, 10  
9 hours, 20 hours, not forever. So, you can only erode  
10 so much in that period of time. So, they end up with  
11 smaller numbers, than if you just use the method,  
12 like I did.

13 So, this would be, you know, the KOMAR  
14 method is commonly used, but I think it's commonly  
15 known, also, that it overestimates the amount of dune  
16 erosion.

17 MS. FOLK: Okay. And what do you base that  
18 on.

19 MR. MINEART: Well, if you read the report,  
20 KOMAR's report. It tends to be an upper limit of  
21 what you can erode. It's the upper limit.

22 MS. FOLK: Okay.

23 MR. MINEART: And, so, it doesn't mean it  
24 can't happen, it just is the upper limit.

25 MS. FOLK: And what's the width of the dunes

1 at the project site?

2 MR. MINEART: Around a hundred feet.

3 MS. FOLK: Okay.

4 MR. MINEART: Now this doesn't include the  
5 beach out front, it just assumes the waves break on  
6 the dune.

7 MS. FOLK: So, in your testimony, on page 6,  
8 you calculate the beach change with sea level rise.

9 MR. MINEART: The same report you're talking  
10 about?

11 MS. FOLK: No, this is in your testimony.

12 MR. MINEART: Oh, my testimony. Okay, we're  
13 doing that. I can't find that one.

14 MS. FOLK: So, have you found page 6, where  
15 you --

16 MR. MINEART: Oh, page 6, yeah.

17 MS. FOLK: Yes. And you calculate -- it's  
18 paragraph D. You calculate the beach change with sea  
19 level rise.

20 MR. MINEART: Where is it at, which  
21 paragraph, and which line?

22 MS. FOLK: D.

23 MR. MINEART: Oh, D. Okay, D. Yeah, okay.

24 MS. FOLK: Yes. It's sort of halfway down,  
25 that paragraph, towards the bottom, actually.

1 MR. MINEART: Yeah, okay.

2 MS. FOLK: Can you tell me the difference  
3 between the foreshore beach slope and the shore face  
4 slope?

5 MR. MINEART: I knew that question was  
6 coming.

7 (Laughter.)

8 MR. MINEART: Oh, yeah. Yeah, so in this  
9 calculation, yeah, you've pointed out there's an  
10 error in there. I used a foreshore slope of three  
11 percent. And the foreshore would be the actual beach  
12 slope, as people are familiar with the beach slope.

13 But, usually, I mean people do these  
14 calculations here, and you see in many of these  
15 studies they use the slope over the whole beach where  
16 sediment is mobile, where sediment's capable of  
17 moving, which tends to go out to deep water. I think  
18 Dr. Revell had estimated 40 feet. That seems a  
19 little deep. But it's deep water, in any case. And,  
20 then, up to the high waterline, where it's supposed  
21 to be the area. That tends to be a shallower slope.

22 MS. FOLK: So, would you agree that this  
23 testimony is not correct in this --

24 MR. MINEART: Yeah, the three percent's  
25 probably too big. It probably should be shallower.

1 MS. FOLK: And, so, for every percentage  
2 decrease in the slope of the beach, what's the change  
3 in the --

4 MR. MINEART: Yeah, according to these  
5 calculations, it's directly proportional. So, if you  
6 I guess one over --

7 MS. FOLK: So, if it was a one percent --

8 MR. MINEART: One over proportional, yeah.

9 MS. FOLK: If it was a one percent slope of  
10 the beach --

11 MR. MINEART: Yeah, it would be -- if it  
12 was a one percent slope, it would be 100 feet for  
13 every foot of sea level rise.

14 MS. FOLK: Okay, so that would be 200 feet.

15 MR. MINEART: Yeah, so two feet would be 200  
16 feet.

17 MS. FOLK: yeah.

18 MR. MINEART: Yeah. But I think I made the  
19 -- I think, if you look in the rest of my rebuttal  
20 testimony, I kind of talked about this method as  
21 being not applicable to Mandalay Beach, even though I  
22 did -- I know I did have it here, but I talked about  
23 the method that's used. It's commonly used by  
24 coastal engineering and geomorphologists. It's a  
25 pretty common method. In fact, it's the most common

1 method used for estimating beach erosion due to sea  
2 level rise.

3           However, the one major assumption it makes  
4 is that there's no net transport of sediment,  
5 longitudinal transport of sediment on the beach.

6           This beach, as shown, just the fact that  
7 it's grown by 300 feet, with four inches of sea level  
8 rise, historic sea level rise, it obviously is  
9 growing with sea level rise. So, this equation, this  
10 method, which I did here, too. I used here, too,  
11 I'll admit. Always erodes with sea level rise,  
12 always shows an erosion. But our beach has actually  
13 grown in the face of sea level rise.

14           MS. FOLK: And your assumption that the  
15 beach has grown is based on that 2009 topographic  
16 data?

17           MR. MINEART: No. No, I think if -- oh, I  
18 guess we don't have that photo of all of the beach --  
19 no, I looked at historic photos. No, isn't based on  
20 that. It's based on that we've looked at 20 aerial  
21 photos, starting from 1947 to present, and that  
22 covered 18 different years. So, looking at those 18  
23 different periods of time, the beach consistently got  
24 bigger.

25           MS. FOLK: And did each of those photos have

1 a data stamped, so that it was a consistent time of  
2 year that --

3 MR. MINEART: You know, for most of them, I  
4 believe we --

5 MS. FOLK: Let me ask my questions.

6 MR. MINEART: I know, I'm trying to -- oh,  
7 I'm sorry. I believe we provided the dates for a lot  
8 of the photos in one of our submittals. I won't say  
9 every photo.

10 MR. CARROLL: Let me -- perhaps, let me  
11 interrupt. First Mr. Mineart, make sure that the  
12 question's been asked before you answer it.

13 MR. MINEART: I'm sorry.

14 MR. CARROLL: And I'd like to suggest -- I'd  
15 like to suggest perhaps we can get the image on the  
16 screen and it might help with this series of  
17 questions.

18 HEARING OFFICER KRAMER: Okay. I can't  
19 remember which image it is, I think --

20 MR. CARROLL: So, this image isn't contained  
21 in Mr. Mineart's opening testimony.

22 MS. FOLK: And, Mr. Mineart, can I ask you  
23 if any of your -- of the beach, which might have been  
24 influenced by construction of the Ventura Harbor, and  
25 the Channel Islands Harbor?

1           MR. MINEART: Well, it's a -- I don't think  
2 so. I can't say for sure it wasn't, you know. But  
3 we looked at -- what we looked at was we looked at  
4 the beach width for the various 18 year, different --  
5 the 18 different years that we had photos for. We  
6 also looked at the amount of estimated sediment  
7 contributed by the Santa Clara River. And we also  
8 looked at the amount of sand, you know, sediment that  
9 was bypassed to Ventura Harbor.

10           And I believe in one of my submittals, I  
11 plotted those up on the same plot, actually, beach  
12 width versus dredging volume from Ventura Harbor, and  
13 beach width versus sand contributed by Santa Clara  
14 River.

15           And there's no obvious correlation between  
16 the Ventura River Harbor dredging and the beach  
17 width. I mean, I plotted them on the same plot and I  
18 didn't see any obvious correlation between them.

19           MS. FOLK: And are you familiar with some of  
20 the erosion that occurred downstream of the Ventura  
21 Harbor, when they were not dredging it as frequently?

22           MR. MINEART: I haven't seen any pictures of  
23 the erosion downstream of Ventura Harbor,  
24 specifically.

25           MS. FOLK: Channel Islands Harbor, excuse

1 me.

2 MR. MINEART: Oh, yes, there are -- yeah,  
3 down channel -- yes, I have seen pictures of erosion.  
4 But that's a totally different environment, it's  
5 completely different.

6 MS. FOLK: What about have you witnessed  
7 erosion down shore from the Santa Barbara Harbor when  
8 dredging --

9 MR. MINEART: Yeah, I have seen -- I mean, I  
10 haven't personally seen it, but I've seen pictures  
11 and heard people talk about it, and read articles on  
12 that where people talk about it.

13 MS. FOLK: Okay. You testified, earlier,  
14 that the Santa Clara River is located two to three  
15 miles from the project site; is that correct?

16 MR. MINEART: I --

17 MS. FOLK: In your rebuttal testimony, on  
18 page 5, you state that it's located one to two miles  
19 from the project site?

20 MR. MINEART: Well, I should be clear, you  
21 know. The mouth of the river is probably about a  
22 mile or so, I think from the site. But the Ventura  
23 River, you know, up on Victoria Avenue, where they  
24 used to have a break out up there during floods, is  
25 two to three miles away.



1 MS. FOLK: And are you aware that the river  
2 has been as close as .5 miles away in recent memory?  
3 And 1969, of course, it was on the project site.

4 MR. MINEART: Yes, that's what prompted the  
5 building of the berm by whoever owned the property at  
6 that time.

7 MS. FOLK: Right. And that berm is 18 feet  
8 high?

9 MR. MINEART: Roughly, 18 feet.

10 Yeah, so that was the picture I was talking  
11 about with the photos we took. So --

12 MS. FOLK: So, I wanted to ask you another  
13 question about your point on dune erosion versus  
14 beach erosion. You stated that the Coastal  
15 Resilience Ventura mapping found that there would be  
16 150 feet of beach erosion near Mandalay Road, which  
17 is approximately --

18 MR. MINEART: There was a table in the  
19 report that showed some kind of rates of erosion for  
20 different periods over time, of sea level rise.

21 MS. FOLK: And you are aware that that  
22 report referred to dune erosion, not beach erosion.

23 MR. MINEART: Right.

24 MS. FOLK: Thank you.

25 MR. CARROLL: I would just point out that

1 the image that I believe you were searching for,  
2 previously, is on the screen at this point.

3 MR. MINEART: Yeah, those are the lines of  
4 the different photos we took, where we measured the  
5 beach width. And we defined it -- just for  
6 photographic purposes, we defined the beach width as  
7 from the head wall of the outfall to the water line  
8 at the time the photo was taken.

9 MS. FOLK: And are there times of years  
10 associated with those lines on that figure?

11 MR. MINEART: They're not listed. For some  
12 of those photos, we probably do know the day it was  
13 taken, but may not the time. I --

14 MS. FOLK: And each -- I'm sorry.

15 MR. MINEART: Okay. Oh, I was going to say  
16 I put this together, and when I put this together I  
17 deliberately color-coded them where the bluer are  
18 older, greener gets newer, and then the orange and  
19 red are the newest. So, you can see how the color  
20 just varies continuously from blue towards red. It  
21 doesn't go back and forth.

22 MS. FOLK: So, this is sort of a random  
23 assortment of photos from different years, without  
24 specific --

25 MR. MINEART: Well --

1 MS. FOLK: You don't necessarily know which  
2 time of year, for example, for every photo?

3 MR. MINEART: Yeah, we may not know the date  
4 some of them were taken.

5 MS. FOLK: Right and --

6 MR. MINEART: The point of this was more of  
7 a continuous stream. Not look, compare one photo to  
8 one other photo, but compare all the photos together.

9 MS. FOLK: Right. But would you agree that  
10 the beach would probably be wider in the summer?

11 MR. MINEART: Yes. Yeah, it would probably  
12 be in the summer and narrower in the winter.

13 MS. FOLK: Okay. And would you also agree  
14 we'd be more likely to have severe storms in the  
15 winter?

16 MR. MINEART: Yeah.

17 MS. FOLK: I'm sorry, there's a lot to kind  
18 of keep my head around here.

19 Can we bring back up Exhibit 1059? Okay.  
20 So, I believe you testified earlier that there are  
21 only -- oh, I'm sorry. That there would only be a  
22 couple of hours of waves eroding the dunes under  
23 normal conditions right now, storm conditions, under  
24 current circumstances. But that by 2050, there could  
25 be up to 250 hours per year of --

1 MR. MINEART: No, in the report that I  
2 referred to, they looked at what they call extreme  
3 water levels. And what they said was, now, you get  
4 just a few of those, occasionally, a few hours of  
5 those extreme water levels. But with climate change,  
6 they expect those extreme water levels to become more  
7 frequent. And as you get further into the century,  
8 those extreme water levels will become more and more  
9 frequent. So, that's what I said.

10 MS. FOLK: Okay.

11 MR. MINEART: It had nothing to do with,  
12 necessarily, the dune height or anything.

13 MS. FOLK: So, what would those -- if you  
14 had those number of hours of extreme water levels,  
15 what kind of erosion would that cause of the dunes?

16 MR. MINEART: Well, there would be like -- I  
17 guess, it would probably be like a big storm we have  
18 now, it's just that there would be more of them in  
19 the future.

20 MS. FOLK: Would it be something like this?

21 MR. MINEART: No, I don't think so.

22 MS. FOLK: You don't think so.

23 MR. MINEART: My opinion is it wouldn't be  
24 like that.

25 MS. FOLK: Okay.

1 HEARING OFFICER KRAMER: By "this", you  
2 meant the chart on page 34, of Exhibit 1059?

3 MS. FOLK: Yeah, that's the exhibit I was  
4 talking about, yeah.

5 HEARING OFFICER KRAMER: Okay. I'm just  
6 trying to make the transcript make sense.

7 MS. FOLK: Sorry.

8 MR. MINEART: Yeah, this was part of like  
9 our worst case analysis we talked about earlier, when  
10 we were trying to think about what would be the  
11 worst case, so we did some analysis of it

12 MS. FOLK: So, again, does the TNC, the  
13 Coastal Resilience data, does that also rely on the  
14 2009 LIDAR topographic data?

15 MR. MINEART: I can't say for sure, I  
16 didn't work on the report. But I'm guessing they  
17 might have used it, since it was available.

18 MS. FOLK: And is it your understanding that  
19 the 2009 LIDAR data shows that the beach is at its  
20 widest as it's ever been on record?

21 MR. MINEART: As wide as it's ever been up  
22 to 2009.

23 MS. FOLK: Okay. So, if you assume that the  
24 beach is at its widest in your modeling, is that  
25 really a worst case scenario?

1 MR. MINEART: Well, I didn't -- it was  
2 probably the widest as it was in 2009. It might be  
3 wider now, for all I know. I haven't seen data from  
4 --

5 MS. FOLK: Did you review Mr. Revell's  
6 report and --

7 MR. MINEART: I did. His testimony?

8 MS. FOLK: His testimony, yes.

9 MR. MINEART: Yeah, I did.

10 MS. FOLK: And did you review the  
11 topographic data that he provided there, regarding  
12 the --

13 MR. MINEART: I did. I looked at the maps  
14 he had provided.

15 MS. FOLK: And you did see the photo  
16 earlier, of the site, with the water up to the foot  
17 of the dunes there.

18 MR. MINEART: Right.

19 MS. FOLK: Yes, okay.

20 MR. MINEART: Right. I don't know if I  
21 agreed with the caption, necessarily, but I did see  
22 it and look at it.

23 MS. FOLK: Can we pull up Exhibit 3025? And  
24 go to page 6. And this is Mr. Revell's testimony in  
25 this proceeding and his -- here, he shows -- it's his

1 figure of the site. And did you have a chance to  
2 review this?

3 MR. MINEART: I did.

4 MS. FOLK: And I believe, in your testimony,  
5 you indicated that you thought this showed no problem  
6 because of the bluish areas and the yellow areas  
7 being areas that showed no erosion. Is that correct?

8 MR. MINEART: What was that again? Can you  
9 repeat that?

10 MS. FOLK: I'm going to go to your  
11 testimony. I believe it's on page 20 of your  
12 rebuttal testimony.

13 MR. MINEART: Okay.

14 MS. FOLK: I believe you stated that you did  
15 not believe this figure demonstrates any issues with  
16 respect to the front of the beach, the beach in front  
17 of the facility.

18 MR. MINEART: Right. I don't remember my  
19 exact words but, right, that was my general  
20 impression was it doesn't show --

21 MS. FOLK: And -- sorry. And that would be  
22 because you -- I think you referred to the blue as an  
23 area showing accretion and --

24 MR. MINEART: Well, there are two reasons.  
25 One is like you said, I looked at the blue areas.

1 The blue areas are accretion. So, if you look at the  
2 blue areas it looks like, well, the beach has had a  
3 lot of accretion.

4 Now, there is the red area in that box,  
5 which is -- I guess there's some black in the middle,  
6 which must have been water on one of the two LIDAR  
7 surveys. And that shows erosion.

8 But, you know, as I think I mentioned, and I  
9 think I mentioned earlier in my -- there's those  
10 crescent-shaped areas where the discharge from the  
11 outfall either veers to the north or veers to the  
12 south. Well, I think that erosion area is one of  
13 those areas where the discharge had veered to the  
14 north and it cuts those channels into the beach. And  
15 that's probably the edge of one of those channels is  
16 eroded. And, so, you end up with a sharp scarp, and  
17 you end up with -- even a small amount of erosion  
18 will end up with a big area because it's a vertical,  
19 essentially a vertical area there. And that's been  
20 probably cut by the discharge.

21 MS. FOLK: Okay.

22 MR. MINEART: So, it is eroded. I agree  
23 with that, it is eroded.

24 MS. FOLK: And do you also see that there's  
25 erosion, if you look --



1 MR. MINEART: Above that, you mean, like  
2 above that?

3 MS. FOLK: Yeah, to the --

4 MR. MINEART: To the right of that?

5 MS. FOLK: Yes.

6 MR. MINEART: Yeah.

7 MS. FOLK: And those are -- those are the  
8 dune structures, is that correct?

9 MR. MINEART: I don't know what's over  
10 there. Where the other erosion is, is it the orange  
11 spot?

12 MS. FOLK: And to the right of the one area  
13 you were just discussing.

14 MR. MINEART: Yeah, I do see those. Yeah.  
15 I'm not sure what they are, but I do see them.

16 MS. FOLK: Yes. And can you read this map  
17 well enough to understand that this is a figure that  
18 portrays the beach and dune system in front of the  
19 project site?

20 MR. MINEART: It does show the beach in  
21 front of the project site.

22 MS. FOLK: Yes.

23 MR. MINEART: Okay.

24 MS. FOLK: I mean, you're just not sure if  
25 the yellow on the right-hand side, upper right-hand

1 side of the box is erosion or -- I mean, dunes?

2 MR. MINEART: You mean inside the box, those  
3 other --

4 MS. FOLK: Yes.

5 MR. MINEART: Well, there's one. It could  
6 be. One of the issues, and I looked at this, if you  
7 look at the lower right-hand corner, you'll see all  
8 that blue, which looks like it's part of the  
9 facility, some kind of facility. You know, the very  
10 lowest right-hand corner, the very -- it catches just  
11 the edge of your survey. You can see the blue, the  
12 dark blue, which looks like it's tanks or I don't  
13 know what it is.

14 MS. FOLK: Yeah, I was referring to the dune  
15 system.

16 MR. MINEART: But what I was getting to is  
17 it looks like one of the LIDARs isn't their earth  
18 LIDAR. It probably is just the reflection of the  
19 LIDAR, so it caught the top of vegetation. So, if  
20 that's the case, then I say that just because it  
21 looks like part of the industrial area's included in  
22 the LIDAR, itself.

23 The other LIDAR, I believe in 2009, is bare  
24 earth, the buildings have been taken out of the  
25 LIDAR. And, so, if you don't do bare earth, any

1 changes in vegetation can show up as erosion or  
2 accretion. Because it will show up in one LIDAR and  
3 you'll have the vegetation and the other LIDAR won't  
4 have the vegetation, and you'll end up with a change  
5 in topography, but it's really a change that one has  
6 vegetation and one doesn't.

7           So, I don't know if that's what that is, but  
8 I just see the buildings down there, and those  
9 obviously are manmade structures and they shouldn't  
10 be in -- they're not in the 2009 data, I believe, and  
11 it looks like they might be in the 2016 data.

12           MS. FOLK: Okay, can we go to the next page?  
13 To Figure 6, I'm sorry. On Page 10, sorry. Yeah, I  
14 don't have any questions about this, actually.

15           Oh, you testified earlier that you did not  
16 believe there was any dune erosion in front of the  
17 project site, based on the observations of plant  
18 personnel.

19           MR. MINEART: We did two things. You know,  
20 when I think Dr. Revell mentioned that there could  
21 have been erosion, then, that's why we have -- and I  
22 showed those pictures and lines of the 20 different  
23 pictures. We originally had four or five, and after  
24 we said that, we said we've got to go back and find  
25 every photo we can, that was taken during that

1 period, to see if we can see where that erosion may  
2 have occurred.

3 And, then, we also talked to plant operators  
4 and asked them if they had seen any erosion. So,  
5 those two things.

6 MS. FOLK: I want to confirm your earlier,  
7 the overlay with the lines, that was the beach  
8 profile there, is that correct?

9 MR. MINEART: Oh, these right here?

10 MS. FOLK: No, not this.

11 MR. MINEART: Oh.

12 MS. FOLK: The one -- I think you just  
13 referred to your earlier testimony about the lines  
14 showing the --

15 MR. MINEART: Oh, yes, yes, yes, right.

16 MS. FOLK: That was the beach profile,  
17 correct?

18 MR. MINEART: Those were the beach -- I  
19 don't know if they're profiles of the beach. We  
20 called it -- yeah, we called it the width of the  
21 beach, you know, at different times, yeah.

22 MS. FOLK: Yeah. Not the dunes?

23 MR. MINEART: No, just the sandy beach.

24 MS. FOLK: Right. And do you know, do beach  
25 personnel, do they go out on the beach and do they --

1 well, let me start with that. Are they educated in  
2 coastal morphology?

3 MR. MINEART: My understanding is they're  
4 going out to see if there's any changes. They have  
5 an outfall out there, so I guess they have some  
6 concern about the beach. But I couldn't tell you how  
7 often. It's fairly frequently, I understand, but I  
8 don't know how often it is.

9 MS. FOLK: And have you ever gone out there,  
10 with them, to see what they did.

11 MR. MINEART: No, I never have.

12 MS. FOLK: And do you know if they have any  
13 experience in --

14 MR. MINEART: No, I --

15 MS. FOLK: -- estimating dune erosion, for  
16 example.

17 MR. MINEART: No, I don't. I don't.

18 MS. FOLK: Okay, thank you. And what does  
19 the facility do with the sand that accumulates on the  
20 site, currently?

21 MR. MINEART: I haven't heard them say  
22 anything about that. At least they haven't said  
23 anything to me about that, so I don't know.

24 MS. FOLK: Okay. So, you don't know?

25 MR. MINEART: I don't know. And I don't

1 know if it accumulates or if they -- I don't know  
2 what they have. I don't really know anything about  
3 sand accumulation on site.

4 MS. FOLK: Okay, that's all I have.

5 HEARING OFFICER KRAMER: Staff, did you --

6 MS. CHESTER: No cross.

7 HEARING OFFICER KRAMER: Okay, thank you.

8 Redirect, Mr. Carroll?

9 REDIRECT EXAMINATION BY THE APPLICANT

10 MR. CARROLL: Yes, just a couple related to  
11 some of the images that we've seen. So, let's start  
12 with the one that's on the screen, since it's there.

13 Mr. Mineart, this is an image from one of  
14 your exhibits, and I think you've explained well what  
15 it is. Ms. Folk asked you if you knew specifically  
16 the days of the year, during which the various photos  
17 were taken. And I think it's safe to assume that at  
18 the time that these photos were taken in the 1940s,  
19 the taker probably didn't know they would end up in  
20 an exhibit here. So, we don't have days of the year.

21 But in your opinion, would that materially  
22 alter -- so, the fluctuations that might happen over  
23 the course of a year, would that materially alter  
24 what you're seeing here over a 60-year trend?

25 MR. MINEART: No, I don't think so. If we

1 had seen -- like, that's one of the reasons why I  
2 colored them by year. So, if you were -- like the  
3 beach, you know, grows in the summer and it shrinks  
4 in the winter, and it grows the next summer and  
5 shrinks in the winter. If that's what you were  
6 seeing, you would expect to maybe see those colors  
7 mixed up. You know, sometimes you caught one in the  
8 winter, sometimes you caught one in the summer, you  
9 know, but the beach was always the same size, then  
10 you'd see the colors mixed up.

11 But you can see that the colors progress,  
12 from blue, to green, to yellow, to red and orange,  
13 which indicates that as the photos are getting newer,  
14 they're getting further and further away from the  
15 outfall.

16 So, even though some of them might have been  
17 taken in the winter, some might have been taken in  
18 the summer, you see a general progression going, the  
19 beach getting wider from over time. Even though,  
20 maybe if you compared two lines that were taken one  
21 or two years apart, they may not be -- they may just  
22 be difference in tides or difference in season  
23 between those two pictures. But when you go from '47  
24 to 2014, that's not seasonal.

25 MR. CARROLL: Thank you. And if we can put

1 up Figure 4, from Exhibit Number 3025.

2 HEARING OFFICER KRAMER: Okay. First let me  
3 note that what we were just looking at is Exhibit  
4 1070.

5 And what was that, Figure 4? Yes. Do you  
6 need both pictures at the same time.

7 MR. CARROLL: No, I think we can do one at a  
8 time.

9 So, Mr. Mineart, these are figures from Mr.  
10 Revell's opening testimony, that you were shown by  
11 Ms. Folk. And Ms. Folk asked you a question, and I'm  
12 paraphrasing here, but I think it was something along  
13 the lines of does that look like 300 feet from the  
14 coastline to the foot of the dune? And you replied  
15 no.

16 What is your understanding of what is being  
17 depicted in this photograph. And let me remind you  
18 that we also have relatively easy access to the image  
19 that was on the screen during your testimony, that  
20 shows the broader view of the beach, if that would be  
21 helpful in describing your understanding of this  
22 photograph.

23 MS. FOLK: I'm going to object that you  
24 should not instruct the witness.

25 MR. CARROLL: Well, I --



1           MR. MINEART: Well, let me -- I'll tell you  
2 --

3           HEARING OFFICER KRAMER: Well, okay, let me  
4 overrule the objection first. Go ahead.

5           MR. MINEART: Oh, I'm sorry.

6           MR. CARROLL: Describe for us what you are  
7 seeing here. And if you think it would be helpful to  
8 refer to some photos in testimony to help explain  
9 that, let us know.

10          MR. MINEART: Okay. So, you know, I think,  
11 you know, like I think the photo was taken -- I don't  
12 know exactly where, but you can see the power plant,  
13 so you know they were taken probably off to the south  
14 somewhere, looking back towards the power plant. And  
15 there's a debris line. And I agree, that's probably  
16 the debris line from the high tide that occurred, I  
17 guess, on the day they said it did.

