

EVIDENTIARY HEARING  
BEFORE THE  
CALIFORNIA ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION

In the Matter of: )  
 )  
Application for Certification ) Docket No.  
for the East Altamont Energy ) 01-AFC-4  
Center )  
\_\_\_\_\_ )

TRACY ELKS LODGE # 2031  
6400 11TH STREET  
TRACY, CALIFORNIA

TUESDAY, OCTOBER 22, 2002  
9:17 a.m.

Reported by:  
Valorie Phillips  
Contract No. 170-01-001

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

COMMITTEE MEMBERS PRESENT

William Keese, Presiding Member

Robert Pernell, Associate Member

HEARING OFFICER AND ADVISORS PRESENT

Major Williams, Jr., Hearing Officer

Al Garcia, Advisor

STAFF AND CONSULTANTS PRESENT

Lisa DeCarlo, Staff Counsel

Cheri Davis, Project Manager

Gary Walker

Dale Edwards

Michael Clayton

William Walters  
Aspen Environmental Group

Paul C. Richins, Jr.

APPLICANT

Greggory L. Wheatland, Attorney  
Jeffery Harris, Attorney  
Ellison, Schneider and Harris

Jim McLucas, Regional Engineer  
Calpine Corporation

Gary S. Rubenstein  
Sierra Research

Thomas Priestley  
CH2M HILL

INTERVENORS

Robert Sarvey

ALSO PRESENT

Susan Sarvey

Wayne Livingston

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

9:17 a.m.

PRESIDING MEMBER KEESE: Good morning, again. We're going to reconvene this hearing on the East Altamont Energy Center. Since I see no members of the public present -- well, I see at least one member of the public present at this moment -- I believe that we should be able to dispense with introductions. Do we need to verify the presence of the parties?

HEARING OFFICER WILLIAMS: No, I would just say that the parties who were here yesterday are again present, except for the San Joaquin Valley Unified Air Pollution Control District. Of course, Byron Bethany was not here yesterday.

So, with that, that will complete our introductions.

PRESIDING MEMBER KEESE: Well, let me just say that we're hopefully here in the last day of our hearings, and I do want to thank everybody, applicant, staff and intervenors, for trying to stick with what's been a very rigorous schedule here. Thank John, our sound man. And his father, Steve, who is very happy that John is not going to get overtime today. His father owns the business,

1 I guess.

2 Valorie, our court reporter, for running  
3 back and forth and keeping up with us. And I  
4 guess we can't skip Calpine for what we've had in  
5 the way of food. It has been very good, from my  
6 standpoint, and I think from most everybody's. I  
7 haven't noticed anybody shirking at the line.

8 As I mentioned earlier I will have to  
9 leave at 11:30 on the dot, and Commissioner  
10 Pernell will continue this hearing as long as we  
11 have to go.

12 I have something to say on visual, but  
13 do you want to take care of some of the  
14 preliminary stuff, Major, before we get started?

15 HEARING OFFICER WILLIAMS: Yeah. We  
16 have, again, an updated exhibit list that's being  
17 copied. I invite the parties to look at it and  
18 make any recommended changes, especially Mr.  
19 Sarvey, because there were a number of exhibits  
20 that were referenced to last night that were not  
21 formally admitted.

22 So, to the best that I could, I've  
23 listed those on the exhibit list. And if there  
24 are some, and I'm sure there are a few, that I  
25 didn't give a number to, we can reconcile that at

1 some point.

2 Again, the topics that we have for  
3 today, visual resources, plume analysis in visual  
4 resources, and overriding consideration are  
5 contested. And we will hear them as set forth in  
6 our topic schedule that was distributed.

7 Witnesses will testify under oath or  
8 affirmation. During the hearings the party  
9 sponsoring the witness shall establish the  
10 witness' qualifications to the extent that the  
11 matter is not stipulated to, and ask the witness  
12 to summarize the prepared testimony. Relevant  
13 exhibits should be offered into evidence at that  
14 time.