18          The other thing about the figure that's a  
19 little bit deceiving, I think, and I think this is  
20 taken in what I called that crescent shape. I  
21 mentioned that before, you know, where the outfall  
22 cuts those channels. And when it cuts those  
23 channels, they leave a depression.

24          And you can see it in some of the aerial  
25 photos, which maybe we could switch to in a minute.

1           MR. CARROLL:  So, why don't you hold there,  
2  so that we are reminded what the crescent shape is.  
3  Can we go back to the -- this is the aerial image  
4  that staff docketed last evening, but has proven  
5  helpful.

6           MR. MINEART:  So, this is those crescent  
7  shapes.  There's one to the north and you can see the  
8  water in it.  There's one to the south and you can  
9  see there's kind of a brownish area, it must be still  
10 wet.  And those tend to be depressions because they  
11 were cut out of the beach by the discharge, and so  
12 they collect water in these depressions.

13           You know, the tide will come in, a wave will  
14 come in and wash into there, and the water, since  
15 they're low it doesn't wash out and they tend to  
16 collect water.

17           So that's -- so, I think, you know, as I  
18 say, I didn't take the picture so I don't know  
19 exactly.  But if you look back at the other picture,  
20 there's water off to the left there that looks kind  
21 of calm, and it doesn't look like the ocean.  You  
22 know, there's no waves.  There's no surf.  It looks  
23 calm.

24           And I saw that picture and I said, you know,  
25 that must be one of those depressions in those

1 crescents, and that's just water left over from the  
2 previous high tide.

3           And, so, the beach actually extends probably  
4 way off to the left of this picture, another couple  
5 hundred feet.

6           MR. CARROLL: Okay, so we're understanding of  
7 what we are seeing here, and I agree with you. I  
8 don't know that I'd say it's a little deception. I  
9 would agree it's deception.

10           So, your understanding of this photo is that  
11 what we are seeing to the left there is the channel  
12 formed by the discharge from the power plant, and not  
13 the ocean?

14           MR. MINEART: I'm guessing that. Like I  
15 say, I don't know exactly where the picture was  
16 taken, where they were standing when they took it,  
17 but I'm just guessing because the water looks still.

18           MS. FOLK: I'm going to object that the  
19 witness should not guess as to this. When I asked  
20 questions earlier, my objection was sustained  
21 regarding his interpretation of the photo. And I'd  
22 ask that he not be asked to testify as to his  
23 interpretation when -- I just put this up for  
24 illustrative purposes, in terms of how close the  
25 water's gotten to the facility.

1 HEARING OFFICER KRAMER: Well, I guess the  
2 point is you put it up and asked him some questions -  
3 -

4 MS. FOLK: But my -- but Mr. Carroll's  
5 objections to my questions about it were sustained  
6 earlier, so --

7 HEARING OFFICER KRAMER: Okay, remind me  
8 what your question was?

9 MS. FOLK: Can we scroll up to the top  
10 picture, as well, so we see both?

11 HEARING OFFICER KRAMER: Let me put it this  
12 way, overruled. You put the pictures in evidence and  
13 Mr. Carroll is probing to determine what this witness  
14 can discern about the meaning of the pictures, at  
15 least as far as where the shoreline is. I think  
16 that's what you're getting at in relation to the --  
17 or, rather the edge of the surf, relative to this.

18 MR. CARROLL: So, let me rephrase the  
19 question. Mr. Mineart, recognizing that you  
20 obviously were not there when these photos were  
21 taken, and that there is no indication on the photo  
22 of the precise location from which the photo was  
23 taken, based on what you know about this area, I  
24 don't want you to guess, but I want you to give your  
25 best answer as to what it is we are seeing in this

1 photograph. And, in particular, what the body of  
2 water is that is to the left of this photograph, and  
3 the one below it.

4 MR. MINEART: Can I answer?

5 HEARING OFFICER KRAMER: Go ahead.

6 MR. MINEART: Okay. Yeah, so when I talked  
7 about beach width, you know, in previous, I showed  
8 that photo with the lines and I've said the beach is  
9 300 feet wide. You know, what I'm really talking  
10 about, when we talk about beach width, just arbitrary  
11 point of reference, we picked the head wall of the  
12 outfall, just because it's a point of common -- you  
13 know, that point's the same place every time, in  
14 every photo. So, it's about 300 feet wide from  
15 there.

16 So, when I look at that photo -- and we went  
17 from there to the surf zone, wherever the surf zone  
18 was. So, I look at that photo and that water doesn't  
19 look like it's the surf zone. That would be, I  
20 guess, where I would just leave it at that.

21 MR. CARROLL: And what does it look like to  
22 you?

23 MR. MINEART: It looks like water that's  
24 been ponded from probably a previous high tide, or  
25 some high waves that washed up and got stranded on

1 the beach, in a depression. That's what it looks  
2 like to me.

3 MR. CARROLL: And if that were the case,  
4 what is the distance from that waterline, shown in  
5 the photograph, to the waterline of the ocean?

6 MR. MINEART: I don't know, because I don't  
7 know --

8 MR. CARROLL: Approximately.

9 MR. MINEART: You know, that crescent area,  
10 you can see it in the other photo we had, where you  
11 can see the whole beach. That crescent area tends to  
12 be a couple hundred feet, a hundred feet in front --  
13 it depends on exactly where you are in that little  
14 crescent area. You could be a hundred feet in, you  
15 could be 200 feet in. You know, you can see it's got  
16 many layers, those crescents.

17 But I'm guessing it's that, where that brown  
18 water is, but that's just my --

19 MR. CARROLL: And when you say that brown  
20 water, where are you referring?

21 MR. MINEART: Oh, on the little crescent,  
22 just below the outfall. But I don't know that, I'm  
23 just guessing because it looks -- because it's still  
24 water. It's not a surf zone. It's still water.  
25 That's all I'm basing it on.

1 MR. CARROLL: Okay, thank you.

2 MR. MINEART: Okay.

3 MR. CARROLL: And could we -- in the same  
4 document, could we move up to Figure 2?

5 HEARING OFFICER KRAMER: This one, this  
6 document?

7 MR. CARROLL: The document further up.

8 HEARING OFFICER KRAMER: There we go.

9 MR. CARROLL: I'm sorry, did we discuss  
10 this?

11 MR. MINEART: No.

12 MS. FOLK: No.

13 MR. CARROLL: Mr. Mineart, can you -- so,  
14 this is Figure 2, again, from Mr. Revell's opening  
15 testimony. Can you explain -- do you understand this  
16 -- or, what's your understanding of what this  
17 photograph depicts?

18 MR. MINEART: Yeah, my understanding from  
19 this photo, I believe they got it, maybe, off the  
20 cover of the FSA. It's a photo, and I believe it  
21 might have been in our AFC application, too. But  
22 it's an artist's rendition of what the beach might  
23 look like right after they take the outfall out. So,  
24 you can still see the crescents left there that the  
25 discharges cut out, but the outfall's gone. And,

1 then, it's been filled in with some kind of sand,  
2 which they probably copied over from other parts of  
3 the beach to kind of give you that look of a beach.  
4 Because all the rip rap's been taken out and the  
5 structure's been taken out.

6 So, it will give you an idea of what a beach  
7 might look like after they take the outfall out, a  
8 short time after they take the outfall out.

9 MR. CARROLL: Okay. So, you're  
10 understanding is that this is an artist's depiction  
11 of what the beach would look like following the  
12 removal of the outfall?

13 MR. MINEART: The outfall's gone in the  
14 picture so, yeah.

15 MR. CARROLL: Okay. So, is it possible that  
16 the blue area shows area of recent wave overtopping  
17 of the access road?

18 MR. MINEART: I just assumed it was  
19 misplaced. I don't -- that's what it says. That's  
20 what it says.

21 MR. CARROLL: Well, but would that be  
22 possible since this is an artist's rendering of a  
23 future scenario?

24 MR. MINEART: No, it wouldn't, because  
25 that's where the outfall is now, today.



1 MR. CARROLL: Thank you. No further  
2 questions.

3 HEARING OFFICER KRAMER: Any recross?

4 MS. FOLK: Yeah.

5 RE-CROSS-EXAMINATION BY CITY OF OXNARD

6 MS. FOLK: I actually would like to go back  
7 to Figure 4. Okay. And, actually, go -- well, we  
8 can start with this one then move north.

9 So, Mr. Mineart, based on your knowledge of  
10 where the MGS facility is located, would you agree  
11 we're looking essentially northwest?

12 MR. MINEART: Yeah, that's what I would  
13 guess would be north, yes.

14 MS. FOLK: Yes. So, if that were the case,  
15 and you understand where the MGS facility is in  
16 relationship to that crescent you were describing  
17 earlier, I believe it's located to the south of that  
18 crescent, is that correct?

19 MR. MINEART: I don't know. I mean, it  
20 could be, I don't know.

21 MS. FOLK: Should we -- can we scroll up?  
22 Yes. So, can you see there that the crescent that  
23 you were referring to is located to the north of the  
24 MGS facility?

25 MR. MINEART: Well, there's one to the

1 north, which is that dark one. There's also one to  
2 the south, which you -- which is right there where  
3 your hand is, right. And that's the one I was  
4 referring to, the one to the south, because the  
5 picture was taken -- it looks to me it was from the  
6 south looking north.

7 MR. CARROLL: So, I understand, are you  
8 stating that your best interpretation of the two  
9 photographs in Mr. Revell's testimony, is that the  
10 photograph that shows the relatively smooth water --

11 MS. FOLK: Excuse me?

12 MR. CARROLL: What?

13 MS. FOLK: I'm the one who was asking  
14 questions.

15 MR. CARROLL: Oh, I'm sorry. I'm sorry. I  
16 lost track of where we were.

17 (Laughter.)

18 MS. FOLK: That's okay. I understand. I am  
19 done.

20 MR. CARROLL: I thought we were on redirect,  
21 actually.

22 MS. FOLK: And I had questions.

23 HEARING OFFICER KRAMER: You actually quit.

24 (Laughter.)

25 MS. CHANG: Could I interrupt to ask, what

1 figure are we looking at? I'm trying to find it on  
2 the docket and I'm failing.

3 HEARING OFFICER KRAMER: This one that's on  
4 the screen?

5 MS. CHANG: Which is the tab? I can't even  
6 tell which tab it is.

7 HEARING OFFICER KRAMER: Oh, it's the one  
8 that's white here. See where the X is actually  
9 active, the one on the left. It's 215823. It might  
10 be in the exhibit list. Well, let me think. No,  
11 it's on my homework to put it in the exhibit list, so  
12 you'll have to look it up by the TN number.

13 MS. CHANG: So, it's 215823. Thank you.

14 HEARING OFFICER KRAMER: Oh, did you finish?

15 Ms. Folk, are you finished?

16 MS. FOLK: Oh, I'm sorry. Yes, I'm  
17 finished.

18 HEARING OFFICER KRAMER: Oh, okay.

19 MR. CARROLL: So, I just had -- I won't  
20 belabor the point, I just want to ask two more  
21 questions and then I'll complete the redirect. But I  
22 think this is important to understand.

23 FURTHER REDIRECT EXAMINATION BY APPLICANT

24 MR. CARROLL: So, Mr. Mineart, for purposes  
25 of reference, so that we can move back and forth

1 between the photographs, I'm going to call the  
2 crescent south of the outfall the south crescent.  
3 And the crescent north of the outfall, the north  
4 crescent.

5 Can we now go to Mr. Revell's opening  
6 testimony, which is 3025. Is it your position that  
7 your best understanding of what this photo depicts is  
8 the south crescent.

9 MR. MINEART: That would be my guess from  
10 looking at the photo.

11 MR. CARROLL: Okay. And can we scroll up to  
12 the image above that? And is it your testimony that  
13 your best understanding of what this photo depicts  
14 would be what I call the north crescent?

15 MR. MINEART: That, I'm not sure, because  
16 the plant's just right there on the right. We're  
17 awfully close to the plant, so I'm not really sure if  
18 it's the north crescent. It might be -- I'm not  
19 sure.

20 MR. CARROLL: Okay.

21 MR. MINEART: I'm not sure.

22 MR. CARROLL: All right, thank you.

23 HEARING OFFICER KRAMER: Okay. Thank you,  
24 sir.

25 The next is --

1 MS. LAZEROW: Excuse me, Mr. Kramer. This  
2 is Shana Lazerow, with the California Environmental  
3 Justice Alliance. I'm going to be joining the call  
4 by WebEx shortly, and I wondered, since staff had  
5 said they would make available a person for my short  
6 line of Environmental Justice/ Air Quality questions,  
7 and I will be driving for about an hour, I just  
8 wondered whether there was any sense that we might be  
9 done with this topic and on to Air Quality before an  
10 hour and a little bit was up, because I will need to  
11 be looking at my questions when I pose them?

12 HEARING OFFICER KRAMER: Is now a good time  
13 for a break? Okay, well, let's ask. So, staff, you  
14 estimated 20 minutes for your direct?

15 MS. WILLIS: Correct.

16 HEARING OFFICER KRAMER: That still sounds  
17 correct?

18 MS. WILLIS: Yes.

19 HEARING OFFICER KRAMER: Okay. And, then,  
20 City, how much do you think you will have by way of  
21 cross?

22 MS. FOLK: For the staff?

23 HEARING OFFICER KRAMER: Yes.

24 MS. FOLK: Probably 30 minutes.

25 HEARING OFFICER KRAMER: Okay. And, Mr.

1 Carroll?

2 MS. FOLK: Oh, he's gone.

3 HEARING OFFICER KRAMER: Okay, well, we're  
4 already up to an hour because we're about to take a  
5 break.

6 Does that answer your question?

7 MS. LAZEROW: Yes, thank you. And I'll be  
8 listening. And if you need me and I'm still driving,  
9 I'll pull over.

10 HEARING OFFICER KRAMER: Okay. Please be  
11 sure to mute yourself, if you can.

12 MS. LAZEROW: I always do.

13 HEARING OFFICER KRAMER: Okay, thanks. And  
14 use the star 6, rather than just, say, mute on your  
15 cell phone, because we might still get a kind of echo  
16 from your cell phone connection.

17 MS. LAZEROW: Okay.

18 HEARING OFFICER KRAMER: Okay, so we are  
19 going to take a break and then go through to staff's  
20 panel. Ten minutes, a ten-minute break.

21 (Off the record at 3:35 p.m.)

22 (On the record at 3:49 p.m.)

23 HEARING OFFICE KRAMER: Back on the record.

24 I think probably Mr. Maurath. Am I saying  
25 your name even close to right?

1 MR. MAURATH: Yes.

2 HEARING OFFICE KRAMER: You were not sworn  
3 earlier; right?

4 MR. MAURATH: No, I was not.

5 HEARING OFFICE KRAMER: But everyone else on  
6 the panel has been; is that correct? They're all  
7 nodding their heads.

8 So if you would raise your right hand?

9 (Whereupon, Garry Maurath is duly sworn.)

10 MR. MAURATH: I do.

11 HEARING OFFICE KRAMER: Thank you.

12 Staff?

13 MS. CHESTER: Mr. Maurath, can you please  
14 state your name for the record?

15 MR. MAURATH: Garry Maurath, G-A-R-R-Y  
16 M-A-U-R-A-T-H.

17 MS. CHESTER: Was a statement of your  
18 qualifications attached to your testimony?

19 MR. MAURATH: Yes.

20 MS. CHESTER: Are you sponsoring the  
21 testimony entitled Geology and Paleontology in the  
22 Final Staff Assessment marked Exhibit 2000?

23 MR. MAURATH: Yes.

24 MS. CHESTER: Do you have any changes to  
25 your testimony.

1 MR. MAURATH: No.

2 MS. CHESTER: Do the opinions contained in  
3 your test represent your best professional judgment?

4 MR. MAURATH: Yes.

5 MS. CHESTER: Can you please state the  
6 purpose of Staff's geology and paleontology analysis?

7 MR. MAURATH: The purpose was to evaluate  
8 the effects of the project on geologic and  
9 paleontological resources. And also to look at the  
10 effects that geological hazards would pose on the  
11 site, and the workers at the site and potential  
12 visitors to the site.

13 MS. CHESTER: Did you review all applicable  
14 laws, ordinances, regulations and standards in your  
15 review?

16 MR. MAURATH: Yes, I did.

17 MS. CHESTER: Ms. Taylor, can you please  
18 state your name for the record?

19 MS. TAYLOR: Marylou Taylor. M-A-R-Y-L-O-U  
20 T-A-Y-L-O-R.

21 MS. CHESTER: Was a statement of your  
22 qualifications attached to your testimony?

23 MS. TAYLOR: Yes.

24 MS. CHESTER: Are you sponsoring the  
25 testimony entitled Soil and Water Resources in the



1 Final Staff Assessment marked Exhibit 2000?

2 MS. TAYLOR: Yes.

3 MS. CHESTER: Do you have any changes to  
4 your testimony?

5 MS. TAYLOR: No.

6 MS. CHESTER: Do the opinions contained in  
7 your testimony represent your best professional  
8 judgment?

9 MS. TAYLOR: Yes.

10 MS. CHESTER: Can you please state the  
11 purpose of Staff's soil and water resources analysis?

12 MS. TAYLOR: I compared Puente to the  
13 existing setting and evaluated the potential for the  
14 project to cause accelerated wind or water erosion  
15 and sedimentation to exacerbate flood condition in  
16 the vicinity of the project, to adversely affect  
17 surface or groundwater supplies, and whether it  
18 degrades surface or groundwater quality. I also  
19 discussed the present and future flood risk in terms  
20 of the severity of consequences from flood hazards.

21 MS. CHESTER: Did you review all applicable  
22 laws, ordinances, regulations and standards in your  
23 review?

24 MS. TAYLOR: Yes.

25 MS. CHESTER: Mr. Vidaver, can you please

1 state your name for the record?

2 MR. VIDAVER: David Vidaver, V-I-D-A-V-E-R.

3 MS. CHESTER: Was a statement of your  
4 qualifications attached to your testimony?

5 MR. VIDAVER: Yes.

6 MS. CHESTER: Are you sponsoring the  
7 testimony entitled Soil and Water Resources, Appendix  
8 Soil and Water 2?

9 MR. VIDAVER: Yes.

10 MS. CHESTER: Do you have any changes to  
11 your testimony?

12 MR. VIDAVER: No.

13 MS. CHESTER: Do the opinions contained in  
14 your testimony represent your best professional  
15 judgment?

16 MR. VIDAVER: Yes.

17 MS. CHESTER: Can you please state the  
18 purpose of Staff's Appendix Soil and Water 2?

19 MR. VIDAVER: I was asked to evaluate the  
20 implications of a prolonged outage of the project for  
21 electric system reliability. And I was also asked to  
22 evaluate whether a simultaneous outage of the  
23 project, the McGrath facility and Mandalay 3 due to a  
24 natural disaster would exacerbate or prolong the  
25 effects of that disaster. The conclusion I reached in

1 both cases was, no.

2 MS. CHESTER: Mr. Marshall, can you please  
3 state your name for the record?

4 MR. MARSHALL: Paul Marshall, P-A-U-L  
5 M-A-R-S-H-A-L-L.

6 MS. CHESTER: Was a statement of your  
7 qualifications attached to your testimony?

8 MR. MARSHALL: It was.

9 MS. CHESTER: Are you sponsoring -- oh,  
10 excuse me.

11 Do you have any changes to your testimony?

12 MR. MARSHALL: I do not.

13 MS. CHESTER: Do the opinions contained in  
14 your testimony represent your best professional  
15 judgment?

16 MR. MARSHALL: They do.

17 MS. CHESTER: Mr. Maurath, did you identify  
18 any coastal hazards at the proposed Puente site?

19 MR. MAURATH: Yes, I did. The hazard was  
20 tsunami hazard.

21 MS. CHESTER: Can you please define tsunami?

22 MR. MAURATH: A tsunami is basically a  
23 seismic sea wave. Sometime they're mistakenly called  
24 tidal waves. It's basically a wave generated in the  
25 ocean as a result of displacement of water caused by

1 either a landslide or an earthquake.

2 MS. CHESTER: Can you please explain how you  
3 came to the conclusion that there were tsunami  
4 hazards at the proposed site?

5 MR. MAURATH: Well, I reviewed publicly  
6 available data. And I also looked at site-specific  
7 data provided by the Applicant and the Interveners.  
8 And then I performed my independent evaluation of  
9 conditions at the site, past conditions, present  
10 conditions, future conditions. And I also  
11 collaborated with other members, engineers and  
12 scientists at the Energy Commission, to evaluate what  
13 that data meant.

14 MS. CHESTER: Are there any non-mitigable  
15 coastal hazards at the proposed site?

16 MR. MAURATH: No.

17 MS. CHESTER: What methodologies did you  
18 employ in your geology and paleontology analysis?

19 MR. MAURATH: Well, I evaluated various data  
20 and maps that were available. All of these are  
21 referenced in the FSA. And I used these maps to  
22 analyze potential impacts to workers' safety at the  
23 site, and from tsunami inundation.

24 The primary source of data that I used for  
25 the tsunami innovation -- tsunami inundation were the

1 official state tsunami hazard inundation maps.  
2 Actually, it's a series of maps that were  
3 collaboratively created by the California Geological  
4 Survey, the California Office of Emergency Services  
5 and the Tsunami Research Center at the University of  
6 Southern California. These maps have been  
7 extensively peer reviewed. And they were created  
8 specifically to assist local agencies in identifying  
9 their tsunami hazard and preparing emergency plans to  
10 mitigate that hazard or to deal with that hazard.  
11 These are the accepted state standard maps for  
12 emergency planning purposes for tsunamis. They are  
13 based on a compilation of current scientific evidence  
14 that includes tsunami run-up from a number of  
15 extreme, yet realistic, reasonable tsunami events, as  
16 discussed in page 5.2-28 of the Final Staff  
17 Assessment.

18           Also, I should note that in this data the  
19 California Geological Survey did evaluate tsunami  
20 events that have a recurrence interval greater than  
21 500 years. Thus, tsunamis are very rare events.  
22 This is evidenced by the lack of or very minimal  
23 amounts of historic evidence available along  
24 California. However, even though these are very rare  
25 events, Staff recommends, with an abundance of

1 caution, that the Applicant prepare a tsunami  
2 mitigation plan that will ensure that workers at the  
3 site and visitors to the site are provided  
4 information on how they may safely seek refuge in the  
5 event of a tsunami.

6 MS. CHESTER: Did you consider more recent  
7 data or studies that were published after the state  
8 maps became available?

9 MR. MAURATH: Yes, I did. In particular, I  
10 did -- I looked at several studies. One in  
11 particular, there was one done by Ken Ryan and others,  
12 published in 2015. This study was not included in  
13 the analysis of the state -- in the preparation for  
14 the state -- official state maps.

15 In Ken Ryan's study, he evaluated a  
16 potential rupture along a multi-segment fault that  
17 included the Pitas Point Faults and the Red Mountain  
18 Faults. When he modeled these, we did evaluate the  
19 results of that model, which is discussed in page  
20 5.2-28 of the Final Staff Analysis. And the final  
21 map that Ken Ryan presented in his paper is also  
22 shown in Figure 8 of the Final Staff Assessment.

23 The recurrence interval, and I'll get to  
24 this more in a bit, but the recurrence interval  
25 proposed by Ken Ryan for this multi-segment fault

1 rupture event is 2,500 years. So we looked at this,  
2 even though it is a very rare event, we looked at  
3 this because it is similar to historic events that  
4 have happened in Japan and in California. Whether or  
5 not this event has ever occurred on the Pitas Point  
6 and Red Mountain Faults or if it is likely to occur  
7 in the future is still the subject of ongoing  
8 scientific debate, as evidenced by another paper that  
9 we reviewed or looked at, also published in 2015 by  
10 Dr. McCarthy which looks at a multi-segment fault  
11 rupture along the Pitas Point Faults, the Ventura  
12 Faults and the San Cayetano Faults, which is a larger  
13 event.

14           However, in the paper presented by Dr.  
15 McCullough, he indicated that the recurrence interval  
16 would be on the order of once every 10,000 years for  
17 a seismic event large enough to generate an  
18 earthquake.

19 Currently the California Geologic Survey is  
20 evaluating whether or not they want to include events  
21 such as these in future updates of their tsunami  
22 inundation map.

23           In Mr. Ryan's model, it indicated that their  
24 inundation in portions of Oxnard and Ventura coast  
25 would be slightly higher than the inundation shown on

1 official maps. However, specifically when you look  
2 at the inundation at the site, the proposed site as  
3 shown in the model, the results would be similar of  
4 what we found the Final Staff Assessment and that  
5 there would be very minor flooding, if any. This  
6 suggests that even if you we used the Ryan model,  
7 that you would have a very minimal amount of  
8 inundation occurring at the site.

9           It should also be noticed that the scale of  
10 the Ryan model is such that it is very difficult, if  
11 not impossible, to make detailed site-specific  
12 observations. And if I may quote Mr. Ryan and his  
13 coauthors in the conclusion section of their paper,  
14 they said, and I quote,

15           “Our simple model is not complete enough to  
16 provide a true quantitative measure of tsunami  
17 hazard or the precise spatial extent of the  
18 inundation zone in the Ventura and Oxnard  
19 region,” end quote.

20           So in addition, neither the Ryan model or  
21 the McCarthy model considers probabilistic analysis  
22 for tsunami events. And this is very important.

23           To put this in perspective, assuming the  
24 worst-case scenario for tsunami events, which we  
25 presented on page 5.2-31 of our Final Staff



1 Assessment, where we have a tsunami event occur at  
2 the exact same time as seasonal high water level or a  
3 mean high water event, and at the exact same time of  
4 maximum sea-level rise, which we evaluated to be the  
5 end of the operational lifespan of the project at 30  
6 years, to have all three of these events occur at the  
7 exact same time, you would have a recurrence interval  
8 of approximately once every 30,000 years.

9           Using that same philosophy, if we were to  
10 look at that exact same scenario with the Ryan model,  
11 the recurrence interval is once every 499,000 years.  
12 And if we used Dr. McCarthy's model, it's once every  
13 12.5 million years. So these are very rare events.  
14 Lengthening the time of the investigation from say 30  
15 years to 60 years to 100 years, mathematically has  
16 very little impact on the recurrence interval when  
17 we're looking at a half million years or 12-1/2  
18 million years.

19           MS. CHESTER: Okay. Did you account for the  
20 effects of climate change in your analysis?

21           MR. MAURATH: Yes, I did. We looked -- we  
22 took climate change, and for my analysis, I looked at  
23 guidance documents provided by the California Coastal  
24 Commission and the Coastal and Ocean Working Group of  
25 the California Climate Action Team. Both documents

1 recommended the use of the best available science,  
2 which is the 2012 National Research Council Report,  
3 which also considers the time frame, considers risk  
4 tolerance, it considers storms and other extreme  
5 events, and also changing shorelines. The latest  
6 data used was the 2012 report.

7 MS. CHESTER: In your opinion, did Staff  
8 consider the latest scientific evidence on sea-level  
9 rise to evaluate tsunami inundation?

10 MR. MAURATH: Yes, we did. We did base it  
11 primarily on the 2012 National Research Council's  
12 report, which was also the same date of data which  
13 was used to determine sea-level rise in the Everest  
14 report prepared in 2017. They also based their sea-  
15 level rise estimates on the same set of data we used,  
16 which is the 2012 National Research Council Report,  
17 and in the Everest Report as shown in Section 4.2 of  
18 their report, what data they used.

19 MS. CHESTER: Did you limit your analysis of  
20 coastal hazards to a particular time frame?

21 MR. MAURATH: Yes. I used 30 years, which  
22 is the operational time frame for the proposed  
23 facility. And the result was at the end of the 30  
24 years there is a potential for a tsunami hazard.

25 MS. CHESTER: On page 26 of Dr. Revell's

1 January -- June 18 testimony -- or, I apologize, I  
2 don't have the date written down correctly.

3 In page 26 of Dr. Revell's testimony marked  
4 as Exhibit 3025, he states that it's not clear what  
5 seismic shaking parameters were used for Staff's  
6 analysis.

7 Did Staff discuss these parameters in that  
8 Final Staff Assessment?

9 MR. MAURATH: Yes, we did. For shaking  
10 analysis, we looked at two factors. One was  
11 liquefaction which could be the result of shaking,  
12 and that was discussed on page 5.2-23 and 5.2-24 of  
13 the Final Staff Assessment. Specifically, we did  
14 include and look at the preliminary seismic design  
15 shaking hazards, which I talked about on 5.2-22 and  
16 5.2-23 in the Final Staff Assessment, and they're  
17 summarized in Table 2, shown on 5.2-23.

18 MS. CHESTER: And in reference to the same  
19 discussion in Exhibit 3025, did Staff discuss  
20 liquefaction potential in the Final Staff Assessment?

21 MR. MAURATH: Yes, we did. We -- that was  
22 discussed on page 5.2-23 and 24 of the Final Staff  
23 Assessment.

24 MS. CHESTER: Ms. Taylor, did you identify  
25 any coastal hazards at the proposed Puente site?

1 MS. TAYLOR: Yes. I identified potential  
2 coastal hazards, flooding, wave impacts and erosion.  
3 I concluded the flood risk of these potential coastal  
4 hazards is low.

5 MS. CHESTER: How did you come to this  
6 conclusion?

7 MS. TAYLOR: My conclusion is based on the  
8 likelihood of a flood impacting Puente and the  
9 consequences resulting from that flood. The  
10 likelihood of flooding is evaluated based on maps  
11 issued by the appropriate regulating agency. From  
12 these maps the likelihood of hazards due to the 100-  
13 year flood events is low.

14 The consequences of flooding at the site are  
15 specific to its function and operation. If Puente  
16 were to experience a 100-year event, I evaluated the  
17 severity of impacts to safety -- to the safety of  
18 people onsite and offsite, whether it produced --  
19 whether it caused harm from onsite toxins released  
20 offsite and the effects of electric grid reliability,  
21 both local and system wide.

22 Various safety measures are in place to  
23 minimize consequences of these impacts, as described  
24 in my Final Staff Assessment. I determined that the  
25 severity of these impacts would be low.

1           Because the likelihood of flooding is low  
2 and the severity of consequences is also low, I  
3 concluded the flood risk of the project would be low.

4           MS. CHESTER: Are there any non-mitigable  
5 coastal hazards at the proposed site?

6           MS. TAYLOR: No.

7           MS. CHESTER: What maps did you use to  
8 analyze flood hazards, and why?

9           MS. TAYLOR: FEMA maps are the accepted  
10 engineering standard. And the City of Oxnard  
11 ordinance uses FEMA maps for their flood management  
12 requirements. I relied on the FEMA maps released in  
13 September of 2016 for determining the likelihood of  
14 flooding. The maps released are preliminary maps,  
15 but they are considered by FEMA to be the best  
16 information available for regulating development.

17           MS. CHESTER: Did you account for the  
18 effects of climate change in your analysis?

19           MS. TAYLOR: Yes. FEMA doesn't include the  
20 effects of climate change in their hazard maps, so I  
21 followed the sea-level rise guidance in documents  
22 from the California Coastal Commission, the Coastal  
23 and Ocean Working Group of the California Climate  
24 Action Team.

25           As Garry had said earlier, both documents

1 recommend that we use the best available science,  
2 which is the 2012 National Research Council's report.  
3 We considered time frame and risk tolerance. We  
4 considered storms and other extreme events. And we  
5 considered changing shorelines.

6 MS. CHESTER: Did you use any modeling to  
7 account for future coastal hazards?

8 MS. TAYLOR: I didn't run any modeling  
9 myself. I'm aware of two publicly available mapping  
10 resources that include climate change and dynamic  
11 modeling of Ventura County. They are the hazard maps  
12 by the Nature Conservancy and the hazard maps by the  
13 U.S. Geological Survey. Each uses its own modeling  
14 framework. I base my analysis on hazard maps  
15 produced by USGS. The modeling they develop is  
16 called CoSMoS, which stands for Coastal Storm  
17 Modeling System.

18 MS. CHESTER: Why did you choose to use that  
19 model?

20 MS. TAYLOR: I have a complete discussion on  
21 why I chose the USGS model in the FSA Appendix SW-1.  
22 But basically, I chose the USGS model because it uses  
23 a downscaled global climate model to produce the 100-  
24 year storm events and long-term beach erosion. And  
25 mapping is based on maximum sustained inundation

1 which is the water elevation sustained for at least  
2 two minutes as this approach that CoSMoS uses is the  
3 model of future wave conditions as accepted by the  
4 California Natural Resources Agency for their Cal-  
5 Adapt efforts.

6 MS. CHESTER: Thank you. Can you briefly  
7 describe the difference between the terms critical  
8 infrastructure and critical facility?

9 MS. TAYLOR: The U.S. Department of Homeland  
10 Security describes critical infrastructure to be the  
11 systems and assets that are so vital to their -- that  
12 are so vital that their incapacity or destruction  
13 would have debilitating impacts on security, national  
14 economic security, national public health or safety,  
15 or any combination of those. Some examples of  
16 critical infrastructure sectors are the energy  
17 sector, transportation systems, water systems,  
18 emergency services.

19 A critical facility is a structure that has  
20 the potential to cause serious bodily harm, extensive  
21 property damage, or disruption of vital socioeconomic  
22 activities if it is destroyed or damaged or if it is  
23 functionally impaired.

24 With respect to floods, FEMA guidance  
25 suggests that critical facilities are facilities that

1 are vital to flood response activities or critical to  
2 the health and safety of the public before, during  
3 and after a flood. An example of this would be a  
4 hospital.

5 Another guidance suggested by FEMA is  
6 facilities that if flooded would make the flood  
7 problem and its impacts much worse. An example of  
8 this would be a hazardous materials facility.

9 MS. CHESTER: In your opinion is the Puente  
10 facility -- proposed Puente facility critical  
11 infrastructure or a critical facility?

12 MS. TAYLOR: The Puente Project is neither a  
13 critical infrastructure or a critical facility. The  
14 electric grid is critical infrastructure, but Puente  
15 is not a critical facility. I came to this  
16 conclusion based on David Vidaver's analysis which is  
17 included in Appendix SW-2.

18 MS. CHESTER: So, Mr. Vidaver, can you  
19 please describe your analysis contained in Appendix  
20 SW-2?

21 MR. VIDAVER: Sure. There's a mistaken  
22 notion that the Moorpark area, which includes Ventura  
23 and Oxnard, relies on generation, nearby generation  
24 for its energy. In fact, it imports energy from as  
25 far away as Fort McMurray, Alberta and El Paso,



1 Texas. The Western Grid is very, very large. And  
2 transmission lines connect the Moorpark area to the  
3 greater grid.

4 The project is proposed to meet local  
5 capacity requirements for the Moorpark area that  
6 ensure that the system will remain reliable for all  
7 but the hottest day of the decade in the face of the  
8 outage -- sequential outage of two major components,  
9 i.e. -- or e.g. power plants in the Moorpark area or  
10 transmission lines within the Moorpark area where  
11 they connect the Moorpark area to the greater grid.  
12 So on the hottest day of the decade, the Moorpark  
13 area and the system has a whole can withstand the  
14 failure of two major components. By definition, it  
15 can withstand the failure of the Puente project.

16 If the -- if a natural disaster were to  
17 disable any two components, let's say Puente or  
18 McGrath, the system will still survive on the hottest  
19 day of the decade. Whether the system would survive  
20 Puente and McGrath and Mandalay 3, if it were still  
21 to continue to operate on the hottest day of the  
22 decade is open to question, but it's highly likely  
23 that it would.

24 The other requirement associated with  
25 finding Puente a critical facility is that it could

1 conceivably be relocated somewhere where there would  
2 be a major natural disaster, and Puente's continued  
3 operation would be essential to providing reliable  
4 electricity service to the Moorpark area. And if you  
5 think about that, the natural disaster would have to  
6 destroy a healthy share of the infrastructure that  
7 allows the importation of energy from outside the  
8 Moorpark area, yet be such that it did not touch  
9 Puente at all. Puente would still have to operate.

10           So the implication is that Puente would be  
11 on some kind of radio line, sitting on a hilltop  
12 somewhere where it was unaffected by a flood or  
13 outside a fire zone, depending on what you think  
14 happened, and therefore be the only thing which saves  
15 the Moorpark area from a blackout. And that's quite  
16 simply difficult to imagine the system being  
17 constructed that way.

18           MS. CHESTER: Ms. Taylor, you stated that  
19 Puente is not, in your opinion, a critical facility.  
20 How does that designation influence the flood  
21 protection standards you recommended for the proposed  
22 project in the Final Staff Assessment?

23           MS. TAYLOR: The Federal Flood Risk  
24 Management Standard establishes a higher flood  
25 protection standard for federal critical actions

1 which they describe as any activity for which even a  
2 slight chance of flooding is too great. These  
3 standards also -- these standards allow federal  
4 agencies to determine whether an action is critical.  
5 And the guidelines were issued in October 2015 to  
6 help agencies determine whether or not the action is  
7 critical.

8           Based on those guidelines and other guides  
9 published by FEMA, the California Emergency  
10 Management Agency and the California Natural  
11 Resources Agency, Puente is not considered a critical  
12 facility that needs this higher flood protection.

13           Therefore, I used the normal standard of the  
14 100-year event for both present-day hazards and the  
15 potential future hazards due to climate change.

16           MS. CHESTER: And, Ms. Taylor, did you limit  
17 your analysis of coastal hazards to a particular time  
18 frame?

19           MS. TAYLOR: Yes. I focused on the time  
20 frame of 30 years to analyze the project effects from  
21 climate change.

22           MS. CHESTER: Mr. Marshall, can you please  
23 explain why Staff has limited their analysis to 30  
24 years?

25           MR. MARSHALL: Yes. We concluded, using the

1 30-year operational lifespan was a reasonable time  
2 frame for analysis of the project for a couple of  
3 important reasons. The primary reason is that using  
4 sea-level rise estimates beyond about 30 years is  
5 highly speculative, as we point out in our analysis,  
6 Staff considered accepted statewide guidance,  
7 including the California Coastal Commission, and  
8 which recommends using the NRC 2012 that you've heard  
9 referenced quite a bit here today.

10           The near-term estimates in this document are  
11 believed by the scientific community to be the best  
12 and most accurate and applicable to standard  
13 engineering design for projects, and so that's why we  
14 think it's appropriate for the 30-year lifespan of  
15 the project.

16           Some of the things to consider with regards  
17 to sea-level rise and how it's presented in the NRC  
18 document is that they typically present the data in  
19 ranges, suggesting there are some levels of  
20 uncertainty in the data and they know that there's a  
21 wide range of possibilities.

22           And, you know, as time goes on and  
23 extrapolation of this data much further beyond 30  
24 years, those variations get much -- become much  
25 greater because we have a lesser understanding about

1 the models that are used to predict how the climate  
2 and how the weather is going to react to the change  
3 in climate. So we think using the NRC estimates over  
4 a 30-year timespan are probably the most  
5 scientifically defensible approach that we should  
6 consider.

7 Now, I will say that understanding these  
8 variations, Staff adopted a very conservative  
9 estimate of sea-level rise for this project. We used  
10 the upper-end estimates that the NRC 2012 document  
11 recommends of about two feet. And on top of that, as  
12 Garry mentioned earlier and Marylou eluded to, we  
13 also considered the effects during a mean high water  
14 condition. So we adopted a very conservative  
15 approach where we used two feet of sea-level rise,  
16 which is the high-end estimate of the NRC 2012  
17 estimates, considered that occurring during a mean  
18 high water condition, and used that for calculating  
19 the flood level or inundation level that we might  
20 expect from a tsunami that would occur during a sea-  
21 level rise event near the end of the life of the  
22 project.

23 So in some ways you could say that this  
24 conservative approach might even suggest that it  
25 would extend beyond the 30-year life of a project.

1 So that would be one thing to consider in terms of  
2 the potential variability.

3 Staff also pointed out, however, that we  
4 anticipate there will be sea-level rise changes --  
5 changes in sea-level rise estimates as time goes on.  
6 And sure enough, we've seen that, as Mr. Revell has  
7 brought to our attention, the fourth climate change  
8 assessment report that Staff had previously not had  
9 access to, which does show some new probabilistic  
10 estimates on sea-level rise. And we finally had time  
11 to take a look at that since we got it.

12 And one of the things that we noticed about  
13 that study was that for the 30-year timespan that we  
14 think is appropriate for the project, the new study  
15 actually shows that those estimates are about the  
16 same, or actually a little less than what we used for  
17 our analysis. Now once we go out to time periods of  
18 about 2040 to 2050, that's where the new  
19 probabilistic estimates start to show significant  
20 increases beyond what we're using.

21 And so -- but as far as Staff knows right  
22 now, the most appropriate guidance for us to use at  
23 this point is still the NRC 2012, the new data that  
24 has been brought up has not been accepted and adopted  
25 as the statewide guidance that we're aware of at this

1 time.

2           The other thing that we considered that was  
3 important was the Coastal Commission guidance  
4 regarding the expected project life. We took a look  
5 at their recent document that came out and looked at  
6 the expected project life, you know, which when you  
7 look at the expected project life, it really helps  
8 determine the amount of sea-level rise to which a  
9 project could be exposed while the project is in  
10 place. And in their guidance they outline a  
11 number -- when it comes to sea-level rise and how you  
12 would analyze that, they outline a number of steps  
13 that you would take when you consider the effects of  
14 sea-level rise on a facility.

15           And I'd like to read just briefly what they  
16 say about this part of the analysis. They say,  
17       "The point of this step is not to specify  
18       exactly how long a project will exist and be  
19       permitted for, but rather to identify a project  
20       life time frame that is typical for the type of  
21       development in question so that the hazard  
22       analysis performed in subsequent steps will  
23       adequately consider the impact that may occur  
24       over the entire life of the development."

25           Staff concluded that given the noncritical

1 nature of the project, that a 30-year time frame was  
2 an appropriate timespan for analysis.

3 MS. CHESTER: Thank you.

4 Ms. Taylor, did you identify any applicable  
5 laws, ordinances, regulations or standards that the  
6 project would not comply with?

7 MS. TAYLOR: Yes. In the City of Oxnard's  
8 2030 General Plan, Policy SH 3.5 prohibits  
9 electricity generation in a location documented by  
10 the City as threatened by flooding or coastal  
11 hazards, among others. The City published maps in  
12 April 2016 that shows the Puente Project would be  
13 within a coastal hazard zone. So this would mean  
14 that the project would not comply with this policy of  
15 the General Plan.

16 In addition, there is one regulation that  
17 Interveners assert that the project is not in  
18 compliance, but Staff doesn't agree. And this is the  
19 section 2 -- sorry -- section 30253 of the Coastal  
20 Act. It says that,

21 "The project must minimize risk to life and  
22 property in areas of high geologic, flood and  
23 fire hazards, and it must assure stability and  
24 structure integrity."

25 The Coastal Act in section 30253, it doesn't



1 specify any particular map or method to determine  
2 whether or not a proposed project would be in a  
3 hazard zone. But the Coastal Commission report, the  
4 30413(d) report concluded that the project is a  
5 critical facility in an area of high flood hazard,  
6 which warrants its relocation to comply with 30253.

7 MS. CHESTER: So to clarify, I believe you  
8 noted a conflict with the City of Oxnard General  
9 Plan, as well as one with the Coastal Commission  
10 30413(d) report but, and I believe you stated this,  
11 you do not agree with the Coastal Commission's  
12 conclusion in the 30413 report regarding that there  
13 is a high flood hazard and warrants relocation; is  
14 that correct?

15 MS. TAYLOR: Correct.

16 MS. CHESTER: Does this conclude your  
17 testimony?

18 MS. TAYLOR: Yes.

19 MS. CHESTER: Great.

20 These witnesses are now available for cross  
21 examination.

22 HEARING OFFICE KRAMER: Mr. Carroll?

23 MR. CARROLL: No questions. Thank you.

24 HEARING OFFICE KRAMER: Ms. Folk?

25 MS. FOLK: Good afternoon. And I will

1 direct my questions to the people I think are  
2 appropriate to answer. If you don't feel that you're  
3 the appropriate person to answer, I'd appreciate if  
4 the person who is would volunteer. And this  
5 question -- these questions, I believe, are directed  
6 to Ms. Taylor.

7           So I've reviewed your qualifications. And I  
8 just wanted to ask whether you have any education or  
9 work experience in coastal geomorphology?

10           MS. TAYLOR: Not coastal geomorphology, no.

11           MS. FOLK: And do you have any experience,  
12 either education or work experience in modeling dune  
13 erosion?

14           MS. TAYLOR: Not modeling dune erosion, no.

15           MS. FOLK: Okay. And it's my understanding,  
16 based on the Final Staff Assessment, that your  
17 assessment of the risk to the site from sea-level  
18 rise is based on the CoSMoS 3.0 model which shows  
19 that no -- there will be no inundation of the site  
20 through 2050; is that correct?

21           MS. TAYLOR: Yes.

22           MS. FOLK: And is it correct that -- excuse  
23 me. Is it correct that the CoSMoS model is still in  
24 draft form?

25           MS. TAYLOR: The CoSMoS is still in

1 preliminary form. There is an indication on the  
2 site, which I accessed the information that it's  
3 published as preliminary and would be updated as more  
4 information is available. But they did publish this  
5 information, so it had been vetted and looked at to  
6 meet their accepted level of certainty that they were  
7 comfortable to release to the public.

8 MS. FOLK: Do you know -- when you say they,  
9 you mean USGS; is that correct?

10 MS. TAYLOR: I'm sorry, will you repeat  
11 that?

12 MS. FOLK: When you said they, you mean  
13 USGS?

14 MS. TAYLOR: I meant USGS, yes. I'm sorry.

15 MS. FOLK: And when you said they have  
16 vetted it, do you know what was done to vet the  
17 model?

18 MS. TAYLOR: I don't know for sure. I  
19 believe that they have -- I'm sure they -- I'm sure  
20 they have, but I'm not exactly sure what it was.

21 MS. FOLK: And does the model have any  
22 technical documentation?

23 MS. TAYLOR: Yes, it does.

24 MS. FOLK: And have you seen it?

25 MS. TAYLOR: Yes, I have.

1 MS. FOLK: And what would that be?

2 MS. TAYLOR: It's listed in my FSA in the  
3 references.

4 MS. FOLK: Is that the reference to the  
5 PowerPoint?

6 MS. TAYLOR: No.

7 MS. FOLK: Okay. Has the CoSMoS model been  
8 peer reviewed?

9 MS. TAYLOR: I believe so.

10 MS. FOLK: Do you know?

11 MS. TAYLOR: Yes, it has been.

12 MS. FOLK: And have you compared the results  
13 of the modeling from CoSMoS to any actual observed  
14 storm events?

15 MS. TAYLOR: No.

16 MS. FOLK: And you testified earlier that it  
17 is a global model that is downscaled to the wave  
18 climate of the local area, and in this case the  
19 Ventura coast; is that correct??

20 MS. TAYLOR: Yes.

21 MS. FOLK: And have you compared the  
22 assumptions in the CoSMoS model about the wave  
23 climate on the Ventura coast to actual observations?

24 MS. TAYLOR: Will you repeat that please?

25 MS. FOLK: And have you compared the

1 assumptions in the CoSMoS model about the wave  
2 climate on the Ventura coast to actual observations?

3 MS. TAYLOR: I have not compared them  
4 personally. I am using the results of the model.

5 MS. FOLK: For example, have you compared  
6 the assumptions about the wave climate to the  
7 historic buoy observations in the Santa Barbara  
8 Channel?

9 MS. TAYLOR: I'm sorry. Will you please  
10 restate that?

11 MS. FOLK: For example, have you compared  
12 the assumptions about the wave climate to the  
13 historic buoy observations in the Santa Barbara  
14 Channel?

15 MS. TAYLOR: No. They don't use that method  
16 to establish their --

17 MS. FOLK: I understand that. I'm asking if  
18 there -- about -- I'm asking questions about sort of  
19 the ground truthing of the model, so to speak.

20 MS. TAYLOR: The ground truthing of the  
21 model?

22 MS. FOLK: Yes. So I have more questions  
23 along this line.

24 Did you assess whether the model's  
25 assumptions regarding the frequency of El Nino

1 conditions match the historic buoy data?

2 MS. TAYLOR: I don't believe they used  
3 historic data to the point where they are trying to  
4 model future global climate effects. They use a  
5 separate model for that. It's a completely different  
6 approach.

7 MS. FOLK: So the assumptions in the model  
8 regarding El Nino events don't match historic events;  
9 is that correct?

10 MS. TAYLOR: I'm not exactly sure what the  
11 basis of the global climate change model is. I'm  
12 sure that it somehow compensates for the future  
13 frequency of El Ninos.

14 MS. FOLK: But you don't know that for sure;  
15 is that correct?

16 MS. TAYLOR: I just used the model. I  
17 didn't --

18 MS. FOLK: Okay.

19 MS. TAYLOR: I mean, I didn't -- I just used  
20 the results from the model.

21 MS. FOLK: And do you know how many storm  
22 events are predicted by the CoSMoS model in the next  
23 100 years that are the same magnitude as the storm of  
24 record, which would be the 1983 storm?

25 MS. TAYLOR: No, I don't.

1 MS. FOLK: So I'd like to go to Exhibit 2000  
2 which is the Final Staff Assessment and,  
3 unfortunately, it's very long. And this will be near  
4 the end. It's Figure 15 in the appendix to the Storm  
5 and Water Resources -- Soil and Water Resources  
6 section.

7 HEARING OFFICE KRAMER: Do you happen to see  
8 a page number at the bottom? Oh, wait. I'm actually  
9 pretty close already, maybe. You said Appendix 2?

10 MS. FOLK: Sorry. Hold on. It's SW  
11 Appendix right here, Appendix 1, and it's Figure 15.

12 MS. CHESTER: Did you say Figure 15? There  
13 is no Figure 15 for Appendix SW-1.

14 MS. FOLK: Well, it's -- all the figures for  
15 that section are at the end of the SW, the Soil and  
16 Water Resources section, so --

17 MS. CHESTER: There should be a title on top  
18 of the figure.

19 MS. FOLK: It is. It says Soil and Water  
20 Resources Figure 15. And then -- then the figures  
21 for the appendix follow, so maybe that's the  
22 confusion. But they're all at the end of the Soil  
23 and Water Resources section, so it's a little --

24 MS. CHESTER: Okay, I see it.

25 MS. FOLK: Do you see it?

1 MS. CHESTER: To clarify, I believe the  
2 title of this figure is Inundation.

3 HEARING OFFICE KRAMER: What's that again?

4 MS. CHESTER: It's Soil and Water Resources  
5 Figure 15.

6 MS. FOLK: And I just want to clarify, is  
7 this a map that CoSMoS -- based on the CoSMoS model?

8 MS. TAYLOR: Yes.

9 MS. FOLK: And does it show, under the  
10 CoSMoS model, the 100-year storm event with one meter  
11 of sea-level rise?

12 MS. TAYLOR: Yes.

13 MS. FOLK: And is this map the result of any  
14 modeling you've done?

15 MS. TAYLOR: No.

16 MS. FOLK: It's just pulled from the CoSMoS  
17 model?

18 MS. TAYLOR: Yes.

19 MS. FOLK: Okay. And are you aware that  
20 there's a beach access road that run along the front  
21 of the Mandalay side, approximately along the dotted  
22 line?

23 MS. TAYLOR: I know that there is a historic  
24 road that was there when the project was first built  
25 and is currently buried in sand.



1 MS. FOLK: Do you know if that road is still  
2 used by the maintenance people at the project site?

3 MS. TAYLOR: I don't know that.

4 MS. FOLK: Okay.

5 HEARING OFFICE KRAMER: Is this what you  
6 were looking for?

7 MS. FOLK: Yeah. Thank you. Okay. And can  
8 you now -- would you mind scrolling to -- it's down,  
9 and it is SW-1 Figure 7?

10 And while we're doing that, I just want to  
11 clarify, Ms. Taylor, you testified that you reviewed  
12 the technical documentation for the CoSMoS model.  
13 The only reference I saw in the Final Staff  
14 Assessment was to the USGS PowerPoint. Do you have  
15 it?

16 MS. TAYLOR: No. There -- I have other -- I  
17 have other references to the -- they're probably  
18 listed under USGS.