15 At the conclusion of a witness' direct  
16 testimony, the sponsoring party should move in all  
17 relevant exhibits to be received into evidence.

18 The Committee will next provide the  
19 other parties an opportunity for cross-  
20 examination, followed by redirect and recross-  
21 examination, as appropriate. Multiple witnesses  
22 may testify as a panel. the Committee may also  
23 question the witnesses.

24 Upon the conclusion of each topic we  
25 will invite members of the public to offer unsworn

1 public comment. Public comment is not testimony,  
2 and a Committee finding cannot be based solely on  
3 such comments. However, a public comment may be  
4 used to explain evidence in the record.

5 The order of presentations on testimony  
6 throughout the day will be taken as follows,  
7 applicant, staff and Mr. Sarvey.

8 Insofar as briefing is concerned, before  
9 we adjourn today we will talk briefly about the  
10 issues to be briefed so that all parties are on  
11 the same page in terms of what the issues are, and  
12 what type of briefing the Committee is looking  
13 for.

14 Yesterday's session was phase three  
15 topics. Today's session will compose phase four  
16 topics, for purposes of our briefing schedule,  
17 which we discussed yesterday.

18 We now begin with testimony on the topic  
19 of visual resources plume analysis. All witnesses  
20 will be sworn by the court reporter.

21 PRESIDING MEMBER KEESE: Thank you,  
22 Major. Before we start I'm sure staff and  
23 applicant work overnight, also, getting prepared  
24 for the next day. But I want to thank Major for  
25 ending these hearings at 9:30 at night and having

1 material ready for us in the morning. Above and  
2 beyond.

3 I'd like to focus us because I believe I  
4 can say the Committee feels that on a couple  
5 issues here we've been a little unfocused, as  
6 we've gone into discussions here we have a  
7 disagreement between applicant and staff.

8 A couple of these pictures illustrate  
9 what I'm going to say, and that is that  
10 Commissioner Pernel and I really love to see a  
11 nice clear sky. We also really like to see a nice  
12 cloudy sky. So, what I'd like in this plume  
13 analysis, I think there are two steps here.

14 Number one, we have to know that a plume  
15 has a negative impact -- that a plume can have a  
16 negative impact. And number two, we want to know  
17 that the plume from this plant can have a negative  
18 impact.

19 So, a two-step process here. Number  
20 one, somebody needs to establish that plumes are  
21 bad, can be bad; and number two, somebody has to  
22 establish that the plumes from this power plant  
23 can be bad.

24 I'm not talking about the plume that  
25 comes down and sits over the highway. That's bad.

1 But from a visual standpoint, two steps.

2 So I hope that we can focus on those  
3 issues as we present today. Thank you.

4 HEARING OFFICER WILLIAMS: Mr.  
5 Wheatland, did you have a question?

6 MR. WHEATLAND: No, I don't.

7 HEARING OFFICER WILLIAMS: Okay. Then  
8 you may proceed.

9 MR. WHEATLAND: Well, first of all, may  
10 I, just to help move things along this morning,  
11 could I ask if the parties would stipulate to the  
12 foundational questions for Mr. Rubenstein with  
13 respect to the introduction of the staff's exhibit  
14 in visual resource plume analysis that's been  
15 identified as exhibit 4I?

16 And also, Mr. Rubenstein has been  
17 previously sworn. Does he need to be sworn in  
18 again today?

19 HEARING OFFICER WILLIAMS: No.

20 MR. WHEATLAND: Okay.

21 HEARING OFFICER WILLIAMS: Staff, I  
22 think the question was --

23 MR. WHEATLAND: Can I omit the  
24 foundational questions for his testimony? The  
25 foundational --

1                   PRESIDING MEMBER KEESE: He wants to  
2 stipulate to the foundational questions --

3                   MS. DeCARLO: I'm sorry, what's your  
4 question? Oh. Sure.

5                   PRESIDING MEMBER KEESE: -- on his  
6 testimony.

7                   MR. WHEATLAND: All right, fine. Thank  
8 you.

9 Whereupon,

10                                   GARY RUBENSTEIN  
11 was recalled as a witness herein, and having been  
12 previously duly sworn, was examined and testified  
13 further as follows:

14                                   DIRECT EXAMINATION

15 BY MR. WHEATLAND:

16                   Q     Then skipping the foundational  
17 questions, Mr. Rubenstein, do you have any changes  
18 or clarifications to your testimony here today?