19 MS. FOLK: Okay.

20 MS. TAYLOR: You referred to Figure SW-1 --

21 MS. FOLK: Figure 7.

22 MS. TAYLOR: I see it.

23 MS. FOLK: Oh, you know what, it might --  
24 I'm sorry. I think it's just SW Figure 7. Sorry.  
25 It's very hard to --

1 MS. TAYLOR: I'm sorry, will you repeat  
2 that?

3 MS. FOLK: It's Figure 7 in SW.

4 MS. TAYLOR: Okay.

5 MS. FOLK: Okay. It's the one up on the  
6 screen.

7 Now is this the FEMA 2016 preliminary map?

8 MS. TAYLOR: Yes. The figure on top of the  
9 page. The top half of the page is.

10 MS. FOLK: Yeah. And again, is this map a  
11 preliminary map?

12 MS. TAYLOR: Yes, it is.

13 MS. FOLK: Has it been technically reviewed?

14 MS. TAYLOR: Yes.

15 MS. FOLK: And by whom?

16 MS. TAYLOR: By the map producer who  
17 released this. I forget who the consultant was, but  
18 it was a FEMA --

19 MS. FOLK: Is it your understanding that  
20 it's AECOM?

21 MS. TAYLOR: I think it's Baker, I forget.  
22 But it has been technically reviewed, yes.

23 MS. FOLK: Okay. And is your understanding  
24 that the maps are now out for review to verify their  
25 technical accuracy?

1 MS. TAYLOR: The maps are out to review to  
2 the local agencies for them to comment.

3 MS. FOLK: And does this -- do these maps  
4 include storm erosion?

5 MS. TAYLOR: FEMA guidelines include the  
6 inclusion of storm erosion. So seeing that this is a  
7 FEMA document, I would think that they would include  
8 storm erosion.

9 MS. FOLK: Do you know whether it includes  
10 storm erosion?

11 MS. TAYLOR: I believe it does.

12 MS. FOLK: You would guess; is that what you  
13 said?

14 MS. TAYLOR: That's how I understand.

15 MS. FOLK: Okay.

16 MS. TAYLOR: It includes storm erosion.

17 MS. FOLK: Does it include sea-level rise?

18 MS. TAYLOR: No.

19 MS. FOLK: Are you familiar with the concept  
20 of the most likely winter profile?

21 MS. TAYLOR: Yes.

22 MS. FOLK: And are you aware that the FEMA  
23 guidelines require mapping of flood risk based on the  
24 most likely winter profile??

25 MS. TAYLOR: Yes. I believe that's what you

1 were alluding to with your question about erosion,  
2 about whether FEMA includes erosion.

3 MS. FOLK: Actually, that was --

4 MS. TAYLOR: Two questions ago.

5 MS. FOLK: -- maybe. Don't worry about it.  
6 It was not.

7 But -- and do you know the date of the  
8 topography that the FEMA mapping is based on?

9 MS. TAYLOR: From what I understand it was  
10 the LIDAR data that was available publicly, I believe  
11 around 2009.

12 MS. FOLK: Do you know it to be November of  
13 2009?

14 MS. TAYLOR: I'm not sure of the month.

15 MS. FOLK: And have we had any major storm  
16 events since 2009?

17 MS. TAYLOR: I would think so, probably. I  
18 don't know for sure.

19 MS. FOLK: Are you familiar with the storm  
20 event of 2015?

21 MS. TAYLOR: I heard about it, yes.

22 MS. FOLK: On page 4-22.129 of the Final  
23 Staff Assessment, you state,

24 "The FEMA map does not incorporate any amount of  
25 sea-level rise, but the area of flooding is

1 larger than the USGS map that includes 40 inches  
2 of sea-level rise."

3 Is that correct?

4 MS. TAYLOR: Yes, that's correct.

5 MS. FOLK: And when you refer to the USGS  
6 map, are you referring to the CoSMoS model?

7 MS. TAYLOR: I'm referring to CoSMoS 3.0.

8 MS. FOLK: Yes. And you relied on the  
9 CoSMoS model when you performed your assessment of  
10 sea-level rise?

11 MS. TAYLOR: Yes.

12 MS. FOLK: So you relied on the model that  
13 showed less impact from sea-level rise than the FEMA  
14 maps that don't take into account sea-level rise?

15 MS. TAYLOR: Yes.

16 MS. FOLK: Okay.

17 MS. TAYLOR: Would you like to know why?

18 MS. FOLK: No, that's fine.

19 MS. TAYLOR: Okay. It's explained in my FSA  
20 in detail.

21 MS. FOLK: That's fine. Okay.

22 Can you address me specifically to the  
23 technical documentation that you reviewed for the  
24 USGS CoSMoS model?

25 MS. TAYLOR: On page 4.11-109 of my FSA, the

1 top of the page says USGS 2016. Oh, I'm sorry, I  
2 take that back, that that's what you were referring  
3 to. I looked at the -- oh, wait. One second. Okay.  
4 Here it is. I'm sorry.

5 Page 4.11-137 of my FSA, it is the second to  
6 the bottom, USGS 2014, the development of the coastal  
7 modeling -- Coastal Storm Modeling System for  
8 predicting the impact of storms in high-energy active  
9 margin coasts.

10 MS. FOLK: And do you agree that each  
11 conditions are one of the factors to consider when  
12 evaluating sea-level rise?

13 MS. TAYLOR: Yes.

14 MS. FOLK: And do you agree that each  
15 conditions in front of the project site have been  
16 variable?

17 MS. TAYLOR: Yes.

18 MS. FOLK: In your -- let me make sure I  
19 don't -- in your testimony, in your rebuttal  
20 testimony, you state that using the TNC modeling  
21 would increase the risk of sea-level rise over the  
22 30-year term that you analyzed from low to medium; is  
23 that correct?

24 MS. TAYLOR: Will you please point to that  
25 in my rebuttal testimony?

1 MS. FOLK: It's on page 20.

2 MS. TAYLOR: Will you repeat the question  
3 please?

4 MS. FOLK: You state in your rebuttal  
5 testimony that modeling -- using the TNC model would  
6 increase the risk of sea-level rise over the 30-year  
7 term that you analyzed from low to medium; is that  
8 correct??

9 MS. TAYLOR: I was explaining a  
10 hypothetical. If I were to use the modeling, it  
11 could change my conclusions if no other -- or  
12 depending on what the situation of other conditions  
13 were for using that model.

14 MS. FOLK: So is it your understanding that  
15 using that model, there could be a medium risk to the  
16 site for flooding?

17 MS. TAYLOR: I understand that using the TNC  
18 model shows that the site would be under a very high  
19 risk of coastal hazards.

20 MS. FOLK: Okay. Did you evaluate whether  
21 the site would be affected by sea-level rise beyond  
22 2050?

23 MS. TAYLOR: No.

24 MS. FOLK: So do you know what the risk to  
25 the site is after 2050 from sea-level rise?

1 MS. TAYLOR: I did not look at past 2050.

2 MS. FOLK: Okay. And did you evaluate  
3 whether the siting of the facility is consistent  
4 with -- well, let me just strike that for a second.

5 Do you know what coastal resiliency planning  
6 is?

7 MS. TAYLOR: Yes.

8 MS. FOLK: And can you tell me generally  
9 what you believe that to be?

10 MS. TAYLOR: It could incorporate a lot of  
11 different strategies. The one that I am more  
12 familiar with is the advanced -- wait, it's the  
13 managed coastal planning where a -- where planning  
14 would be to keep development outside of the coastal  
15 zone. And as sea-level rise were to increase risks  
16 inland, then there would be a retreat of the  
17 development further inland to avoid impacts from the  
18 coastal hazards.

19 MS. FOLK: Right. So I believe that's  
20 referred to as managed retreat; is that correct?

21 MS. TAYLOR: Managed retreat.

22 MS. FOLK: Yeah. And did you consider  
23 whether the siting of the project is consistent with  
24 managed retreat policies?

25 MS. TAYLOR: One second. I am unaware that



1 the City of Oxnard General Plan from 2030 had a  
2 managed retreat policy. Can you show me where that  
3 is?

4 MS. FOLK: That was not the question I  
5 asked.

6 I asked whether you considered whether the  
7 project is consistent with the policy of managed  
8 retreat?

9 MS. TAYLOR: For a hypothetical policy,  
10 yes -- I mean, no, it wouldn't -- I don't -- I'm not  
11 sure.

12 MS. FOLK: Okay.

13 MS. TAYLOR: Whatever hypothetical managed  
14 retreat -- I haven't seen this policy that you're  
15 talking about.

16 MS. FOLK: Do you understand that the City  
17 has policies in its General Plan that discourage the  
18 armoring of its coastline?

19 MS. TAYLOR: Yes.

20 MS. FOLK: Okay. And do you understand that  
21 the City has policies that also encourage hazard  
22 avoidance?

23 MS. TAYLOR: I believe I brought that up in  
24 my direct when I talked about policy SH --

25 MS. FOLK: 3.5.

1 MS. TAYLOR: -- 3.5. Thank you.

2 MS. FOLK: And do you think it might be  
3 reasonable for an agency to have a 30-year planning  
4 time frame in order to address potential sea-level  
5 rise impacts?

6 MS. TAYLOR: I can't make that call, what an  
7 agency, a local agency would use for their planning  
8 criteria.

9 MS. FOLK: Do you know if the California  
10 Coastal Commission has -- what the time frame that  
11 the California Coastal Commission has for  
12 assessing -- or for planning for sea-level rise?

13 MS. TAYLOR: I believe they suggest to take  
14 into account the operational life of a development.

15 MS. FOLK: And I don't know if these  
16 questions go to you. They have to do with, actually,  
17 the operational life of the project.

18 Are you aware of any gas-fired power plants  
19 in California that have been online longer than 30  
20 years?

21 MR. VIDAVER: Yes.

22 MS. FOLK: And --

23 MS. TAYLOR: Say your name.

24 MR. VIDAVER: Dave Vidaver. Sorry.

25 MS. FOLK: Do you know of any gas-fired

1 power plants that have a Condition of Certification  
2 requiring their removal after 30 years?

3 MR. VIDAVER: Not me.

4 MR. MARSHALL: No, we don't.

5 MS. FOLK: Do you know of any Condition of  
6 Approval for the Puente Project that would require  
7 its removal after 30 years?

8 MR. MARSHALL: No, I'm not.

9 MS. FOLK: And is it -- did you hear the  
10 testimony from NRG yesterday that they were not --  
11 would not be required to remove the MGS 1 and 2  
12 facilities in the absence of the approval of the  
13 Puente Project?

14 MR. MARSHALL: I don't recall that.

15 MS. FOLK: Are you aware of any gas-fired  
16 power plants that have been removed after 30 years?

17 MR. VIDAVER: That have been removed or  
18 ceased operation?

19 MS. FOLK: Removed.

20 MR. VIDAVER: Not me, no.

21 MR. MARSHALL: No.

22 MS. FOLK: I believe there's a condition in  
23 the -- actually, I'll strike that.

24 Did you evaluate the extent to which placing  
25 this facility in an area that may be subject to sea-

1 level rise would also require other infrastructure to  
2 serve that facility, for example, roads or wastewater  
3 or --

4 MR. MARSHALL: No. Since we found that  
5 there would be no impact from sea-level rise on the  
6 facility, we did not analyze that.

7 MS. FOLK: But you only evaluated that  
8 through the next 30 years; is that correct?

9 MR. MARSHALL: That's correct.

10 MS. FOLK: Okay. So I have -- okay, I have  
11 no more questions.

12 HEARING OFFICE KRAMER: Redirect?

13 MS. CHESTER: No redirect.

14 HEARING OFFICE KRAMER: Okay. Thank you,  
15 Panel.

16 Our next witness will be Dr. Revell.

17 MS. FOLK: Okay. Can I quickly get some  
18 water?

19 (Colloquy Between Hearing Officer and  
20 Commissioners)

21 HEARING OFFICE KRAMER: We're going to take  
22 the hint and have a five-minute break.

23 (Off the record at 4:54 p.m.)

24 (On the record at 5:00 p.m.)

25 COMMISSIONER SCOTT: Back on the record.

1 This is Commissioner Scott. I will turn the hearing  
2 over to Hearing Officer Paul Kramer.

3 HEARING OFFICE KRAMER: Okay. To help Staff  
4 make their flights, we're going to take a break in  
5 Soil and Water testimony and go back to the questions  
6 that CEJA wanted to ask of an Air Quality witness  
7 from Staff relating to environmental justice issues.

8 Ms. Lazerow, are you in a good place to  
9 speak?

10 MS. LAZEROW: I am, yes, thank you. And I  
11 appreciate the five-minute warning.

12 HEARING OFFICE KRAMER: So are you ready to  
13 go?

14 MS. LAZEROW: I am, yes.

15 HEARING OFFICE KRAMER: Okay.

16 MS. LAZEROW: Thank you.

17 So first I want to appreciate you being  
18 available to answer these follow-up questions.

19 HEARING OFFICE KRAMER: Okay. This is --  
20 what we have for you here is Matt Layton, and he has  
21 been sworn.

22 MS. LAZEROW: Right.

23 HEARING OFFICE KRAMER: So go ahead.

24 MS. LAZEROW: Thank you.

25 Mr. Layton, you are one of the staff people

1 who contributed to the air quality analysis that  
2 concluded -- that included an environmental justice  
3 analysis; is that correct?

4 MR. LAYTON: That is correct. I supervised  
5 the preparation of the Air Quality section.

6 MS. LAZEROW: Wonderful. Thank you. So did  
7 you conclude that air quality impacts will be less  
8 than significant after applying mitigation measures?

9 MR. LAYTON: Yeah. This is Matt Layton.  
10 That is correct.

11 MS. LAZEROW: And what were the impacts  
12 without mitigation measures?

13 MR. LAYTON: I'm not sure I understand your  
14 question.

15 MS. LAZEROW: So there were impacts to be  
16 mitigated.

17 My question is: What were those impacts?

18 MR. LAYTON: This is Matt Layton. Some of  
19 the forms of mitigation are actual controls on the  
20 equipment. We actually did model the operation of the  
21 equipment without those controls in place. That  
22 represents the commissioning period, when you're  
23 first starting up the engine and trying to bring its  
24 performance into spec, such that it doesn't blow up  
25 on you. And then you add the emission controls, and

1 then the emissions are controlled.

2 We do not plan to see the unit operate like  
3 that, except for commissioning, so we did analyze  
4 that. But in that case, there's never going to be  
5 unmitigated impacts on the public that are ongoing.  
6 So there's not -- I don't -- I guess I -- I don't  
7 think we can arrive at unmitigated as you're  
8 describing it.

9 MS. LAZEROW: So maybe, I think your answer  
10 partially answers my question.

11 Were the commissioning impacts quantified?

12 MR. LAYTON: Yes. This is Matt Layton. The  
13 commissioning impacts are shown in the FSA, and I  
14 won't waste your time by trying to tell you where it  
15 is. But it is in a table that talks about  
16 commissioning emissions and commissioning impacts.  
17 And so since you're driving, you probably can't write  
18 it down and I don't have time to find it. I think I  
19 would waste your time.

20 MS. LAZEROW: Not to worry. I have the FSA,  
21 and I'm not driving. So I have the FSA in front of  
22 me.

23 My question, so did you evaluate the impacts  
24 of those -- of the commissioning -- I'm sorry, the  
25 impacts during commissioning on the environmental

1 justice population?

2 MR. LAYTON: This is Matt Layton. Yes, we  
3 did.

4 MS. LAZEROW: And did you conclude that the  
5 environmental justice population would not be  
6 disproportionately affected by those impacts?

7 MR. LAYTON: This is Matt Layton. Yes, we  
8 did.

9 MS. LAZEROW: What were you comparing the  
10 possibility of disproportionately impacts to --

11 MR. LAYTON: This is --

12 MS. LAZEROW: -- so disproportionately to  
13 what?

14 MR. LAYTON: This is Matt Layton. The  
15 Ambient Air Quality Standards are designed to protect  
16 the young, the old and those with preexisting  
17 conditions. That -- those standards would protect  
18 someone who has asthma or someone who has preexisting  
19 conditions, that I think you're describing, in the EJ  
20 community. Since those standards are protected of  
21 the least able to fend off the impacts of air  
22 quality, we believe that if there -- if the modeling  
23 shows there are no significant impacts for those  
24 sensitive receptors, then there are no significant  
25 impacts to workers who don't, say, spend 70 years



1 exposed to that particular air emission. They are  
2 there, then they leave, then they come back.

3 Again, the standards are designed as if  
4 you're chained naked to a fence post for 70 years  
5 while breast feeding and drinking the water. It's a  
6 pretty conservative estimate of adverse effects from  
7 the pollutants.

8 MS. LAZEROW: And so does your analysis  
9 change depending on whether there is an environmental  
10 justice population in close proximity to the project  
11 or not?

12 MR. LAYTON: This is Matt Layton. We do  
13 look at the EJ communities. We think it's important  
14 to try to understand who will be impacted or who's  
15 close to the project, who would like to understand  
16 what the project is doing to their environment. We  
17 try to reach out to them and we try to understand,  
18 again, how the impacts are in that specific area.

19 MS. LAZEROW: So could you describe for me  
20 the additional -- the efforts that were made from an  
21 air quality perspective, in addition to applying the  
22 air quality standards to address the census tract in  
23 which the Puente Plant would be located?

24 MR. LAYTON: This is Matt Layton. The  
25 outreach I was referring to is the outreach that the

1 Commission Staff as a whole does. Air Quality Staff  
2 do not go out and talk to specific members of the  
3 community.

4           However, during all these meetings, I do  
5 talk to members of the community in the back of the  
6 room, trying to understand what they're concerned  
7 about. I've had many long conversations with Mr.  
8 Raul Lopez.

9           But I haven't done any walking out to the  
10 east of the project, no.

11           MS. LAZEROW: And so, thank you for that  
12 answer. I appreciate that.

13           From an analytical perspective, did you  
14 consider the air quality impact to the project in  
15 combination with other pollution factors?

16           MR. LAYTON: This is Matt Layton. What do  
17 you mean by other pollution factors?

18           MS. LAZEROW: So, for example, pesticide or  
19 pesticide and water quality?

20           MS. WILLIS: Ms. Lazerow --

21           MS. LAZEROW: Let me rephrase that, not  
22 pesticides. Water quality impacts and air quality  
23 impacts together, or toxics impacts and air quality  
24 impacts together?

25           MR. LAYTON: This is Matt Layton. I'm not

1 sure how to answer your question. The background,  
2 the ambient air quality background levels for a  
3 particular pollutant are available at various  
4 monitoring stations. And we, to make our analysis  
5 conservative, use the worst case. We try to find the  
6 monitoring station that's representative. If the  
7 project is located near a busy intersection, often  
8 times the carbon monoxide levels are higher due to  
9 the traffic at that intersection. So we would try to  
10 find the one monitor that, say, has the highest CO  
11 reading, carbon monoxide reading to be representative  
12 of where the project is located and what the ambient  
13 air quality conditions are. So we do try to take  
14 into consideration existing background.

15           The ambient air quality monitors do not  
16 measure pesticide levels, so it's hard for us to say  
17 how many pesticides are in the fields and how they  
18 would interact with a criteria pollutant emitted from  
19 the power plant.

20           MS. LAZEROW: Thank you. I think my  
21 question was not exactly that. My question is -- I  
22 understand that your section deals with air quality,  
23 and concluded that there are not disproportionately  
24 impacts on environmental justice communities.

25           And so my question is: In determining

1 disproportionately impacts, did you consider only air  
2 quality factors or did you consider other factors  
3 affecting the environmental justice community?

4 MR. LAYTON: This is Matt Layton. The --  
5 well, having sat through four days of this, I know  
6 you're trying to ask if there's a cumulative modeling  
7 analysis that could have been done with some of the  
8 parameters identified in CalEnviroScreen. And the  
9 answer is, no. CalEnviroScreen is not a cumulative  
10 impact analysis. It just identifies proximity to  
11 burden or burden -- proximity to pollution. Most  
12 people call that burden. Our analysis --

13 MS. LAZEROW: So I'm -- you're actually, if  
14 I might, you're not actually answering my question.  
15 I was asking a different question. I don't think I  
16 asked that of any of the witnesses.

17 My question is -- and I think you have  
18 already answered it, so maybe I will reflect back to  
19 you what I heard you saying, that the environmental  
20 justice analysis of the Air Quality portion considers  
21 the interaction between ambient air quality and the  
22 project as mitigated; is that correct?

23 MR. LAYTON: This is Matt Layton. I believe  
24 that is correct.

25 MS. LAZEROW: Okay. And I have -- actually,

1 you raised an interesting point about carbon monoxide  
2 monitoring. You were present when we were discussing  
3 the monitoring locations.

4 Do you have any background in carbon  
5 monoxide monitoring for a site closer than seven  
6 miles?

7 MR. LAYTON: This is Matt Layton. The most  
8 representative carbon monoxide monitor is identified  
9 in the tables in the FSA.

10 But to answer your question more directly,  
11 there is not a closer on that's, number one, not a  
12 closer one and not one that's more representative  
13 than the one we use.

14 MS. LAZEROW: All right. Those are all my  
15 questions. Thank you so much for being available,  
16 and I hope you catch your flight.

17 MR. LAYTON: I'm doubtful, but thank you.

18 MS. LAZEROW: Oh, dear. Traffic's not that  
19 bad.

20 HEARING OFFICE KRAMER: Okay. Thank you.  
21 Are you going to stick around to talk about exhibits,  
22 Ms. Lazerow?

23 MS. LAZEROW: I am staying on the -- I will  
24 stay on WebEx. I will put myself back on mute,  
25 unless you'd like to talk about exhibits now, in

1 which case I certainly can do it. But otherwise, I  
2 don't want to hold up the rest of the hearing, and I  
3 can be on WebEx for the next several hours.

4 HEARING OFFICE KRAMER: Okay. Well, let's  
5 hope you don't have to be. All right.

6 Then back to Mr. Revell.

7 Did we get you sworn in yet, sir?

8 MR. REVELL: No, sir.

9 HEARING OFFICE KRAMER: Please raise your  
10 right hand.

11 (Whereupon, David Revell is duly sworn.)

12 MR. REVELL: Yes.

13 HEARING OFFICE KRAMER: Thank you.

14 MS. FOLK: We're almost getting to good  
15 evening.

16 So, Mr. Revell, did you prepare your  
17 testimony and your opening testimony and rebuttal  
18 testimony in this proceeding?

19 MR. REVELL: I did. I did.

20 MS. FOLK: Okay. You're going to need to --

21 MR. REVELL: Yes.

22 MS. FOLK: Okay.

23 MR. REVELL: Is it on? It's on.

24 MS. FOLK: And do you -- are you submitting  
25 that testimony under the penalty of perjury in this

1 proceeding?

2 MR. REVELL: Yes.

3 MS. FOLK: And I'd like to have you sort of  
4 talk us through some of your testimony here.

5 So if we could pull up Exhibit 3025? And if  
6 we could go to -- starting with page 4?

7 And so, Mr. Revell, you have essentially  
8 four figures that are together here that I think you  
9 used to discuss some of the topographic features in  
10 front of the project site. So I'd appreciate it if  
11 you could just walk us through the figures and talk  
12 about some the topography and some of the work that  
13 you did to characterize the topography of the site.

14 MR. REVELL: Sure. So I've been involved in  
15 several modeling exercise on this site. And one of  
16 the shortcomings I've seen in the past work is that  
17 there's a reliance on the 2009 topography.

18 So in December of 2016 two days before  
19 Christmas, we went out and collected another  
20 topographic survey, which is shown here. It depicts  
21 the site and it shows the beach, the fronting dunes.  
22 And highlighted in the dark blue and white colors are  
23 the elevation of the contours. The dunes in front of  
24 the site range from 20 to 30 feet, as Dr. Mineart has  
25 said, although there has been some differences

1 between the 2009 LIDAR, which both FEMA, the CoSMoS  
2 and the Nature Conservancy modeling work have all  
3 relied upon.

4           So if -- for reference, there's three  
5 transects there shown in red in the upper, which is  
6 sort of closest to the development site, the middle  
7 which is right adjacent to the outfall, and a  
8 transect through the -- sort of in front of the  
9 existing MGS facility.

10           MS. FOLK: And when you did that LIDAR  
11 survey, how did you -- how was that work done?

12           MR. REVELL: That was flown via drone,  
13 following FAA Regulations, staying under 100 feet and  
14 away from both the flight traffic control for the  
15 Oxnard Airport and below 100 feet, so it wouldn't  
16 interfere with anything with the -- no the site  
17 either.

18           HEARING OFFICE KRAMER: You're very soft  
19 spoken and that's --

20           MR. REVELL: All right. Well, don't get me  
21 fired up. Okay.

22           HEARING OFFICE KRAMER: All right.

23           MR. REVELL: I will try and speak more  
24 clearly then.

25           HEARING OFFICE KRAMER: Okay.



1 MR. REVELL: Okay.

2 HEARING OFFICE KRAMER: You've got it.

3 MS. FOLK: Okay. And could we then go to  
4 the next page?

5 MR. REVELL: One last feature on that is  
6 that the access road shown in front of the dunes is  
7 sort of a good -- is about 20 feet elevation, and  
8 that is a good reference point.

9 MS. FOLK: And can you just describe where  
10 that access road is on this?

11 MR. REVELL: That access road is behind the  
12 outfall, which I think everybody has seen now. And  
13 then to the right, if you look at the middle transect  
14 to the right where it goes from yellow to the blue  
15 line is roughly the access road. And you can follow  
16 that sort of northwest to southeast in front of that  
17 dune system.

18 MS. FOLK: Okay. And can you now go to page  
19 5? Actually, let's go to page 6.

20 MR. REVELL: So one of the first pieces of  
21 analysis that I conducted was to look at the changes  
22 in the beach and the dunes in front of the site, the  
23 proposed site again being to the -- sort of just to  
24 the right of the black box, and then the top right of  
25 that black box. And this was a grid subtraction, so

1 we took the 2016 and subtracted the 2009, November,  
2 two dates in early November of 2009. And what is  
3 shown here is the hot colors indicate areas of  
4 erosion and the cool colors indicate areas of  
5 accretion. There's a lot that could be talked about,  
6 about this, in terms of how the beach has come and  
7 gone.

8           But one of the key features and the key  
9 take-home I took from this is that the dunes fronting  
10 the proposed site shown at the top right corner  
11 inside the black box have dramatically been reduced.  
12 Those four dunes are now -- have lost in some cases  
13 up to 12 feet of sand, most likely caused by the  
14 December 11, 2015 storm event where waves battered --  
15 it was about a 25-year wave event, battered the  
16 Ventura Pier, had overtopping throughout Ventura.

17           MS. FOLK: And can we scroll down one more  
18 page? Here we are.

19           MR. REVELL: Oh, those pictures. I wish I  
20 would have put the other ten pictures that we had  
21 showing the top picture, which is taken, you know,  
22 looking north. What we can see here is that this the  
23 dunes fronting the Mandalay site. Those are wave  
24 overtopping, so the waves have migrated all the way  
25 to the toe of those dunes. And then the bottom

1 picture is without any waves.

2           And what is -- you can see the high water  
3 mark. But this is a King tide that was just five  
4 days later when waves have dropped substantially, and  
5 there's still some ponded water. But you can see the  
6 high debris line caused by the wave run-up. This is  
7 right now at the base of these dunes and is already  
8 higher than the CoSMoS results shown in the FSA that  
9 included over three -- almost three feet of sea-level  
10 rise and a 100-year wave event.

11           MS. FOLK: And were you able to confirm  
12 where these photos were taken?

13           MR. REVELL: Yes. If you can scroll back to  
14 the first topographic map on page 4?

15           They were effectively taken on the lower  
16 transect just to, you know, kind of just above and to  
17 the right of the word lower. So it was taken from  
18 the access road or right at those dunes looking  
19 northwest.

20           MS. FOLK: And before we go any further,  
21 because we're going to start talking about some of  
22 the models that are used here, and also issues  
23 related to beach variability and coastal dune  
24 erosion, can you just tell us a little bit about your  
25 experience using -- your work experience as a coastal

1 geomorphologist?

2 MR. REVELL: I've been a coastal  
3 geomorphologist for about 20 years. My dissertation  
4 work, which is the most relevant, was studying the  
5 beaches of Santa Barbara and Ventura Counties. I've  
6 looked at the harbor dredge records, the dependence  
7 on harbor dredging and sediment discharge from the  
8 rivers of this system, in particular, on beach  
9 widths, on dune formation, also the role of shoreline  
10 armoring and growings on the beach widths and  
11 subsequent alterations, as well as climate change  
12 impacts associated with large El Nino events and the  
13 Pacific Decadal Oscillation.

14 MS. FOLK: And do you have specific  
15 experience in modeling sea-level rise scenarios?

16 MR. REVELL: Yes. I have been working -- I  
17 worked for a consulting firm that has -- that did the  
18 Coastal Resilience Ventura modeling work. Prior to  
19 that I worked on the Pacific Institute modeling work  
20 looking at coastal erosion and coastal flooding  
21 across the entire state. I sit in Santa Cruz, about  
22 half a mile from the USGS office. I did my post-doc  
23 with Dr. Barnard, who is the lead person on CoSMoS.  
24 And he and I have discussed for years about working  
25 on -- about the trials and tribulations of sea-level

1 rise modeling and storm impacts.

2 MS. FOLK: So now going back to your  
3 testimony, if we could go to Figure 5, which is on  
4 page 8. This is awfully technical.

5 HEARING OFFICE KRAMER: Page 8?

6 MS. FOLK: Yeah. So I actually would --  
7 let's move ahead here and talk about the TNC model,  
8 which I believe you have experience working with.

9 Staff has asserted in the -- that the TNC  
10 model is a worst-case assessment for sea-level rise.  
11 Do you agree with that assessment?

12 MR. REVELL: No, I do not.

13 MS. FOLK: Can you tell us why?

14 MR. REVELL: There's -- all models require a  
15 lot of assumptions and a lot of interpretation. The  
16 model that was developed for the Nature Conservancy  
17 and the County of Ventura, they were co-funders of  
18 the project, we applied basically what FEMA would  
19 apply. We followed the Pacific Coast Flood  
20 Guidelines and then just added sea-level rise to the  
21 analysis. I think that the difference is that, as we  
22 went into with the testimony of Dr. Mineart, there is  
23 some challenges with using the modified Komar and  
24 Allan approach, which is the dune erosion model  
25 component.

1           But what we did is something that the other  
2 models did not do, which was to erode the coast over  
3 time from storm events and then flood what was  
4 eroded. And as you step through time, which neither  
5 the FEMA models of the CoSMoS models do, you see a  
6 different picture as in the dunes start to get  
7 breached and new hydraulic connections through the  
8 dunes become exposed.

9           Now there is a conservative nature to that  
10 modified Komar and Allan model. And you can -- Dr.  
11 Mineart sort of mentioned that under existing  
12 circumstances in present day there's a couple of  
13 hours of exceedance annually where you might get that  
14 elevation that starts to erode the dune. And then  
15 over time, with sea-level rise and increased storms,  
16 then you would expect those hours of erosion to  
17 increase.

18           While this may be an overestimate for an  
19 individual storm impact, I think when you look at all  
20 of the uncertainties of the sequences of storm events  
21 into the future, it makes a lot of sense to take that  
22 approach where it's not as dependent on a specific  
23 time series of large waves and high tides  
24 coincidental, but rather an elevation that would  
25 equilibrate the coast over time.

1 MS. FOLK: And you've also testified --  
2 well, we've heard testimony today regarding the width  
3 of the beach in front of the site. And can you talk  
4 about how the variability in the topography in front  
5 of the site affects the analysis of sea-level rise?

6 MR. REVELL: Certainly. This beach has  
7 varied widely throughout time. I think the first  
8 shorelines I've looked at in my dissertation work  
9 dated back to the 1850s, maybe 1859. This beach has  
10 widened and narrowed over time. What's become more  
11 of the standard is the influence of the dredges over  
12 time.

13 This figure here is taken from Beacon, which  
14 is a Regional Joint Authority that focuses on beach  
15 erosion and nourishment issues and ocean water  
16 quality. They started collecting beach topography  
17 following the 1982-83 El Nino, which was the storm of  
18 record in the site, and they've collected that very  
19 sporadically. And then as part of my dissertation  
20 working, working with Dr. Barnard, we started  
21 collecting routine beach profiles.

22 And you can see in the squiggly line plot,  
23 and I tried to add some actually understandable  
24 pieces in it, where you can see that the active part  
25 of the beach which is below the part that's shaded

1 blue called underwater, mean high or high water  
2 variability in this is about 200 to 250 feet just in  
3 this since 1987. There are substantial changes from  
4 storm events.

5           The actually October 2007, this site is just  
6 up from north of the site on Beacon Line 32. That  
7 gap between the light blue line is actually the  
8 location of the Santa Clara River at the time of this  
9 survey in October of 2007, less than a half a mile to  
10 the north of the site.

11           The dunes have been -- you know, sort of  
12 have certain -- that elevation there. I don't know  
13 what else I can -- want to say about this one.

14           MS. FOLK: No, that's fine. That's fine.

15           And then can you discuss Tables 1 and 2 in  
16 your testimony and the conclusions you can draw from  
17 wave run-up elevations and the beach slope at the  
18 site? And Table 1, I believe, is just your  
19 calculation of wave run-up elevations. And then  
20 Table 2 is as adjusted for sea-level rise.

21           MR. REVELL: Yes. So Table 1 was, again,  
22 looking at the available LIDAR data sets on those  
23 three transects shown in Figure 1 in my testimony. I  
24 measured a '97 and '98, a 2009 and the 2016 to look  
25 at the variability of both beach slopes and dune



1 crest elevations at the site. You can see that the  
2 beach slopes very widely from 0.04 to 0.18. I sort  
3 of would throw out the 0.3 as a scalloping, as Dr.  
4 Mineart called it. But those other slopes are within  
5 the range of the sediment grain sizes found on the  
6 site. We see the dune crest at the north end in  
7 front of the proposed site tends to be much lower.  
8 This is also the site that has lost a lot of the  
9 fore-dunes.

10 MS. FOLK: Can we scroll down to Table 1 to  
11 see this?

12 HEARING OFFICE KRAMER: Table 1 or Figure 1?

13 MS. FOLK: Table 1.

14 MR. REVELL: Table 1.

15 HEARING OFFICE KRAMER: Which page is that  
16 on?

17 MR. REVELL: Eleven.

18 MS. FOLK: Thank you.

19 MR. REVELL: The dune crests at the middle  
20 of the site which are protected by the outfall  
21 structure are the highest, right at the sort of 29-  
22 foot range. And then they kind of drop on the lower  
23 transect to about 27.

24 What's most important here to note is the  
25 variability in the beach slopes. And beach slopes,

1 when I refer to the beach slope I'm referring to that  
2 area of the beach that's usually between mean high  
3 water and mean low water in which the waves actually  
4 rush up the beach. And this is very important for  
5 determining wave run-up elevations. And the wave  
6 run-up calculations done in all of the models, both  
7 the CoSMoS, FEMA, Nature Conservancy, Coastal  
8 Resilience Ventura, all use the same total water  
9 level equations that are based largely on beach  
10 slopes.

11 If you go to Table 2 on page 15, what I did  
12 is I took that observed range of beach slopes,  
13 applied the same 100-year wave event characteristics  
14 that FEMA -- or similar characteristics that FEMA  
15 would have calculated to achieve their 20.1 wave run-  
16 up high-velocity elevation zone, and I just varied  
17 the beach slopes. And just by varying the beach  
18 slopes at the site, you can get wave run-up  
19 elevations that go from just under 19 feet to over 38  
20 feet.

21 MS. FOLK: And just to be clear, the beach  
22 slopes that you're using are ones that have been  
23 actually observed in front of the project site?

24 MR. REVELL: That's correct.

25 MS. FOLK: Okay.

1           MR. REVELL: So the wave run-up elevations  
2 and the potential for coastal flooding, and  
3 arguable -- or I would say almost more important, the  
4 wave run-up elevations that would start to erode  
5 those frontal dunes can be much higher based on just  
6 observations of beach slope changes than what is  
7 currently shown in any of the other maps, besides the  
8 Coastal Resilience Ventura maps.

9           MS. FOLK: And again, that conclusion is  
10 based on actual observed conditions?

11          MR. REVELL: Yes.

12          MS. FOLK: Okay.

13          MR. REVELL: That's actual data.

14          MS. FOLK: Can you just -- one of the other  
15 things that Staff and Mr. Mineart testified to is,  
16 again, the width of the beach and the sediments  
17 supply.

18                 Can you discuss, just briefly, the key  
19 factors that affect sediment supply?

20          MR. REVELL: I like sand, so I'll try and  
21 keep this brief.

22                 Sediment supply to this site is controlled  
23 largely by river discharge, but that discharge starts  
24 at the Santa Maria River mouth and flows all the way  
25 down to Mugu Canyon. So we have sort of two sources

1 of sand to this segment between Ventura Harbor and  
2 Channel Islands Harbor. One is the long-shore  
3 transport by waves of sand on the beaches, and we  
4 have several places that we've looked at that, the  
5 Harbor at Santa Barbara, the Ventura Harbor dredge  
6 records. And then we have sediment discharge from  
7 largely the Ventura River and the Santa Clara River.

8           What's shown in the FSA and in other sort of  
9 sediment budget calculations, including -- I don't  
10 know the figure off the top of my head -- but is  
11 largely based on total sediment load coming out of  
12 the system. When you look strictly at the core  
13 sediment supply, and when I say large sediment load,  
14 that's the muds and the silts and the sand and  
15 everything, when we look specifically at the core  
16 fraction of sediment, the sand grain sizes, we see  
17 that if we took out the 1969 flood event, we've lost  
18 a quarter of the sediment -- sand-grain size sediment  
19 supplied to this beach. One storm event provided all  
20 of that.

21           So the use of average annual sediment supply  
22 is a bit of a misnomer when one event can account for  
23 25 percent of the sand.

24           MS. FOLK: And --

25           MR. REVELL: Is that all I can say?

1 MS. FOLK: Yes. Can you explain your  
2 concerns with the use of the CoSMoS model, the CoSMoS  
3 3.0 as a model to assess sea-level rise at the  
4 project site? Specifically, do you have experience  
5 working with it?

6 MR. REVELL: I have had a lot of discussions  
7 with the USGS modeling team. This is CoSMoS 3.0. I  
8 have been -- talked to them since CoSMoS 1.0 that was  
9 applied to Southern California.

10 With respect to CoSMoS 3.0, both the  
11 preliminary data sets, I do a lot of coastal hazard  
12 work up and down the state, my most direct use of  
13 CoSMoS has been in Imperial Beach, San Diego, where I  
14 looked at the CoSMoS 3.0 model, saw that it vastly  
15 under predicted what the community has already  
16 observed happens routinely with wave overtopping and  
17 coastal flooding, and I went back to USGS and said,  
18 "This isn't working. What should we use?" And their  
19 guidance, this is only when the preliminary data was  
20 available, was to actually take CoSMoS 3.0 and 1.0  
21 and do a mash-up.

22 So I applied that, waiting for CoSMoS 3.0  
23 final to become available. And now I'm starting to  
24 use that, and it is available, the final version, in  
25 San Diego. And as all good modelers do, you sort of

1 look at what other models are available and real data  
2 to validate the model. And so I've done that. I've  
3 looked at existing wave flood extents. And I've  
4 found that the 3.0 dramatically under predicts.

5           When I compared the flood depths to another  
6 model developed by the Department of Defense for  
7 Naval Base Coronado that extended to Imperial Beach,  
8 I saw in some places a under -- a difference of 5  
9 meters, or about 16 feet, in flood depths with CoSMoS  
10 under predicting wave flooding. Based on  
11 observations, areas that had two meters of sea-level  
12 rise with 100-meter storm event were not getting wet,  
13 when I can show pictures from '83-'83, '97-'98 of  
14 several feet of flooding. And comparing the model to  
15 see a five meter difference gives me some concern  
16 about the accuracy of some of the model outputs.

17           Now, I have spent hours of my life as a  
18 volunteer, talking with USGS folks to understand what  
19 they're doing and it is -- they are doing a lot of  
20 good work. There is a lot more than needs to be done  
21 to make it a parcel-level planning support tool.

22           There I feel that the various components,  
23 there's -- one of the biggest problems is that what  
24 they've used to train the model, particularly the  
25 CoSMoS Coast Model which is the mean high water

1 shoreline evolution model, they use a very narrow  
2 training window. When you develop a model you sort  
3 of throw the data you have at it and you say, how  
4 well do you recreate that? They used a training  
5 window from 1995 to 2011. They ignored other  
6 published USGS shorelines which go back to the 1850s.

7           As a result, the accretion rate shown in the  
8 CoSMoS Coast Model for this site in particular are  
9 about a meter or 1.2 meters of accretion. If you  
10 look back at the long-term accretion rates at this  
11 site, we see the long term dating back to the 1850s  
12 is about 0.8 meters. If you look at the accretion  
13 rate just from the short time since the harbors have  
14 been in place, we see 0.4 meters of accretion  
15 annually. If you were to substitute the 0.4 meters  
16 instead of the 1.1 meters, so a factor of three, you  
17 would -- the amount of time that the response of the  
18 shoreline would take, sea-level rise influences on  
19 that shoreline position would be much closer into  
20 where we sit today in time.

21           And so the changes of the CoSMoS Coast that  
22 are projected I think are off because of the time  
23 period they've used to train it. I think it could be  
24 retrained and probably apply, but that has not been  
25 done, nor do they have any intent of doing that right

1 now. And the whole model may go away, depending upon  
2 what happens with the current funding and the current  
3 administration.

4 MS. FOLK: And can you -- can we bring up  
5 Exhibit 2000 and go again to Figure 15, which is in  
6 the Soil and Water Resources Appendix? It's just  
7 called Soil and Water Resources Figure 15.

8 HEARING OFFICE KRAMER: Boy, am I good.

9 MS. FOLK: That's it. That's it. Thank  
10 you.

11 So, Mr. Revell -- or Dr. Revell, I don't  
12 mean to downgrade you, based on your understanding of  
13 the CoSMoS model, do you believe that this accurately  
14 reflects the risk from sea-level rise at the project  
15 site by 2050?

16 MR. REVELL: Absolutely not. That extent  
17 right there we saw in December 11, 2015. And it does  
18 not include the dune erosion. In fact, CoSMoS 3.0  
19 doesn't have any long-term dune erosion in the model  
20 whatsoever.

21 MS. FOLK: And -- I forgot my question.

22 Oh, about the December 2015 storm, what is  
23 your understanding of the magnitude of that storm?

24 MR. REVELL: I estimate it to be between a  
25 20- and a 25-year recurrence interval.



1 MS. FOLK: And what do you estimate that  
2 based on?

3 MR. REVELL: Historic observations of the  
4 buoy records in the Santa Barbara Channel.

5 MS. FOLK: Okay. And can you tell us why  
6 the assumptions about dune erosion, which you just  
7 referred to here with respect to the CoSMoS model,  
8 are critical to the assessment of coastal hazards?

9 MR. REVELL: As has been stated in other  
10 testimony, the elevation of the proposed site is, I  
11 believe it's somewhere between 9 and 14 feet in EVD.  
12 The dune crest elevations at the north end where the  
13 site is, is around 22 feet. And as I've shown in  
14 Table 2, you know, the FEMA velocity zone, which wave  
15 velocity causes dune erosion, you know, is here at --  
16 is estimated to be 20 feet by FEMA. But if we vary  
17 the beach slopes, we can get to 26 feet. So already  
18 we can blow through the crest of those dunes and  
19 flood the site. If we get to 26 feet, then we're  
20 talking substantial flooding into the site.

21 MS. FOLK: And do the FEMA maps take into  
22 account coastal dune erosion?

23 MR. REVELL: No, they do not.

24 MS. FOLK: Okay. And can you tell me how  
25 the presence of the outfall would affect the beach

1 profile north or up coast from the outfall?

2 MR. REVELL: The outfall has functioned for  
3 years as a growing cross-shore structure that traps  
4 sand moving from north to south. We can see these up  
5 and down the Santa Barbara littoral cell. We see it  
6 at the Santa Barbara Harbor. We've seen it along  
7 much of the Montecito Coast. We've seen them at the  
8 Pierpont Dunes where the growings are actually very  
9 effective at trapping sand, building up dunes, and  
10 then having that sand blow into the homes and having  
11 the homeowners complain about all the sand.

12 So the nice -- the thing about this outfall  
13 structure in particular is that it's -- there's two  
14 of them. And when it was built it went to the water  
15 and it has been effective at trapping sand up coast.  
16 But in addition to that, the headwall of the  
17 structure serves as a revetment of sorts, so any wave  
18 that maybe gets to the crest of the outfall structure  
19 hits the headwall and sort of dissipates that wave  
20 energy. I think that's a portion of why the dune  
21 crest immediately in that transect are the highest we  
22 see on the site.

23 I also think that one of the things that the  
24 increased beach width from the growing structures are  
25 is that it's artificially widened the beach. And as

1 Dr. Hunt, the botanist or the ecologist, sorry, the  
2 dune biologist was talking about earlier with the  
3 winds -- winds, in order to make dunes, need a large  
4 part of sand to blow over. If that beach narrows  
5 there's not nearly the amount of fetch or distance  
6 over which the winds can blow the sand up into the  
7 dunes. So as the beach narrows from this removal, as  
8 the sea-level rises, that fetch and that availability  
9 of wind to blow over a long distance of sand is  
10 diminished.

11 Many of those dunes were created when -- as  
12 sea level has been lower, and so we've seen these  
13 over time. So I think that's one of the impacts of  
14 the removal of that.

15 MS. FOLK: And in the rebuttal testimony  
16 Staff states on page 17,

17 "I agree that the riprap forming the outfall  
18 jetty obstructs long-shore sand movement and  
19 contributes to the beach width next to the  
20 project site."

21 Do you agree with that statement?

22 MR. REVELL: Yes.

23 MS. FOLK: And what would you expect to  
24 happen to the beach profile with the removal of the  
25 outfall?

1           MR. REVELL: I think that the beach, you  
2 would stop seeing the same scalloping, but you'd see  
3 a lot of the trapping efficiencies disappear, as  
4 well.

5           MS. FOLK: Okay.

6           MR. REVELL: And so I would expect the beach  
7 to narrow.

8           MS. FOLK: And can you tell me what the site  
9 would look like into the future? I believe the  
10 question asked before to the botanist was 60, 100,  
11 200 years?

12           MR. REVELL: Well, if we look at the  
13 probabilistic assessment that was just completed in  
14 June of 2016, using a high-emission scenario, which  
15 as we've measured emission scenarios, we're already  
16 above the high-emission scenarios used in the last  
17 IPCC report.

18           MS. FOLK: Okay. Can you clarify what you  
19 mean when you talk about the probabilistic assessment  
20 and high-emission scenarios?

21           MR. REVELL: Yeah. So the Energy  
22 Commission, as part of the fourth climate change  
23 assessment for California, funded Dan Cayan and some  
24 researchers at Scripps and sort of super-modelers, I  
25 guess, you would call them. And they basically

1 looked at downscaling the climate models to  
2 California. And as part of that, they came up with a  
3 time series of sea-level rises. And what they did is  
4 they looked at the probabilities associated with  
5 different factors that contribute to sea-level rise.

6 And when they did that, they started to be  
7 able to assign probabilities of what sea-level rise  
8 elevations could be realized in the future. It was  
9 actually terrifying to me. By 2100 we would see --  
10 we could see up to nine-and-a-half feet of sea-level  
11 rise under the worst-case scenario, the quote unquote  
12 "one percent sea-level rise scenario." By 2200, I  
13 think the NRG counsel asked what would the coast look  
14 like at 2200, we could see under the one percent sea-  
15 level rise probability of 40 feet of sea-level rise.

16 MS. FOLK: Okay. So you -- can you -- I  
17 believe in -- sorry.

18 Can you talk a little bit about your  
19 experience working with agencies on coastal  
20 adaptation efforts?

21 MR. REVELL: I currently work for many  
22 different jurisdictions on climate change modeling of  
23 coastal hazards, of climate vulnerability  
24 assessments. I'm currently working for the City of  
25 Oxnard, among others. I'm up and down the California

1 coast. I have worked for every jurisdiction in Santa  
2 Barbara and Ventura County on climate change hazards  
3 and working on adaptation strategies for several  
4 right now, including economics, with a team. I'm not  
5 an economist. And, yes, that's enough.

6 MS. FOLK: And can you tell us how the  
7 Puente Project would interfere with coastal  
8 adaptation and resiliency planning efforts?

9 MR. REVELL: One of the challenges that  
10 every one of these communities face is that under the  
11 Coastal Commission guidance as they start to update  
12 their local coastal programs is that they're being  
13 asked to look well into the future. Their general  
14 plans and their coastal programs may be geared to 30  
15 years, but sea-level rise is not going to stop there.  
16 It's going to continue. And as they start to rethink  
17 their communities with an eye toward the future, what  
18 they are all sort of struggling with is how do you  
19 allow for some kind of economic growth but start to  
20 develop adaptation strategies that are going to be  
21 sustainable, and sustainability is long term, and  
22 that's beyond usually the typical life of a single  
23 project.

24 But when you look at the four biggest  
25 hurdles for communities to adapt, they tend to be

1 utilities, water supply, bridges and transportation  
2 corridors and wastewater treatment plants. For each  
3 opportunity that we have to remove one of these  
4 adaptation bottlenecks, the community can then start  
5 to design their retreat strategies, their get-away  
6 from harm's way, their hazard avoidances in a more  
7 holistic manner than being reliant on something that  
8 could fail as sea-level rise and increasing flood  
9 elevations and coastal hazards escalate.

10 MS. FOLK: And can you tell me why simply  
11 adding mitigation to a facility will not always be as  
12 effective as avoidance if your goal is coastal  
13 adaptation?

14 MR. REVELL: I think the main reason is that  
15 the community then has to maintain all of those, that  
16 infrastructure that accesses it, the transmission  
17 lines, the roads that are in -- that access those  
18 things. As they start to look at replacement and,  
19 you know, reengineering and rethinking their -- both  
20 their policies and their adaptation projects, it  
21 gives the communities a lot more opportunities to  
22 have a local say in where they head into the future.

23 MS. FOLK: Okay. That's all I have. Thank  
24 you.

25 HEARING OFFICE KRAMER: Thank you.

1 Mr. Carroll?

2 MR. CARROLL: Thank you.

3 Hello, Dr. Revell.

4 MR. REVELL: Hello.

5 MR. CARROLL: You testified regarding your  
6 concerns regarding the -- I don't know if this is  
7 your word or my word -- the validity of the CoSMoS  
8 model or the extent to which the CoSMoS model is  
9 reliable in predicting future events; is that an  
10 accurate characterization of your testimony related  
11 to the CoSMoS model?

12 MR. REVELL: From what places that I have  
13 looked at the CoSMoS model and compared it what I've  
14 seen in pictures or had other models to compare it to  
15 that I know, you know, know much more about that has  
16 good technical documentation, I see shortcomings in  
17 the CoSMoS model that cause me to want to see their  
18 technical documentation before I draw any further  
19 conclusions or apply it widely.

20 MR. CARROLL: And much of your analysis and  
21 your assessment of potential future consequences at  
22 the project site is also based on modeling, correct,  
23 but not the CoSMoS model, other models?

24 MR. REVELL: It's both based on models and  
25 historic observations.



1           MR. CARROLL:   Okay.   I'm wondering if we can  
2 go to the City's Exhibit number 3000?

3           So I take it, as we're waiting for the  
4 screen to come up, that our ability to predict what  
5 might occur in the future is only as good as the  
6 predictive capabilities of the model that we're  
7 using; correct?

8           MR. REVELL:   I like to use models to test  
9 what I know about a system.   If I have to rely solely  
10 on a model to understand the system, then I don't  
11 understand the system and shouldn't be modeling it.

12          MR. CARROLL:   Okay.   So by that you mean  
13 that -- well, explain what you mean by that.   You  
14 like to use the models to test -- I'm sorry, I'm not  
15 sure I understood what you said.

16          MR. REVELL:   So as a modeler, I like to  
17 first understand the system and then use the model to  
18 test what I already know about the system before I  
19 just apply the model --

20          MR. CARROLL:   Okay.

21          MR. REVELL:   -- and accept its results.

22          MR. CARROLL:   Okay.   So if a model produces  
23 a -- is it fair to say that what you mean by that is  
24 if a model produces a result that doesn't square with  
25 what you know about the system, you would have some

1 questions about the validity of the model?

2 MR. REVELL: Correct.

3 MR. CARROLL: Okay. If we can go to page  
4 ten of this exhibit?

5 HEARING OFFICE KRAMER: Hold on. Something  
6 is wrong here. It is scrolling weirdly, but --

7 MR. CARROLL: Yeah. And that's actually --  
8 oh.

9 HEARING OFFICE KRAMER: This is 3000.

10 MR. CARROLL: Let me -- so this is  
11 Applicant's -- or, I'm sorry, City of Oxnard Exhibit  
12 3000, TN number 204942. Is that the document that  
13 we're --

14 HEARING OFFICE KRAMER: That part's correct.

15 MR. CARROLL: Pardon me?

16 HEARING OFFICE KRAMER: Yeah, that's right.

17 MR. CARROLL: Okay.

18 HEARING OFFICE KRAMER: Is there a word I  
19 could search for, a phrase?

20 MR. CARROLL: Yes. It's a diagram --

21 HEARING OFFICE KRAMER: No.

22 MR. CARROLL: -- if that helps find it  
23 faster. Let me see.

24 HEARING OFFICE KRAMER: Did I spell it  
25 right?

1 MR. CARROLL: You're in the correct  
2 document. So if you continue to scroll down, there  
3 are several documents within the same document, so it  
4 is one of the page tens. Try 28 of 47.

5 HEARING OFFICE KRAMER: That might do it.

6 MR. CARROLL: And if we could just scroll  
7 down a little bit to pull the Figure 8 up?

8 HEARING OFFICE KRAMER: Up or from --

9 MR. CARROLL: That's fine.

10 So, Dr. Revell, this is a diagram. It's  
11 Figure 8 in this particular document which is  
12 testimony that you've provided the CPUC, which you  
13 have introduced here as City's Exhibit 3000.

14 My understanding, and correct me if I'm  
15 wrong, but my understanding is that the wave  
16 conditions that are identified below or at the bottom  
17 of the photo are the wave conditions that existed  
18 during the 1983 storm event, what's been referred to  
19 during today's proceedings as the -- and now I've  
20 forgotten what the term was, the --

21 MR. REVELL: Storm of record --

22 MR. CARROLL: -- the storm --

23 MR. REVELL: -- January 27th --

24 MR. CARROLL: -- the storm of record?

25 MR. REVELL: -- 1983.

1 MR. CARROLL: Thank you. And am I accurate  
2 that, although it doesn't say the storm of record  
3 1983, that those are the wave conditions that  
4 occurred during that event?

5 MR. REVELL: Correct.

6 MR. CARROLL: Okay. And so my understanding  
7 of this diagram, based on having read the text that  
8 surrounds it in your exhibit, is that this is a  
9 depiction based on your model of what would occur at  
10 the site today under current conditions if the  
11 1983 -- under current physical conditions at the site  
12 if the 1983 storm event were to occur again today; is  
13 that an accurate way --

14 MR. REVELL: Correct. Yes.

15 MR. CARROLL: -- in layman's terms? Okay.

16 And so first let me ask you, do you -- so in  
17 other words, what this depicts, that if the  
18 conditions that occurred during the 1982 storm of  
19 record were to occur today, the model predicts that,  
20 ironically, the Puente Project site would not be  
21 inundated, but the remainder of the Mandalay  
22 Generation Station site would be inundated; is that  
23 an accurate depiction of what's here --

24 MR. REVELL: Yes.

25 MR. CARROLL: -- or description?

1 MR. REVELL: That's what that shows.

2 MR. CARROLL: Okay. Do you happen to know  
3 whether or not the Mandalay Generation Station  
4 facility was, in fact, inundated during the 1983  
5 storm event?

6 MR. REVELL: I have, since this modeling was  
7 done, have learned that it was not.

8 MR. CARROLL: Okay.

9 MR. REVELL: However, invalidating that  
10 model in other places in Ventura County, the flood  
11 extents were very similar --

12 MR. CARROLL: Okay.

13 MR. REVELL: -- to what was realized.

14 MR. CARROLL: Okay. But at the Mandalay  
15 Generating Station, what, as far as you know, what  
16 occurred in 1983 is not what's depicted here; is that  
17 your testimony?

18 MR. REVELL: The difference between this  
19 site and --

20 MR. CARROLL: Well, I'm not -- I'm not  
21 asking you to compare different sites. I'm just  
22 asking you to answer whether or not what, based on  
23 your knowledge, actually occurred at the Mandalay  
24 Generating site in 1983 is consistent with what's  
25 depicted in the model here -- in the diagram based on

1 the modeling?

2 MR. REVELL: I have only heard anecdotal  
3 testimony that says it wasn't flooded.

4 MR. CARROLL: Okay.

5 MR. REVELL: I have no knowledge personally.

6 MR. CARROLL: All right. And so for this  
7 to -- for what is depicted in Figure 8 here to be the  
8 results of the 1983 storm event occurring today,  
9 given that when the 1983 storm event occurred in 1983  
10 there was no inundation of the site --

11 MS. FOLK: I'm going to object.

12 MR. CARROLL: -- the --

13 MS. FOLK: That's assumes a fact not in  
14 evidence. Mr. Revell just testified that he did not  
15 know it to be a fact.

16 MR. CARROLL: Did not know what to be a  
17 fact?

18 MS. FOLK: That the -- that the site had no  
19 storm inundation at all.

20 MR. CARROLL: Well, I believe he testified  
21 that he was knowledgeable of the fact that the site  
22 was not inundated.

23 But was that your testimony, Mr. Revell?  
24 Are you -- did you not testify that you are aware of  
25 the fact that the site was not inundated during the

1 1983 storm event?

2 MR. REVELL: I have heard from this  
3 proceeding that it was not.

4 MR. CARROLL: Okay.

5 MR. REVELL: But I have no evidence myself  
6 that says otherwise.

7 MR. CARROLL: Okay. So let's assume, for  
8 the sake of my next question, that the site was not  
9 inundated during the 1983 storm event. What that  
10 would mean, then is that for this to be an accurate  
11 depiction of what would occur at the site, were the  
12 1983 storm event to occur today, would be that the  
13 situation had changed dramatically in terms of the  
14 protection of the site from inundation? In other  
15 words, the only way that this could accurately depict  
16 what would happen at the site today if the 1983 storm  
17 event were to occur would be if the beach and/or the  
18 dunes had been significantly diminished between 1983  
19 and today; is that correct?

20 MR. REVELL: If dune erosion continued, as  
21 we have -- that I showed earlier in my testimony  
22 where the Puente -- the dunes in front of the  
23 northern part of the site were eroded by 12 feet, and  
24 if erosion continued as is shown in the 1984 air  
25 photo following this same event, if those dunes were

1 eroded, I would expect --

2 MR. CARROLL: Well --

3 MR. REVELL: -- that level of flooding.

4 MR. CARROLL: Right. Well, that's not my  
5 question. I'm not --

6 MR. REVELL: I'm sorry.

7 MR. CARROLL: -- talking about --

8 MR. REVELL: Can you please restate your  
9 question?

10 MR. CARROLL: Yes, I will. So I'm not  
11 talking about what could happen in the future.

12 Let me restate the question, that given that  
13 the site was not inundated -- or, I'm sorry.

14 If we're assuming for the sake of the  
15 question that the site was not inundated in 1983 when  
16 this actual event occurred, then the only way for  
17 this to be the consequence of the 1983 event  
18 occurring today would be if the dunes and the beach  
19 had significantly eroded in width or height between  
20 1983 and today; is that not correct?

21 MR. REVELL: The dune would have to erode.  
22 I'm not so sure that the beach width would have to  
23 change. The dunes would have to erode, and they have  
24 been eroding.

25 MR. CARROLL: So you are -- do you disagree



1 with the -- I'm not sure I understand what you mean  
2 by the last question. We've had testimony earlier  
3 today that showed the significant accretion and  
4 growth in the beach over the period of time since the  
5 power plant was developed.

6 Are you disagreeing that the beach has grown  
7 in width over the period of time since the power  
8 plant was developed?

9 MR. REVELL: I have testified that the beach  
10 has oscillated through time, and it has -- it's wider  
11 than it was. But we also have a huge amount of  
12 sediment trapped and a huge -- between the two  
13 harbors now.

14 MR. CARROLL: Okay. And I'm not really  
15 going to, you know, why or how --

16 MR. REVELL: Okay.

17 MR. CARROLL: -- the beach has accreted over  
18 time. But you can see that over the period of time  
19 between the time that the plant was built and today,  
20 the beach has accreted?

21 MR. REVELL: Not from this figure. It has  
22 grown some.

23 MR. CARROLL: Well, I'm not -- I'm sorry,  
24 I'm not necessarily asking you to draw that  
25 conclusion from this figure.

1           But based on everything that you know, are  
2 you disagreeing that the beach has accreted over the  
3 period of time since the plant was constructed?

4           MS. FOLK: I believe he's been asked and  
5 answered that question. His testimony was that it's  
6 oscillated.

7           MR. CARROLL: Well, he didn't really answer  
8 the question. He said not based on this diagram, but  
9 based on --

10          MR. REVELL: Okay.

11          MR. CARROLL: -- everything that you know?

12          MR. REVELL: I'm happy to answer that  
13 question. The beach has oscillated there, as has  
14 this entire littoral cell through time.

15          MR. CARROLL: I'm not -- over what period of  
16 time has it oscillated? I'm not talking thousands of  
17 years.

18                 I'm asking you, from the time the power  
19 plant was built in 1960 until today, do you disagree  
20 that the beach has accreted?

21          MR. REVELL: I will say that the beach has  
22 oscillated and is variable.

23                 HEARING OFFICE KRAMER: I think a couple  
24 minutes ago --

25          MR. CARROLL: Okay.

1 HEARING OFFICE KRAMER: -- he said it was  
2 wider than when the project was constructed, or it is  
3 currently wider.

4 MR. CARROLL: Well, I believe there's been  
5 extensive testimony today and there's extensive  
6 evidence in the record about the accretion of the  
7 beach, so, you know, we'll move on from there. So  
8 absent -- well, let's leave it at that. Thank you.

9 Mr. Revell, you haven't -- you don't have  
10 and you haven't claimed any specific expertise with  
11 respect to power plant design or power plant  
12 operation; is that correct?

13 MR. REVELL: No, I have not.

14 MR. CARROLL: So is it fair to say that the  
15 testimony that you've provided today and the prepared  
16 testimony that you've submitted in connection with  
17 these proceedings does not provide any indication of  
18 the impact on the power plant associated with, once  
19 it's built, assuming any particular level of  
20 inundation?

21 MS. FOLK: I'm going to object to that  
22 question as vague.

23 MR. CARROLL: Pardon me?

24 MS. FOLK: The question is vague.

25 MR. CARROLL: Let me see if I can rephrase

1 it. And I will confess to I'm fading a little bit  
2 myself.

3 MS. FOLK: Yeah.

4 MR. CARROLL: Is it fair to say that the  
5 testimony that you have provided in these proceedings  
6 does not go to the risk that would be posed to -- or,  
7 I'm sorry, does not go to the ability of the plant to  
8 withstand any particular level of flooding, were it  
9 to occur?

10 MR. REVELL: I have not seen any engineering  
11 designs for the power plant.

12 MR. CARROLL: Okay.

13 MR. REVELL: And that is not entered into my  
14 consideration of potential future flood depths or  
15 exposure to coastal erosion --

16 MR. CARROLL: Okay.

17 MR. REVELL: -- on site.

18 MR. CARROLL: Okay. And so -- and let me  
19 see if I can restate it in a clearer way.

20 So your analysis has been focused on --

21 MS. FOLK: He's already testified, if we  
22 want to get this moving.

23 MR. CARROLL: Yeah. I have one last  
24 question.

25 So your testimony in these proceedings is

1 focused on the probabilities as to whether or not the  
2 site could be inundated and does not go to what the  
3 implications of any such level of inundation would  
4 be?, with respect to the ability --

5 MS. FOLK: I would object.

6 MR. CARROLL: -- to operate the site?

7 MS. FOLK: Okay. I believe that  
8 mischaracterizes his testimony. He was specific as  
9 to the actual operation of the power plant, but not  
10 what the implications of the inundation would be.

11 HEARING OFFICE KRAMER: Well, he can answer  
12 the question, I think, rather than you.

13 MR. REVELL: I have not seen any engineering  
14 design and any kind of specifics to be able to think  
15 about where failures in the system may occur.

16 MR. CARROLL: Okay. So you are not  
17 attempting to make any linkage between any particular  
18 level of inundation and the ability to operate the  
19 plant or the reliability of the plant?

20 MS. FOLK: I'm going to object regarding the  
21 reliability of the plant. If you want to limit it to  
22 the operation of the plant, that's fine.

23 HEARING OFFICE KRAMER: What are the  
24 grounds?

25 MS. FOLK: Well, he's not an expert on

1 reliability, so his testimony goes to -- actually,  
2 you know what --

3 HEARING OFFICE KRAMER: Well --

4 MS. FOLK: -- let him answer.

5 HEARING OFFICE KRAMER: -- and he's simply  
6 being asked.

7 MS. FOLK: Just let him answer. It's okay.  
8 I don't care.

9 HEARING OFFICE KRAMER: So did you withdraw  
10 your objection?

11 MS. FOLK: I withdrew my objection.

12 HEARING OFFICE KRAMER: Okay.

13 Can you answer the question?

14 MR. REVELL: I'm sorry. Can you repeat it?

15 MR. CARROLL: Yes. So --

16 MR. REVELL: Sorry.

17 MR. CARROLL: -- in your testimony you have  
18 not attempted to make any linkage between any  
19 particular level of inundation or flooding of the  
20 site and the consequences of that inundation or  
21 flooding with respect to the operation of the plant  
22 or the reliability of the plant?

23 MR. REVELL: I've only been looking at depth  
24 of flooding.

25 MR. CARROLL: Thank you.

1 No further questions.

2 HEARING OFFICE KRAMER: Redirect? Wait,  
3 let's see. Did we ask -- I don't think we asked  
4 Staff if they had -- do you have any questions?

5 MS. CHESTER: No questions.

6 HEARING OFFICE KRAMER: Redirect?

7 MS. FOLK: Two questions.

8 Staff testified earlier that they reviewed  
9 the -- that Ms. Taylor had reviewed the CoSMoS  
10 technical documentation and cited to a 2014 USGS  
11 document. Are you familiar with that document?

12 MR. REVELL: The 2014, the natural hazards?

13 MS. FOLK: It is, yes.

14 MR. REVELL: Yes. I have read it two years  
15 ago.

16 MS. FOLK: And does that provide technical  
17 documentation for the CoSMoS 3.0 model?

18 MR. REVELL: From my recollection it  
19 describes the framework and the total water level  
20 proxy, as they call it, which is the same tide wave  
21 run-up elevation that is used in all these models and  
22 how they apply it in a framework of different size  
23 modeling grids.

24 MS. FOLK: And do you consider that adequate  
25 information about how the model works and its

1 assumptions?

2 MR. REVELL: No. It doesn't talk about any  
3 of the specific assumptions, the training, the  
4 validation, the verification of the results.

5 MS. FOLK: And I'd like to just address your  
6 testimony regarding the visual that's up on the  
7 screen here.

8 And in particular, could we go to page 16 of  
9 Exhibit 3025? That's Mr. Revell's testimony. And I  
10 will say, I know that there is in the record a  
11 clearer version of this visual that's not been  
12 docketed as an exhibit, so we can just -- I'll just  
13 work off this so we don't have to have an argument  
14 about that.

15 So, Mr. Revell, can you explain why under  
16 the TNC model the site may not have flooded in 1983  
17 but the model is still a good predictor of potential  
18 risk from sea-level rise?

19 MR. REVELL: Yes. This photo, which I got  
20 from Dr. Mineart's CPUC testimony, is a color  
21 infrared image. And so what this does show,  
22 especially in the clearer version, is that there was  
23 dune erosion across the site and the lack of  
24 substantial vegetation. So in a color infrared  
25 photo, vegetation shows up as red. And so the lack



1 of vegetation front much of the power plant or the  
2 linear sort of line along all of that dune vegetation  
3 and a beach stripped of almost all vegetation  
4 indicates to me that there was some prolonged erosion  
5 of the dunes and of the beach.

6 And so the shortcoming in the model at this  
7 site, if what I've been told is true, that the site  
8 did not experience any flooding, is likely because  
9 this storm did not have enough time to erode through  
10 that dune. But this model clearly shows that there  
11 is substantial dune erosion in this image.

12 MS. FOLK: And is it your expectation that  
13 in the future, as we see more of the effects of  
14 climate change, that we will see longer and more  
15 severe storms and more frequent storms?

16 MR. REVELL: I think we'll not only see  
17 stronger storms at higher elevations, but we will  
18 also see a decline in sediment supply coming from the  
19 Santa Clara as droughts get longer.

20 MS. FOLK: Okay. Thank you.

21 MR. CARROLL: Just one re-cross question to  
22 clarify.

23 So this is the actual conditions that  
24 resulted from the 1983 storm of record. And your  
25 testimony is that it illustrates erosion; is that

1 what you just explained?

2 MR. REVELL: Yes --

3 MR. CARROLL: But does not --

4 MR. REVELL: -- of the dunes.

5 MR. CARROLL: But does not illustrate  
6 inundation of the site?

7 MR. REVELL: This was taken in 1984 and  
8 that -- so this has had at least a year to recover.

9 MR. CARROLL: Well, you're right. Let me --

10 MR. REVELL: So, no, this would not be a  
11 photo that would be suitable for looking at  
12 inundation but -- because inundation is temporary.

13 MR. CARROLL: You're right, and I didn't ask  
14 the question properly.

15 So your testimony is that this illustrates  
16 that the results of the 1983 storm was erosion. And  
17 whether we accept it or not is another question.

18 But isn't it still the fact that what the  
19 1983 model predicted was not erosion but complete  
20 inundation of the MGS site?

21 MR. REVELL: The Coastal Resilience Ventura  
22 model does erosion and flooding.

23 MR. CARROLL: Okay. The previous image that  
24 we showed that was on the screen from your Exhibit  
25 3000 showed inundation of the site; correct?

1           MR. REVELL: Combined with coastal erosion  
2 as following a coastal erosion episode based on those  
3 storm characteristics of 25 feet at 22 segments.

4           MR. CARROLL: And I'm not really focused on  
5 the coastal erosion now. I'm just asking you what  
6 your model predicted that you're using to evaluate  
7 the potential impacts of coastal hazards on this site  
8 produced a result that the MGS site would have been  
9 not just eroded but completely inundated as a result  
10 of the '83 storm; is that not what this image  
11 depicts?

12           MR. REVELL: This is the combination of  
13 coastal erosion model and coastal flooding model  
14 together.

15           MR. CARROLL: Okay. Thank you.

16           HEARING OFFICE KRAMER: Okay. Thank you.  
17 Okay.

18           We still have the topic of Overrides which  
19 involve direct testimony from the City of Oxnard and  
20 then a cross examination from the Applicant.

21           Ms. Folk?

22           MS. FOLK: So the City, and I discussed this  
23 with Mr. Carroll yesterday, is not going to call  
24 Ashley Golden. We did have Jim Caldwell who was  
25 going to call in. I don't know --

1 HEARING OFFICE KRAMER: Let me check.

2 MS. FOLK: -- if he's on the line or not.  
3 I'm trying to -- I texted him. I will say that it  
4 was expected that he would testify earlier today,  
5 so --

6 MR. CALDWELL: I am online.

7 MS. FOLK: Oh, great.

8 MR. CALDWELL: I am on the line. Can you  
9 hear me?

10 HEARING OFFICE KRAMER: Yeah. We just un-  
11 muted you, so -- and you were --

12 MR. CALDWELL: I'm on the line.

13 HEARING OFFICE KRAMER: Can you hear?

14 MR. CALDWELL: I can hear you. Can you hear  
15 me?

16 HEARING OFFICE KRAMER: Yes, we can hear  
17 you.

18 MS. FOLK: We can hear you.

19 HEARING OFFICE KRAMER: Okay. Let me mute  
20 some of the others again.

21 Mr. Caldwell, you were previously sworn; is  
22 that correct?

23 MR. CALDWELL: Yes.

24 HEARING OFFICE KRAMER: Okay. Go ahead, Ms.  
25 Folk.

1 MS. FOLK: Good evening, Mr. Caldwell, and  
2 thanks for being on the phone.

3 MR. CALDWELL: It's not quite morning yet,  
4 but it's close.

5 MS. FOLK: Yes. We've now past all the  
6 other greeting times.

7 So your testimony today is on the issue of  
8 the override finding and the finding that the Energy  
9 Commission would need to make if it were to override  
10 inconsistencies with the City's land use ordinances.  
11 And this finding requires the Commission to determine  
12 that a project is in the public convenience and  
13 necessity and that there are not more prudent and  
14 feasible means of achieving the public convenience  
15 and necessity.

16 Now Staff in its -- the submission of  
17 January 24th cites two reasons regarding the location  
18 of the project -- cites two reasons regarding the  
19 location of the project, project efficiency and  
20 reliability, in support of its statement regarding  
21 the public benefit of the project and project.

22 And the first is that the location of the  
23 project from a regulatory and practical standpoint in  
24 terms of its ability to address LCR need makes sense  
25 and would provide a public benefit; do you agree with

1 that statement?

2 MR. CALDWELL: I'm sorry. Could you repeat  
3 that?

4 MS. FOLK: Okay.

5 MR. CALDWELL: Just the last part. I don't  
6 think we need everything.

7 MS. FOLK: Yeah. So the statement from  
8 Staff on the -- in the -- and I probably should -- it  
9 might be easier if I just pull up the actual language  
10 here, and it will take me one minute. Sorry. Thank  
11 you.

12 HEARING OFFICE KRAMER: Let's go off the  
13 record for a second.

14 (Off the record at 6:22 p.m.)

15 (On the record at 6:23 p.m.)

16 HEARING OFFICE KRAMER: On the record.

17 MS. FOLK: The staff's -- on page one of  
18 their statement regarding overrides the staff  
19 addresses the project's strong relationship to the  
20 project site, both from a regulatory and practical  
21 standpoint, and notes its potential for the project  
22 to continue to local grid capacity requirements.

23 Do you believe that this location of the  
24 site is a necessary location and would contribute to  
25 the public benefit of the project?

1           MR. CALDWELL: Well, the -- when you say  
2 this particular site, the LCR need in question can be  
3 met by resources anywhere within the Moorpark  
4 subarea. And since, you know, this site is within  
5 the Moorpark subarea, it does contribute in that way  
6 but it is not necessary to be on this site. It could  
7 be anywhere in the Moorpark subarea.

8           MS. FOLK: And Staff also cites the ability  
9 of the project to contribute to system-wide  
10 efficiency and reliability. Do you agree with that  
11 assessment?

12           MR. CALDWELL: I do not. I believe that  
13 this facility will be among -- by the time it is  
14 constructed in 2020 or in operation in 2020 it will  
15 be among the least efficient large facilities on the  
16 grid. And to the extent that it is used to supply  
17 operational flexibility system-wide, it could compete  
18 -- I mean, that system-wide flexibility could be  
19 supplied from anywhere on the Western Grid from, as  
20 somebody said earlier, from Mexico to Alberta that is  
21 available -- that have available transmission  
22 capacity.

23           So it is not -- it certainly is, as I say,  
24 is an inefficient solution that is really designed  
25 only to deal with the local capacity need which

1 requires the location to be within the Moorpark  
2 subarea. Any other use of the plant is not  
3 necessary.

4 MS. FOLK: And yesterday --

5 MR. CALDWELL: In fact, it is probably cost  
6 inefficient.

7 MS. FOLK: And yesterday Mr. Rubenstein  
8 testified he was appalled at the prospect of using  
9 Mandalay Unit 3 in the future under your scenario.

10 Can you clarify your view of how Mandalay 3  
11 would be used in the short term?

12 MR. CALDWELL: Well, you know, I don't think  
13 there's any question that Mandalay 3 is not a unit  
14 that we would like to rely on for daily energy  
15 production. It is too inefficient and too polluting  
16 to do that.

17 However, in this case what we are suggesting  
18 is that Mandalay 3 provide a bridge for technology to  
19 develop over the next few years, and in the meantime  
20 it would only be used in the very rare event of a  
21 loss of one of the Pardee-to-Moorpark transmission  
22 lines, in which case it would be started up to  
23 prevent problems if the other line went down. So  
24 that event is extremely rare. It should be  
25 mitigated. And the use of a facility like Mandalay 3



1 is appropriate for that rare event.

2 MS. FOLK: And was it your testimony that it  
3 would need to operate only 0.1 to 0.3 percent of the  
4 time?

5 MR. CALDWELL: Yes.

6 MS. FOLK: And would it be operating at full  
7 capacity all of that 0.1 to 0.3 percent of the time?

8 MR. CALDWELL: Probably not because the --  
9 in order to be operating at full capacity the loss of  
10 that transmission line would have to be coincident  
11 with a very high load within the Moorpark area. And  
12 so the probability is that if you lose one of the  
13 Pardee lines that significantly less than the total  
14 amount of indicated need would be required because  
15 the load would not be at its peak. And whatever unit  
16 or program responded to that contingency need would  
17 probably operate at less than full capacity.

18 MS. FOLK: And based on your review of  
19 development in the market for preferred resources, do  
20 you think that there are other feasible and prudent  
21 needs of meeting the LCR need in this Moorpark  
22 subarea?

23 MR. CALDWELL: Yes.

24 MS. FOLK: And even assuming that a natural  
25 gas facility is necessary, do you believe that there

1 are other prudent and feasible means of meeting the  
2 LCR need using natural gas?

3 MR. CALDWELL: Yes. The particular Frame 7  
4 unit that would -- is contemplated here is not  
5 designed for this specific duty. There are other gas  
6 facilities, both in the GE product line and the other  
7 competing manufacturers which are specifically  
8 designed for this, and those units are smaller which  
9 leads to more diversity and better performance. They  
10 are more efficient. They come equipped with voltage  
11 support which mitigates the need without combustion.  
12 And they are significantly cheaper than this  
13 facility.

14 There is a specific application before the  
15 Commission in another AFC which would also mitigate  
16 the need for -- or mitigate the contingency, the N-1-  
17 1 contingency, that's the Mission Rock facility.  
18 That's composed of five smaller and therefore more  
19 resilient units. They're more efficient and come  
20 equipped with voltage support mechanisms which  
21 mitigate the need without having to burn natural gas  
22 and creating both greenhouse gas and criteria  
23 pollutant emissions.

24 So there clearly are other available natural  
25 gas facilities that could perform the same function

1 as Puente. And although Puente does meet the planning  
2 criteria for this to mitigate this need, there are  
3 many other superior, both environmentally,  
4 financially and land use-wise alternatives to this  
5 particular project.

6 MS. FOLK: I have nothing further.

7 HEARING OFFICE KRAMER: Mr. Carroll,  
8 anything?

9 MR. CARROLL: I have no questions. I think  
10 this is largely repetitive of what we've  
11 characterized as Alternatives that we covered on an  
12 earlier day. And so we have no further questions for  
13 Mr. Caldwell. Thank you.

14 HEARING OFFICE KRAMER: Staff?

15 MS. CHESTER: We have no questions.

16 HEARING OFFICE KRAMER: Okay. That  
17 concludes Overrides and leaves us with the floaters.

18 So unless a party raises an objection, we  
19 are going to close the record on, well, all the  
20 topics. But those we haven't come to yet in any way,  
21 I'll specifically call out.

22 The first is Cultural Resources.

23 COMMISSIONER DOUGLAS: Have you un-muted on  
24 WebEx and the parties?

25 HEARING OFFICE KRAMER: Oh, true. Let me

1 un-mute. Let's see. Actually, I need to un-mute a  
2 couple to find Shana, because she moved from where  
3 she was.

4 Grace, are you into the WebEx?

5 MR. CHANG: I am, yes.

6 HEARING OFFICE KRAMER: Okay. But we don't  
7 need to un-mute you since you're here. I wanted to  
8 make sure that was you.

9 MR. CHANG: Yes, it's me.

10 HEARING OFFICE KRAMER: Okay. Ms. Belenky,  
11 I'll un-mute her.

12 So, Shana, are you on the phone, Shana  
13 Lazerow? Wait, one more here. Hold on. Okay. Try  
14 one more time?

15 MS. LAZEROW: Hello. Can you hear me?

16 HEARING OFFICE KRAMER: Yes. Okay.

17 MS. LAZEROW: Hello?

18 HEARING OFFICE KRAMER: Just trying -- okay.  
19 Shana, can you speak one more time to make sure I've  
20 left you open?

21 MS. LAZEROW: To me, as well, but, yes. Can  
22 you hear me? Can you hear me?

23 HEARING OFFICE KRAMER: Yes.

24 MS. LAZEROW: Hello? Okay.

25 HEARING OFFICE KRAMER: I can. Are you at a

1 noisy place?

2 MS. LAZEROW: I am. I can mute myself. Did  
3 you just ask me a question, though?

4 HEARING OFFICE KRAMER: No. Okay. So long  
5 as you're controlling your muting, in case you want  
6 to speak up during the housekeeping portion, we'll be  
7 good. Okay. Thanks.

8 MS. LAZEROW: Is this good?

9 HEARING OFFICE KRAMER: Yeah. Okay. So  
10 what we're going to do then is close the record on  
11 all the other topics. And I just want to, absent a  
12 request from a party to speak about one of them, let  
13 me list them.

14 The first was Cultural Resources. And then  
15 we go to the floater topic section of this list,  
16 Facility Design, Power Plant Efficiency, Power Plant  
17 Reliability, Transmission System Engineering,  
18 Transmission Line Safety and Nuisance, Hazardous  
19 Materials Management, Worker Safety and Fire  
20 Protection, Waste Management and, finally, Noise.

21 So any -- nobody had indicated any interest  
22 in speaking about these, but we'll just call them out  
23 and ask. Does anyone want to speak to any of these  
24 topics? Okay. Hearing none, then the record is  
25 closed on those and all of the topics.

1           Let's move -- Shana, I think we're still  
2 hearing you.

3           MS. LAZEROW: Was that me? I had star six.  
4 Can you hear me now?

5           HEARING OFFICE KRAMER: Yeah. It's not  
6 working.

7           MS. LAZEROW: Hello? Can you hear me?

8           HEARING OFFICE KRAMER: So I'll mute you and  
9 then I'll make sure to un-mute you and call on you  
10 periodically.

11          MS. LAZEROW: Okay.

12          HEARING OFFICE KRAMER: Okay. So that's  
13 muted. Okay.

14          Exhibits. The way I propose to go through  
15 this, it seems to be the most efficient, is we do  
16 them in big blocks and speak specifically only to  
17 those that one of you wants to call out as the  
18 subject of some debate about its admissibility.

19          Let me first ask Shana if she is going to  
20 have objections to anybody else's exhibits? That  
21 might make things easier. Hold on. Okay.

22          MS. LAZEROW: Can you hear me?

23          HEARING OFFICE KRAMER: Yes. Are you going  
24 to be objecting --

25          MS. LAZEROW: Can you hear me?

1 HEARING OFFICE KRAMER: -- to anybody's  
2 exhibits?

3 MS. LAZEROW: CEJA is not objecting to any  
4 exhibits.

5 HEARING OFFICE KRAMER: Okay. Then you can  
6 just listen into this next part. And I've already  
7 muted you and I've got to find the other source of  
8 noise. Okay.

9 So the Applicant's Exhibits run from 1000 to  
10 1140 with some gaps that were identified in the  
11 exhibit conversion table that I docketed the other  
12 day. For the most part, that was 1102 through 1120  
13 were not in the list to be approved. And then 1122  
14 through 1135 and 1137 and 1139. Those basically were  
15 the duplicates of 1121, so it's not as if the  
16 documents aren't in here, they're just in here as  
17 part of one particular exhibit.

18 Does anybody have any objections to any of  
19 the Applicant's proposed exhibits?

20 MS. WILLIS: Staff has no objection.

21 MS. BELENKY: This is Lisa Belenky. Sorry.

22 HEARING OFFICE KRAMER: Go ahead.

23 MS. BELENKY: I didn't know if somebody else  
24 was going to speak. I didn't want to jump in.

25 There are two exhibits to testimony. It was

1 actually Mr. Theaker's testimony. He attached two  
2 exhibits that were other people's testimony. One was  
3 called the Sparks Testimony and one was called the  
4 Millar Testimony. And they were both, I believe,  
5 from a different proceeding.

6 So just to the extent that they're being  
7 provided for some citation as to what they say, I  
8 don't think we object. But to the extent they're  
9 trying to come in as testimony itself, we are a  
10 little bit concerned about that because neither Mr.  
11 Sparks nor Mr. Millar was at that hearing.

12 HEARING OFFICE KRAMER: Do you happen to  
13 know the exhibit numbers?

14 MS. BELENKY: No, I'm sorry. Through Mr.  
15 Theaker's testimony they were Exhibits F and G. But  
16 I don't know what -- I don't know what that exhibit  
17 number is anymore. I did get a little lost when the  
18 numbers changed.

19 MR. CARROLL: So I believe that that would  
20 have been Applicant's Exhibit number 1131, which is  
21 now a portion of 1121.

22 MS. BELENKY: Yes.

23 HEARING OFFICE KRAMER: Correct.

24 MS. BELENKY: It was 1131.

25 HEARING OFFICE KRAMER: Okay. So are we



1 just -- so you're simply asking that they be -- they  
2 not be taken n for the truth of the statements that  
3 are made therein; is that correct?

4 MS. BELENKY: Yes.

5 HEARING OFFICE KRAMER: Mr. Carroll, do you  
6 have any response?

7 MR. CARROLL: We have no objection to that.  
8 These are, you know, two of many documents that we  
9 and others have filed from CPUC proceedings. And  
10 my -- our intention and my understanding is that all  
11 of those would be treated in that way and not as  
12 testimony presented in these proceedings but as  
13 information relative to testimony that was provided  
14 in those other proceedings.

15 HEARING OFFICE KRAMER: Okay. I'll need to  
16 make a specific note of this in my cover sheet  
17 eventually.

18 So what are the names of the two persons who  
19 had this testimony that was an attachment?

20 MS. BELENKY: The name of the people's  
21 testimony? One is called the Sparks Testimony and  
22 one is called the Millar Testimony. And they're  
23 Exhibits F and G to Mr. Theaker's rebuttal.

24 HEARING OFFICE KRAMER: Okay. You said --  
25 did you say Sparks?

1

2 MS. BELENKY: Yes.

3 HEARING OFFICE KRAMER: Okay. And the other  
4 one, could you spell?

5 MS. BELENKY: Millar, M-I-L-L-A-R.

6 MR. CARROLL: Mr. Kramer, this is Mike  
7 Carroll. My only concern with that is that that then  
8 singles out these two examples from all of the  
9 others.

10 Would it be possible to have a general  
11 agreement amongst all of the parties that to the  
12 extent anyone has submitted copies of testimony  
13 provided by witnesses in other proceedings who did  
14 not appear here, how that will be treated? Because  
15 otherwise, then I'm going to have to go through all  
16 of the exhibits that others have submitted that are  
17 similar in nature and object to those so that they're  
18 all -- so that I can ensure that they're all treated  
19 the same.

20 HEARING OFFICE KRAMER: Okay. Does that  
21 work for the other parties?

22 MS. WILLIS: That's fine with Staff.

23 MS. FOLK: Yes, it's fine.

24 MS. ROESSLER: That's fine with us, too.

25 MS. BELENKY: Yes, I'm fine. Thanks.

1 HEARING OFFICE KRAMER: Okay. I'll write up  
2 a statement to that effect and put it in this cover  
3 memo it's going to have on top of the exhibit list.  
4 And to the extent I get it wrong, it could be  
5 addressed during PMPD comments. Okay.

6 So with that, I'm hearing no objections to  
7 the Applicant's Exhibits that I delineated, so we  
8 will accept all of them into evidence this day.

9 (Whereupon Applicant Exhibits 1000 through 1101,  
10 1121, 1136, 1138, and 1140 are received.)

11 HEARING OFFICE KRAMER: Now let's move on to  
12 the Staff's documents, 2000 through 2003, and then  
13 2005 through 2024, with the asterisk that 2023 at  
14 this point is a placeholder for the citation, the  
15 corrected citation to a reference that Ms. Watson is  
16 going to provide for us.

17 Any objections to any of those documents?

18 MR. CARROLL: And, I'm sorry, does that -- I  
19 withdraw the question. Never mind.

20 HEARING OFFICE KRAMER: Was there a  
21 question?

22 MS. ROESSLER: We were just wondering if  
23 the -- I assume that didn't include the demonstrative  
24 photograph that Staff used this morning; is that  
25 correct?

1 MS. WILLIS: I think that was 2024, because  
2 others used it afterwards. And it just kept being  
3 used over again.

4 HEARING OFFICE KRAMER: Right. I did  
5 include that.

6 MS. ROESSLER: It did?

7 HEARING OFFICE KRAMER: It did.

8 MS. ROESSLER: We won't object, as long as  
9 that's reciprocated in terms of the photo that we  
10 would also like in, as well, based on timing.

11 MS. WILLIS: I have no objection.

12 HEARING OFFICE KRAMER: Okay. All right.  
13 So hearing no objections to Staff's documents, we'll  
14 take those into evidence.

15 (Whereupon Staff Exhibits 2000 through 2003 and  
16 2005 through 2024 are received.)

17 HEARING OFFICE KRAMER: Next we have the  
18 City of Oxnard, that's 3000 through 3013, and then  
19 3015 through 3032, and then 3035 through 3059.

20 Any objections to any of those documents?

21 MR. CARROLL: I believe that -- this is Mike  
22 Carroll for the Applicant. I believe that included  
23 within the City's documents are the -- is the Coastal  
24 Commission report. We've registered our objections  
25 with respect to the Coastal Commission report and its

1 status, at least as portions of it being hearsay. I  
2 think those objections are on the record, but I  
3 wanted to restate them to ensure that the Committee  
4 understands that those objections stand.

5 HEARING OFFICE KRAMER: So you're, in  
6 essence, you're calling our portions as hearsay and  
7 asking us to treat it as such?

8 MR. CARROLL: Correct.

9 HEARING OFFICE KRAMER: Okay. Let's see  
10 which exhibit that was.

11 MS. FOLK: Do -- have --

12 MR. CARROLL: I believe it --

13 MS. FOLK: Can we let that objection stand  
14 based on whatever record was created at the time,  
15 instead of trying to recreate now? Because then  
16 we'll have to go back and talk about which portions,  
17 and I don't know that we want to do that.

18 HEARING OFFICE KRAMER: So you meant it as  
19 you previously --

20 MR. CARROLL: Yeah. I didn't mean to rehash  
21 the issue. I just wanted to make sure that now that  
22 we are at the formal process of moving the exhibits  
23 into the record, that we'd make it clear that we  
24 weren't waiving our objection and concerns with  
25 respect to those documents raised earlier.

1 MS. FOLK: Right. That's fine.

2 HEARING OFFICE KRAMER: Okay. That's 3009.

3 Okay. So hearing no other objections, we will take  
4 those documents in.

5 (Whereupon City of Oxnard Exhibits 3000 through  
6 3013, 3015 through 3032 and 3035 through 3059 are  
7 received.)

8

9 HEARING OFFICE KRAMER: And then from the  
10 Coastal Alliance we have 4000 through 4030.

11 MS. ROESSLER: You mean Environmental  
12 Coalition?

13 HEARING OFFICE KRAMER: I'm sorry, the  
14 Environmental Coalition.

15 And then also 4035 and 4036, which is --  
16 that's the demonstrative exhibit that you referred to  
17 a minute ago.

18 Any objections to any of those?

19 MR. CARROLL: No objections with the caveat  
20 that I believe you already ruled on 4030 and the  
21 context of the staff's motion to strike, that that  
22 was admitted as hearsay; is that correct??

23 HEARING OFFICE KRAMER: I believe so, yes.  
24 Anybody remember otherwise?

25 MS. ROESSLER: I think that's correct, but

1 it was admitted.

2 HEARING OFFICE KRAMER: Okay. I'll make  
3 that note. Okay, hearing no objections otherwise,  
4 those documents come in.

5 (Whereupon Environmental Coalition Exhibits 4000  
6 through 4030, 4035 and 4036 are received.)

7 HEARING OFFICE KRAMER: Who was 5000?  
8 That's -- hold on, it's right on the list. I don't  
9 have to be --

10 MR. CARROLL: Is that --

11 HEARING OFFICE KRAMER: That's Mr. Sarvey.  
12 He had 5000 and 5001. They're related to I think the  
13 Elle Wood facility. And during the prehearing  
14 conference he --

15 MR. CARROLL: We waived our objections.

16 HEARING OFFICE KRAMER: Right. And he said  
17 that he was offering them to show that power plants  
18 sometimes live longer than 30 years.

19 MR. CARROLL: That's right. And we waived  
20 our objections on the condition that Mr. Sarvey  
21 wouldn't participate. So just think of how much  
22 longer we'd be here had we not done that?

23 HEARING OFFICE KRAMER: So you're not  
24 complaining, are you?

25 MR. CARROLL: No. I'm --

1 HEARING OFFICE KRAMER: Okay.

2 MR. CARROLL: -- looking for a little  
3 credit.

4 HEARING OFFICE KRAMER: All right. Okay.  
5 So 5000 and 5001 are accepted.

6 (Whereupon Mr. Sarvey Exhibits 5000 through 5001  
7 are received.)

8 HEARING OFFICE KRAMER: CEJA 6000 through  
9 6005.

10 Do I have any -- do we have any objections?  
11 Hearing none, those will come in.

12 (Whereupon CEJA Exhibits 6000 through 6005 are  
13 received.)

14 HEARING OFFICE KRAMER: Center for  
15 Biological Diversity. Okay, Lisa is un-muted.

16 MS. BELENKY: No, I'm right here.

17 HEARING OFFICE KRAMER: Okay, 7000 --

18 MS. BELENKY: 7032.

19 HEARING OFFICE KRAMER: You're up to -- what  
20 did you say?

21 MS. WILLIS: I have 7032.

22 MS. BELENKY: 32.

23 HEARING OFFICE KRAMER: Correct. Any  
24 objections to any of those documents?

25 MR. CARROLL: We had raised an objection



1 earlier to 7013. Mr. Belenky had indicated the  
2 limited purpose for which that was being introduced,  
3 in response to which we withdrew our objection. But  
4 I just wanted to confirm that a record was made of  
5 that exchange.

6 MS. BELENKY: And that was the FFIERCE  
7 expert report on air quality, which already in the  
8 public comment, part of the record, as well.

9 MR. CARROLL: Correct.

10 HEARING OFFICE KRAMER: Okay. Hearing no  
11 other objections, those documents are in.

12 (Whereupon Center for Biological Diversity  
13 Exhibits 7000 through 7032 are received.)

14 HEARING OFFICE KRAMER: Finally, FFIERCE.  
15 We have 8000 through 8003. And then there actually  
16 was a separate document, it was a better .pdf quality  
17 copy of the slides in Mari Rose Taruc's testimony.  
18 It was no different than Exhibit 8003. So I don't  
19 see a need to add it to the record on that basis.

20 Do you, Dr. Chang?

21 MS. CHANG: No, that's fine.

22 HEARING OFFICE KRAMER: Okay. She says no,  
23 so we will not add that.

24 So then do we have any objections to 8000  
25 through 8003?

1 MS. WILLIS: No objection.

2 HEARING OFFICE KRAMER: Seeing none, those  
3 will come in, as well.

4 (Whereupon FFIERCE Exhibits 8000 through 8003  
5 are received.)

6 MS. CHANG: Mr. Kramer?

7 HEARING OFFICE KRAMER: Yes?

8 MS. CHANG: Today I -- or just today just  
9 before 5:00, I sent in, just in case it was  
10 necessary, the PAO outreach list and the copy of 7507  
11 list that Shawn Pittard had sent to me so kindly the  
12 other day.

13 HEARING OFFICE KRAMER: Now, you say you  
14 sent it, you mean to me or --

15 MS. CHANG: Or, no, no. I'm sorry. I  
16 actually did post it to the docket and it shows up  
17 here as pending. And I did get a confirmation that it  
18 had been submitted in time.

19 And then there's one more document that is  
20 the updated list with signatures that I had spoken  
21 about in the testimony that is -- it's actually an  
22 update of TN number -- hold on. Well, it's an  
23 updated -- it's the same thing that was Exhibit 8000,  
24 I believe, the statement of FFIERCE, but with  
25 additional signatures.

1           So I was not sure if that needed to be  
2 entered as an exhibit or if that could be entered as  
3 a public document?

4           HEARING OFFICE KRAMER: Well, I don't know  
5 how the parties feel, but they certainly have not had  
6 an opportunity, because it's in the pending queue,  
7 they haven't even had an opportunity to see it --

8           MS. CHANG: Okay.

9           HEARING OFFICE KRAMER: -- much less digest  
10 it. Would you be comfortable submitting that via the  
11 public comment or as a public comment?

12          MS. CHANG: I can do both. Since I've --  
13 since it's already there in the docket with the  
14 status pending, I could also send it.

15          HEARING OFFICE KRAMER: Well, you could just  
16 leave it in there. And when it gets approved it  
17 won't become an exhibit, so it would be treated as  
18 comment.

19          MS. CHANG: Okay. For good measure, I could  
20 do that, as well.

21          HEARING OFFICE KRAMER: Okay. Because, I  
22 mean, I don't know if the parties are going to object  
23 but, again, they haven't seen this thing at all.

24          MS. CHANG: I mean, I suppose another way  
25 that we could do it is that there are members of the

1 FFIERCE coalition here in the audience. And when  
2 they make public comment, they could also submit it  
3 to you.

4 MR. CARROLL: I apologize. I didn't catch  
5 the description of the document.

6 MS. CHANG: It's simply the letter that  
7 was -- the statement that was submitted at the  
8 beginning of my participation in this proceeding as  
9 the Intervener, or just prior to that in October.

10 MR. CARROLL: Right. So it's the  
11 statement --

12 MS. CHANG: And so this is --

13 MR. CARROLL: -- with just additional  
14 signatures?

15 MS. CHANG: Correct. Yeah.

16 MR. CARROLL: We have no objection to that.

17 HEARING OFFICE KRAMER: Okay. So let's make  
18 that --

19 MS. CHESTER: I'm sorry, I'm not clear. Is  
20 this the Public Records Act request that we submitted  
21 to Ms. Chang, or was this the letter for her entrance  
22 into the proceedings?

23 HEARING OFFICE KRAMER: It's two documents.

24 MS. CHESTER: It's two different things?

25 HEARING OFFICE KRAMER: One --

1 MS. CHESTER: Okay.

2 HEARING OFFICE KRAMER: -- is the Public  
3 Records Act response, I think. But she's speaking of  
4 an updated version of --

5 MS. CHESTER: Okay. No objection.

6 HEARING OFFICE KRAMER: Okay. So next week  
7 I'll take care of giving those. It will be 8004 and  
8 8005, but I'll take care of numbering those, because  
9 I'm hearing no objection from any party to their  
10 entry.

11 (Whereupon FFIERCE Exhibits 8004 and 8005 are  
12 received.)

13 HEARING OFFICE KRAMER: Okay. So the other  
14 items of housekeeping are to remind you that have  
15 continued this meeting to next Wednesday the 15th to  
16 begin at noon, or if the business meeting of the  
17 Commission runs longer, after the business meeting  
18 concludes. It will be up at the Energy Commission  
19 offices in Sacramento. The purpose of that for the  
20 Committee to deliberate in closed session.

21 So for those of you in the public, we would  
22 encourage you not to fly up to Sacramento. There  
23 will be very little to see. It's certainly not worth  
24 your money, no matter how much you have. But if you  
25 did want to listen in, WebEx is a perfect tool for

1 that.

2           And then, let's see, we are going to  
3 postpone our Committee's issuance of our list of  
4 topics that we want the parties to brief. But we  
5 also invite you, if you want to, to file a memo or a  
6 letter in the docket between now and then suggesting  
7 the issues that you think everybody should brief.  
8 It's optional, but we welcome those suggestions.

9           And I think that's all, except for public  
10 comment.

11           COMMISSIONER SCOTT: All right. Yes. And  
12 just in case folks weren't here the whole day, we've  
13 already taken two public comments today. And we have  
14 just a few here that I have blue cards for. As a  
15 reminder, if you want to make a comment, please see  
16 our Public Adviser, fill out a blue card and she'll  
17 bring it to me.

18           I have Mike Stubblefield, followed by Andrea  
19 Mondragon.

20           MR. STUBBLEFIELD: Before the clock starts I  
21 just want to say thank you for your patience this  
22 week for all of you. This has been a fascinating  
23 experience for me, personally.

24           I'm Mike Stubblefield. I'm the Air Quality  
25 Chair of the Los Padres Chapter of the Sierra Club,

1 which is all of Ventura and Santa Barbara County.

2 I'm also a member of the statewide Sierra Club

3 California Energy-Climate Committee.

4 I want to just give you some things to think  
5 about. I'll have more formal comments I'll submit in  
6 writing.

7 For 60 years, Oxnard's beaches have been the  
8 only location for all power plants in the Moorpark  
9 subarea, one at Ormond, three at Mandalay Bay and the  
10 Edison peaker near Mandalay Bay. Oxnard was also the  
11 site of the Halico Aluminum-Magnesium Recycling  
12 Facility which emitted toxic pollutants into the air  
13 and into the adjacent Coastal Wetlands at Ormond  
14 Beach. Since March 2007, Halico has been an EPA  
15 superfund site. Nine years later, EPA has yet to  
16 determine the extent of the contamination.

17 The Port of Hueneme has, for decades,  
18 generated significant air pollution from shipping and  
19 trucking and continues to do so.

20 Some history. Ventura County did not  
21 achieve attainment for California or Federal Ozone  
22 Standards until the early 1990s, and then only  
23 because the Sierra Club, the Environmental Coalition  
24 and the Environmental Defense Center sued Edison  
25 which finally installed selective catalytic reduction

1 technology in the smoke stacks at Ormond Beach and  
2 Mandalay Bay plants.

3 For years, we were also subjected to  
4 emissions from 3M, which is now closed, and other  
5 large manufacturing facilities. And the 101, of  
6 course, carries thousands of cars and trucks through  
7 the county seven days a week. Many, if not -- excuse  
8 me.

9 More recently, Edison's peaker next door to  
10 Mandalay Generation Station was approved, despite  
11 widespread public opposition. Many if not most of  
12 the local residents effected by these cumulative  
13 impacts live in neighborhoods in South Oxnard. Now  
14 NRG wants to build yet another peaker a few hundred  
15 yards from the Edison peaker. I ask you, is putting  
16 yet another peaker, a sixth power plant, on our beach  
17 the highest best possible use of our coastline? And  
18 I might add, nobody else has ever had one in the  
19 Moorpark subarea.

20 We have a large commercial-industrial zone  
21 in East Oxnard. If this peaker is really necessary,  
22 which flies in the face of a front-page article in  
23 the L.A. Times last Sunday, which I'm sure most of  
24 you read, indicating we're so awash in surplus  
25 electricity that ten-year-old plants are being



1 decommissioned, then why not put it there instead of  
2 on our beach which already has five of them?

3           No one disputes the worldwide consensus of  
4 climate scientists -- no one except the President and  
5 his supporters disputes the worldwide consensus of  
6 climate scientists that we must move beyond fossil  
7 fuels, including natural gas, as quickly as possible  
8 if we want to avoid climate catastrophe.

9           And finally, I would ask the CEC to  
10 disapprove this shortsighted and unnecessary  
11 proposal.

12           Thank you.

13           COMMISSIONER SCOTT: Thank you.

14           I have Andrea Mondragon, followed by Sara  
15 Gepp, or maybe Eep.

16           MS. A. MONDRAGON: Good evening. My name is  
17 Andrea Mondragon. I'm a mother and a college  
18 student.

19           Oxnard has enough power plants as it is.  
20 There are children that live in this area and have  
21 grown up in this area and haven't had the healthiest  
22 environment to do so.

23           I don't support the building of this plant,  
24 simply for the fact that my father works on the naval  
25 base. There's enough contamination in the air as it

1 is.

2           And a lot of my friends that I go to school  
3 with carry inhalers because they have actually --  
4 they were born and raised here in Ventura County, and  
5 a lot of them from here in Oxnard.

6           Not only should this plant not be built  
7 because, as he said, there is an excess of energy,  
8 this is native land. We accommodate native land. And  
9 I feel that it's disrespectful to build something  
10 that creates an excess when we already have an  
11 excess.

12           And really thinking about it, when my son  
13 asks me, "Am I growing up in a healthy community,"  
14 what am I going to tell him?

15           There's no way for this to be healthy for  
16 the community. So considering the contamination that  
17 there is in the air as there is -- sorry -- I really  
18 don't support the building of this plant. I don't  
19 want my son to grow up and be one of those kids that  
20 has to carry an inhaler with him because of where he  
21 grew up. I live in a very happy community, but that  
22 doesn't change the fact that a lot of kids are  
23 growing up with breathing problems.

24           And I really want to be able to say, yes,  
25 son, you live in a healthy community, you live in a

1 place where you're going to grow up happy and healthy  
2 and not have any of these issues. And I can't tell  
3 him that because I know people who have grown up in  
4 this community and who carry inhalers and who have  
5 breathing problems. So raising my son in this  
6 community feels kind of restrictive. I feel like  
7 there are going to be days when I just can't take him  
8 out of the house because I don't want his lungs to  
9 get used to this.

10           There are a lot of different ways that we  
11 can produce energy, a lot of healthier ways, a lot  
12 more natural ways. Heck, drive up the freeway a few  
13 miles. You see the windmills. That's one way.  
14 There's solar power. There is a lot of different  
15 ways that we can create power. But when you really  
16 think about it, we don't need to, so I don't know why  
17 it's a necessity.

18           That's all I have. Thank you.

19           COMMISSIONER SCOTT: Thank you.

20           I have Sara -- I can't tell if it's Eep or  
21 Eepp, it's got two Es, followed by Isabella  
22 Mondragon.

23           MS. GEPP: Thank you to the panel. My name  
24 is Sara Gepp --

25           COMMISSIONER SCOTT: Oh, Gepp?

1 MS. GEPP: -- from Close to the Earth On-  
2 Demand IT Services. I'm an Oxnard resident and a  
3 business owner.

4 I do want to say that this hearing was  
5 impossible for many in our community to attend  
6 because the time was not certain. And given the  
7 state of things, undocumented people would not feel  
8 safe to come here and participate. In the future  
9 there must be equal access for all residents.

10 I run my business and my office on solar  
11 power. Solar is meeting my power needs. I have an  
12 IT business, and I have over 200 computers under  
13 management. My power bill is very low and my solar  
14 service performs exceedingly well to meet my power  
15 needs. I pass the savings onto my customers and I  
16 create great paying jobs for my employee-partners. I  
17 feel that we have a real asset here in California,  
18 that we have the good fortune to see just about every  
19 day. That asset is the sun.

20 The data shows that California has a surplus  
21 of energy. That is a fact. We do not need to waste  
22 our taxpayer money on unnecessary power plants. It  
23 is simply corporate welfare fueled with greed.

24 Natural gas exploration is conducting by  
25 fracking which threatens fresh water, the most

1 precious resource. Water is life.

2 I feel that it is California's  
3 responsibility to present and provide green energy  
4 solutions for everyone.

5 A work about Native American rights in  
6 considering this project. I want to acknowledge that  
7 this is Chumash land. And I feel that the Chumash  
8 cultural resources need to be protected for  
9 generations to come. Putting yet another power plant  
10 in Ventura County is simply environmental racism.

11 For environmental and cultural heritage  
12 reasons, I feel strongly opposed to the Puente Power  
13 Plant. NRG Corp. cannot freeload on me as a  
14 taxpayer. No Puente Power Plant.

15 Thank you so much.

16 COMMISSIONER SCOTT: Thank you.

17 I have Isabella Mondragon, followed by Larry  
18 Godwin.

19 MS. I. MONDRAGON: Good evening. My name is  
20 Isabella Mondragon. I am a student at Buena High  
21 School. And I oppose the building of this power plant  
22 because I believe that the people here should have a  
23 choice and a voice --

24 COMMISSIONER SCOTT: Can you get just a  
25 little closer to the mike?

1 MS. I. MONDRAGON: -- and not be moved to  
2 have their land be destroyed and have them suffer,  
3 when it's not -- okay. I believe that the people  
4 here need to be able to have their own voice. And if  
5 they don't have that, then what else do they have?  
6 Because if they don't have a voice in their  
7 community, then things will happen that could kill  
8 them and can make them suffer.

9 And I believe that there should be -- you  
10 should ask -- have you asked the people of this land,  
11 the Chumash people, if they wanted their land to be  
12 destroyed by the power plant and by the toxicity, and  
13 if it's okay? Because it's not okay. It's not okay  
14 for people to have breathing problems, to have lung  
15 problems, to have asthma. And this is very serious  
16 and it can't be taken lightly.

17 It's affecting my education and the  
18 education of my peers, and the education of small  
19 children. Because if they can't breathe, they can't  
20 learn.

21 So I oppose the building of this power  
22 plant.

23 Thank you.

24 COMMISSIONER SCOTT: Thank you.

25 I have Larry Godwin.

1           MR. GODWIN: I'm Larry Godwin. I also want  
2 to thank the Commissioners and the staff and  
3 everybody for spending four grueling days here. I  
4 only sat in on a few hours of each day.

5           I'm a 55-year resident of Oxnard, with 45  
6 years -- 40 years, rather, at Magu as a civilian  
7 physicist, very complex systems. And so my training  
8 is to take a project like this, break down the plus  
9 and minuses and what makes really sense.

10           The bottom line is that this project is not  
11 needed. It's in the wrong location if it is needed.  
12 It's probably going to be a dinosaur in less than  
13 five years and it will be offline for the rest of the  
14 duration of it sitting here.

15           It doesn't make a lot of sense to me, and I  
16 could go on for hours. But what I do is I do it in  
17 my mind and I don't have to, you know, take and do a  
18 balance sheet, I just do in my mind. And I looked at  
19 the pluses and the minuses. All I saw was minuses.  
20 I didn't see any pluses.

21           So my personal opinion and professional  
22 opinion would be that it's in the wrong location and  
23 it's not needed, and there's too many negatives from  
24 the environment, the city, the grid, everything is  
25 wrong.

1           So thank you.

2           COMMISSIONER SCOTT: Thank you.

3           It looks like Mayor Pro Tem Ramirez would  
4 like to say something.

5           MAYOR PRO TEM RAMIREZ: I just want to thank  
6 you for your patience, and particularly for you being  
7 here and hearing from our community, and all the  
8 people that kept this going, our interpreters, the  
9 sound people, our police officers, the court  
10 reporter.

11           And, Paul Kramer, you're amazing. Your  
12 patience is an example to all of us.

13           HEARING OFFICE KRAMER: Thank you.

14           MAYOR PRO TEM RAMIREZ: Thank you for coming  
15 to Oxnard.

16           COMMISSIONER SCOTT: Thank you.

17           Let me turn to the Spanish WebEx to see if  
18 we have any commenters? No.

19           Let me turn to the English WebEx to see  
20 whether we have any commenters? Hold on just a  
21 moment. Paul Kramer is unmuting you. Okay. You are  
22 unmuted. If you are on the WebEx and would like to  
23 make a comment, now is your opportunity. Please  
24 speak up.

25           MAYOR PRO TEM RAMIREZ: I'd like to make a



1 comment.

2 MS. BAKER: Hi. My name is Ashley.

3 MS. JOHNSON: That's fine. Go ahead.

4 MS. BAKER: Oh, no, no, no. You go.

5 MS. JOHNSON: Oh, okay. Yes. My name is  
6 Gaye Theresa Johnson.

7 COMMISSIONER SCOTT: Could you spell that,  
8 please, for our court reporter?

9 MS. JOHNSON: Yes. Gaye, G-A-Y-E, Theresa,  
10 T-H-E-R-E-S-A.

11 COMMISSIONER SCOTT: Thank you.

12 MS. JOHNSON: Last name is Johnson.

13 COMMISSIONER SCOTT: Thank you. Please go  
14 ahead.

15 MS. JOHNSON: Okay. Thank you. I'm a very  
16 long-term resident of the tri-county area, but I've  
17 been 12 years in Ventura. And I'm also a professor  
18 at UCLA and I'm a historian. And I'm absolutely  
19 opposed to this, and I'm going to dispense with any  
20 kind of, you know, sort of formalities around this.

21 Everybody knows on both sides that this kind  
22 of thing is most of the time placed in communities  
23 that are vulnerable, that do not have the kind of  
24 resources to fight back. This is just a fact. This  
25 is -- people can say whatever they want on the side

1 of the power plant that this is not the case, but it  
2 is always the case. It is the case more than 90  
3 percent of the time across the nation.

4           The fact that people can't make it tonight  
5 because of the current political climate that makes  
6 them afraid to come out, and a lot of people may say,  
7 well, what can we do about that? If you have enough  
8 power to put a power plant in the middle of Oxnard,  
9 then you have enough power to get this word out and  
10 get people there who are the most effective. And the  
11 people who are the most effective in this case are  
12 just like every other case where there are power  
13 plants, recycling plants located in poor  
14 neighborhoods or in places where people who have more  
15 money don't wish to be.

16           And so again, I want to stress that this is  
17 a deliberate thing. This is not -- you pull no wool  
18 over the eyes of the community when you say that, you  
19 know, this not something that has to do with  
20 vulnerable communities. It always has to do with  
21 vulnerable communities.

22           And so the other thing I want to say is,  
23 absolutely, I do not believe that this is the only  
24 way. And I think I echo the sentiments of so many  
25 people. But also, it seems like an insult, really,

1 to insist that this is bias in any way, that this  
2 could -- and to mince words and to rebut on these  
3 simple points that are just facts, but it is  
4 dangerous to have this here in this way, in this  
5 manner at this time and for all perpetuity. It is  
6 being dangerous, absolutely, and you know you take a  
7 risk. The only thing that's happening here is profit.  
8 And if we could just dispense with that, I think that  
9 people will probably feel a lot less unfocused.

10           It is so important for people to understand  
11 that at this time we want to be on the right side of  
12 history. We have so many lawsuits already, just in  
13 the first three weeks of this presidency, with regard  
14 to the environment. Why be on that side of history?  
15 Why be part of that team? We need people who are  
16 going to fight for the environment and fight for  
17 people who are not being fought for in the next four  
18 years, hopefully not eight. And we really believe  
19 that it is possible for corporations to be on that  
20 right side. And I just hope that people will think  
21 about this, not just as a financial question but as a  
22 moral and an ethical one, as well.

23           COMMISSIONER SCOTT: Thank you.

24           I think I heard another voice. Please go  
25 ahead and speak up.

1 MS. BAKER: My name is Ashley Baker. I'm a  
2 student at UCSB. And I'd just like to speak against  
3 the power plant. I feel that we do not need any more  
4 power plants. California already has a great amount  
5 of power, and many existing power plants are being  
6 closed in recognition of this. California is on  
7 track to produce at least 21 percent more electricity  
8 than it needs to by 2020, more than enough to cover  
9 us electrically in any type of emergency, plus  
10 electricity produced by solar panels.

11 We are absorbing the cost for the building  
12 and maintenance of new and unneeded plants,  
13 essentially paying for the surplus of unneeded power  
14 at a very high premium.

15 And, you know, just like a few of the other  
16 people in the audience there mentioned, I grew up  
17 around -- breathing in toxic air. I'm from Los  
18 Angeles. And I know that it had my -- its effects on  
19 my development. And I just want to speak up against  
20 any kind of -- any kind of development that's going  
21 to just put us backwards as a human -- in the human  
22 race.

23 So just please, you know what's right in  
24 your heart, just please listen to that voice and  
25 don't listen to any of the other voices that you have

1 in your head.

2 Thank you very much.

3 COMMISSIONER SCOTT: Thank you, Ms. Ashley.

4 Would you please spell your name, if you  
5 don't mind, for the court reporter, just to make sure  
6 she gets it right in the transcript?

7 MS. BAKER: Yes, of course, A-S-H-L-E-Y  
8 B-A-K-E-R.

9 COMMISSIONER SCOTT: Great. Thank you so  
10 much.

11 Do I have anyone else on the WebEx who would  
12 like to make a comment? If so, please speak up.

13 MR. LIM: This is Sonny Lim.

14 COMMISSIONER SCOTT: Yes. Please go ahead.

15 MR. LIM: My name -- so my last name is L-I-  
16 M, and Sonny. And I lived in Santa Barbara area for  
17 years until a couple of years ago. Now I'm living in  
18 Oakland, California.

19 I want to speak against building this power  
20 plant, building a new power plant in Oxnard, because  
21 it has already plants there. Because it has an  
22 existing power plant does not justify building  
23 another power plant in Oxnard. Rather, I believe  
24 that we should acknowledge and recognize that Oxnard  
25 people have suffered enough because of the existing

1 power plants.

2 I'm so glad the Commission is willing to  
3 hear from people and make a right decision. And I  
4 want to urge the Commission to reconsider all 20  
5 power plants, power -- making more power, a plan to  
6 make another 20 power -- a way of making power.

7 For example, I mean, NGR [sic], when I look  
8 at the NGR website, it was explaining and presenting  
9 that this power plant is a bridging to the renewable  
10 and clean energy in the future. But I believe it's  
11 not. It's not for the future. It's the clean and  
12 renewable energy is still already here. We have -- I  
13 live in a house where I have power -- solar panels.  
14 And with solar a wind energy, we can have right now.  
15 And I really want to urge the Commission to think  
16 about, for example, to help policies to encourage  
17 public buildings to have solar panels on their roofs,  
18 for example. That's one of the solutions we can  
19 think about.

20 So thank you for listening to me. And I  
21 really hope to see in the future that you make a  
22 right decision.

23 COMMISSIONER SCOTT: Thank you.

24 Do I have any others on the WebEx who would  
25 like to make a comment, please speak up?

1 MR. KAHN: Hello.

2 COMMISSIONER SCOTT: Hello. Yes, please go  
3 ahead.

4 MR. KAHN: Hi. My name is Hareem Kahn. I  
5 am a California resident. And I'm calling to express  
6 my solidarity with the communities in Oxnard and to  
7 voice my opposition to the NRG power plant. We don't  
8 need any more power plants. California already has a  
9 surplus of power. And many existing power plants are  
10 being closed in recognition of this. California is  
11 on track to produce more electricity than it needs by  
12 2020, which is enough to even cover emergencies, plus  
13 the electricity produced and generated by solar  
14 panels.

15 So we need to encourage the pursuit of  
16 alternative energy provisions that reduce pollution  
17 instead of building unnecessary power plants that  
18 work primarily to generate profit for NRG.

19 So to conclude, we want jobs in renewable,  
20 sustainable energy development, not toxic power  
21 plants.

22 Thank you.

23 COMMISSIONER SCOTT: And if you don't mind,  
24 would you kindly spell your name, as well, for our  
25 court reporter to make sure she gets it right in the

1 transcript?

2 MR. KAHN: Of course. First name is Hareem,  
3 H-A-R-E-E-M.

4 COMMISSIONER SCOTT: Okay.

5 MR. KAHN: Last name, as well?

6 COMMISSIONER SCOTT: If you like, yes,  
7 please.

8 MR. KAHN: Kahn, K-A-H-N.

9 COMMISSIONER SCOTT: Thank you.

10 MR. KAHN: Thank you.

11 COMMISSIONER SCOTT: Do I have any others on  
12 the WebEx who would like to make a comment? If so,  
13 go ahead and please speak up.

14 MS. HANNA: Hello?

15 COMMISSIONER SCOTT: Hello. Please go  
16 ahead.

17 MS. HANNA: Hello. My name is Karen Hanna.  
18 I am absolutely opposed to the Puente Power Plant.  
19 I'm extremely concerned about the number of power  
20 plants that continue to be built in California  
21 without thorough investigation of its necessity. And  
22 I really echo what so many people are saying, that  
23 again research shows that by 2020, California is set  
24 to produce at least 21 percent more electricity than  
25 it needs. So why are we building another plant?



1           This is a waste of taxpayer money to build  
2 and maintain these unneeded plants, not to mention an  
3 additional health hazard for the children living in  
4 Oxnard who have already been burdened with exposure  
5 to the pollution emitted from the landfill there.  
6 I'm hearing the voices of the young people offering  
7 public comment today and I'm persuaded by their  
8 testimony of how their peers already cannot breathe,  
9 and that they worry that their own children will also  
10 be unable to breathe in their own community.

11           It's your responsibility as a public  
12 Commission to protect communities, especially  
13 vulnerable ones without political and economic power,  
14 and not just for corporate greed. So I'm asking you,  
15 as a Commission, why don't you wait to develop the  
16 already mandated alternative energy solutions,  
17 instead of jumping toward building this plant. It's  
18 very obvious that the plant is not providing the  
19 economic opportunities at a large scale to the local  
20 community, and NRG already admitted this on  
21 Wednesday.

22           I strongly urge the Commission to use not  
23 only your common sense and discretion, but most  
24 importantly, your moral conscience in deciding  
25 whether or not to build the plant.

1 Thank you.

2 COMMISSIONER SCOTT: Thank you. Did I have  
3 you spell you name? If you don't mind, would you  
4 please spell your name, as well?

5 MS. HANNA: Sure. It's K-A-R-E-N, and then  
6 the last name is H-A-N-N-A.

7 COMMISSIONER SCOTT: Great. Thank you very  
8 much.

9 Do I have any others on the WebEx who would  
10 like to make a comment? Please speak up.

11 MS. HODGES: Hello?

12 COMMISSIONER SCOTT: Hi. Yes, please go  
13 ahead.

14 MS. HODGES: Hi. My name is Teresa Hodges.  
15 It is spelled T, as in Tom, -E-R-E-S, as in Sam, -A,  
16 as in apple, last name H-O-D, as in David, -G, as in  
17 George, -E-S, as in Sam. Okay.

18 So I am a resident of Oxnard. I was born in  
19 Port Hueneme. My sister was born in Oxnard. I study  
20 currently at the University of Hawaii at Manoa doing  
21 a PhD program. But parents also still live in Oxnard  
22 and have been there since the 1970s, so Oxnard is  
23 still home for me.

24 I am calling because I oppose the Puente  
25 Power Plant. We do not need another power plant, as

1 others have said earlier. There are more than  
2 enough. And we should be looking for more  
3 sustainable practices anyways.

4           It would cost taxpayers so much. And Oxnard  
5 is already so under-resourced, we need to put more  
6 money back into essential services, such as  
7 affordable housing and education.

8           When I lived in Oxnard, when I grew up and I  
9 graduated from high school, I graduated as 1 of 32  
10 students out of a graduating class of 500 students  
11 who matriculated on to a four-year university  
12 directly after high school, so that's about 6 percent  
13 of the graduating class. I went to a really great  
14 public university, UC San Diego, but I was still ill  
15 prepared for the rigors of academia upon entering  
16 that required instructional supervision and support  
17 to help get me on par.

18           We should not divert funds away from what  
19 will really contribute to the livelihood and equity  
20 of Oxnard and area residents. I'm calling because I  
21 care about Oxnard. It is the great community that  
22 raised me.

23           We need to put money into services that will  
24 benefit the community and community members, such as  
25 education, and not benefit corporations.

1 Thank you very much.

2 COMMISSIONER SCOTT: Thank you.

3 Do I have other public comment on the WebEx?

4 Please speak up. Okay. Hearing none, going once,  
5 going twice, going three times? Okay.

6 That's our close of -- oh, I'm sorry.

7 Please go ahead.

8 MS. D. MONDRAGON: Hi. My name is Dolores  
9 Mondragon, that's M-O-N-D-R-A-G-O-N. I oppose the  
10 building of this power plant.

11 Fear is why these chairs are empty. I speak  
12 on behalf of the undocumented people that are afraid  
13 to be out here today, the voiceless, the ones that  
14 are not heard. We have a legacy of oppression, and  
15 it is very evident based on all the conversations and  
16 all the negatives that are seen out there. Climate  
17 change is evident, it's real.

18 This hearing is really historic. Future  
19 generations, including my grandson that you heard  
20 back here, will look back at these hearings at this  
21 point in time and look where and how, if we stood up,  
22 if those of you that are up there stood up. And if  
23 this hearing is an example of complicity to climate  
24 change, where is the triumph for progress?

25 If you go forward, and pardon my cynicism,

1 are funds being allocated for gas masks? What are we  
2 going to do in 10 years, in 20 years? Because this  
3 is not progress. And us, who are the voiceless, need  
4 to prepare. We need to be ready.

5 I am thankful that you're here and that you  
6 have the ability to hear us. Thank you for sitting  
7 here for so many days. Thank you for listening to  
8 your moral conscience. Thank you for understanding  
9 the gravity of this decision. Thank you for the  
10 opportunity to be open with an open heart, because  
11 the political is personal. So through these  
12 decisions, you really will be effecting people's  
13 lives, and I really pray that it's for the better. I  
14 really pray that we participate in progress and  
15 moving forward as a community.

16 My daughter asked me if I'm proud to be from  
17 California and be here? And I said, "Yes. This is  
18 the place for real freedom. We are at the forefront  
19 of progress." Please be an example of that. Please  
20 help us. We beg you. We come to you because the  
21 political is personal.

22 Thank you.

23 COMMISSIONER SCOTT: Thank you.

24 I see one more comment behind you there.  
25 And if you would please state and spell your name for

1 our court reporter, she'll appreciate that very much.

2 MR. SALAS: First name C-E-Z-A-R, last name,  
3 S-A-L-A-S. Like many others that aren't here, I  
4 oppose this project.

5 Clearly, I'm not an expert within this  
6 field, but it is very, very well known that the  
7 global climate destabilization is real. And it's  
8 kind of disgusting that there are many politicians  
9 that would rather have a short-term effect -- short-  
10 term profit from money with big corporations and  
11 denying that it's real and adding a power plant where  
12 the majority are not as important compared to others  
13 that have a higher income.

14 And first of all -- well, I want to get a  
15 little more deep -- but I'm pretty sure the union  
16 workers, I understand that they want to work. But  
17 it's pretty evident that -- I wouldn't say they  
18 wouldn't care, but none of them are here like they  
19 were the other day. And I wouldn't doubt that they  
20 were either paid -- well, I'm pretty sure they were  
21 paid overtime to come here.

22 And second of all, it's kind -- if this  
23 wasn't a negative impact, why did -- why is there --  
24 why did they have to -- NRG, why was it -- why did  
25 you have to say if you get approved to build this

1 plant the other two will come down? When either way  
2 the other -- if it's approved or not, the other two  
3 are going to come down. If this wasn't a negative  
4 thing there wouldn't be a need for that to be said.

5           And I do thank you very much for taking  
6 your time being here. Oxnard is home to me. I've  
7 never moved out of Oxnard. Even though I'm very  
8 young, I do have strong feelings for this place. And  
9 I really hope that the profit you're making, it  
10 doesn't control you. The way money is controlling  
11 you is very disturbing. I hope that you understand  
12 his plan is very unjust.

13           And thank you for your time.

14           COMMISSIONER SCOTT: Thank you. So I would  
15 just like to say, we've heard from everyone. As we  
16 close -- is this something that you could just hand  
17 to our Public Adviser --

18           MS. D. MONDRAGON: Yeah.

19           COMMISSIONER SCOTT: -- to make sure it goes  
20 in the record?

21           MS. D. MONDRAGON: It's just a petition --

22           COMMISSIONER SCOTT: Yes.

23           MS. D. MONDRAGON: -- with over 200 --

24           COMMISSIONER SCOTT: Yes, please. She'll  
25 make sure that it gets in --

1 MS. D. MONDRAGON: Okay.

2 COMMISSIONER SCOTT: -- public record.

3 MS. D. MONDRAGON: Thank you so much.

4 COMMISSIONER SCOTT: Thank you.

5 I do want to say thank you to everyone. We  
6 had -- we did have a long haul through four days of  
7 evidentiary hearings, but I think that we heard a lot  
8 of very interesting information.

9 I want to say thank you very much to the  
10 parties. Thank you to everyone who helps make our  
11 hearing go really well. And so I'll echo what I said  
12 this morning, and also echo what Mayor Pro Tem  
13 Ramirez said, thank you so much to our police  
14 officers and to our security for spending four days  
15 with us, to our IT folks, to our court reporter, and  
16 to our translators who have translated every word  
17 that you have heard over the last four days and to  
18 many hours into Spanish. So thank you all so very  
19 much.

20 And with that, I'll just ask my Associate  
21 Member whether she has any closing remarks?

22 COMMISSIONER DOUGLAS: Just to add, and I  
23 know Commissioner Scott meant this, but a big thanks  
24 to the City of Oxnard for --

25 COMMISSIONER SCOTT: Yes.



1           COMMISSIONER DOUGLAS:  -- hosting -- or  
2 helping us host this event.  And it's been a  
3 productive, a long but productive, four days.  We've  
4 heard from a lot of people and we appreciate it.

5           COMMISSIONER SCOTT:  Absolutely.

6           HEARING OFFICE KRAMER:  Okay.  So we are  
7 adjourning or continuing this meeting to next  
8 Wednesday, February 15th at noon, or if our  
9 Commission business meeting runs later, as soon as  
10 that's over.  That will be at our Energy Commission  
11 offices in Sacramento.  Again, it's primarily for the  
12 purpose of the Committee deliberating in a closed  
13 session.  So please don't fly up there just for that  
14 or drive up, because there's very little for the  
15 public to see and you'll -- but if you want to listen  
16 to the public portions, we recommend you do that with  
17 our WebEx call-in system.

18           And with that, we are adjourned until  
19 February 15.  Thank you.

20           (The Evidentiary Hearing of the Puente Power  
21 Plant was adjourned at 7:35 p.m., until Wednesday,  
22 February 15, 2017 at 12:00 p.m.)

23  
24  
25

CERTIFICATE OF REPORTER

I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were reported by me, a certified electronic court reporter and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

And I further certify that I am not of counsel or attorney for either or any of the parties to said hearing nor in any way interested in the outcome of the cause named in said caption.

IN WITNESS WHEREOF, I have hereunto set my hand this 17th day of February, 2017.



MARTHA L. NELSON, CERT\*\*367

CERTIFICATE OF TRANSCRIBER

I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were transcribed by me, a certified transcriber and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

And I further certify that I am not of counsel or attorney for either or any of the parties to said hearing nor in any way interested in the outcome of the cause named in said caption.

I certify that the foregoing is a correct transcript, to the best of my ability, from the electronic sound recording of the proceedings in the above-entitled matter.



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MARTHA L. NELSON, CERT\*\*367

February 17, 2017