19                   A     No, I do not.

20                   Q     Would you please summarize your  
21 testimony?

22                   A     Yes. The analyses that we performed  
23 indicate that the visible water vapor plumes from  
24 both the cooling towers and heat recovery steam  
25 generators associated with this project would

1 result in no significant visual impacts.

2 And that is a conclusion that is  
3 consistent with the fundamental conclusion that  
4 staff has reached in this proceeding.

5 That completes the summary of my  
6 testimony.

7 MR. WHEATLAND: All right. And I did  
8 overlook the fact that we have a panel here. Mr.  
9 McLucas is on our panel, as well. He's been  
10 previously sworn.

11 Mr. Priestley has not. So, could we  
12 have Mr. Priestley sworn in, please.

13 Whereupon,

14 JIM McLUCAS

15 was recalled as a witness herein, and having been  
16 previously duly sworn, was examined and testified  
17 further as follows:

18 Whereupon,

19 THOMAS PRIESTLEY

20 was called as a witness herein, and after first  
21 having been duly sworn, was examined and testified  
22 as follows:

23 DIRECT EXAMINATION

24 BY MR. WHEATLAND:

25 Q Now, have you had a chance to review the

1 Energy Commission Staff testimony on this subject?

2 MR. RUBENSTEIN: Yes, I have.

3 MR. WHEATLAND: And could you please  
4 summarize your response to their testimony as it  
5 relates to the applicant's direct testimony?

6 MR. RUBENSTEIN: Yes. I have four  
7 principal concerns with the staff's testimony.  
8 First relates to the modeling techniques that were  
9 used by the staff. Although in the end we have  
10 reached exactly the same conclusion as the staff  
11 has regarding the significance of the plume  
12 impacts, which is to say there are no significant  
13 impacts, I believe it important to make clear for  
14 the record that I continue to have substantial  
15 concerns about the modeling techniques that the  
16 staff is using.

17 In particular, I believe that the  
18 staff's modeling techniques over-predict, and in  
19 some cases, significantly over-predict plume  
20 dimensions that they depict.

21 In addition, I believe that their  
22 modeling techniques contain compensating errors  
23 regarding the calculation of plume frequency  
24 which, although in some cases can lead to results  
25 that are consistent with ours, in other cases can

1 lead to results that are dramatically different.

2 It's my understanding that the staff has  
3 recently, and by that I mean within the last two  
4 months or so, identified some errors in their  
5 modeling techniques, and has corrected them.

6 It is not clear to me whether their  
7 testimony in this proceeding reflects the  
8 correction of those errors.

9 And we have not had the opportunity to  
10 review in detail the corrected version of their  
11 model to see whether they've corrected the errors  
12 that we believe we've identified.

13 Again, the bottomline conclusion in this  
14 particular case, both our conclusion and the  
15 staff's conclusion, is that there are no  
16 significant impacts.

17 But to the extent that the discussion  
18 veers in other directions this morning, I want to  
19 make it very clear that we reached that conclusion  
20 using very different techniques. And I'd have  
21 some substantial concerns about the techniques  
22 they used. I'm not going to go into detail with  
23 them, because it will sound even more confusing  
24 that the discussion you heard about photochemistry  
25 last night. But I'm prepared to do that if there

1 are questions that arise.

2 The second concern I have about the  
3 staff's testimony has to do with the significance  
4 criteria that the staff applies. Again, in this  
5 particular case we reached the same conclusion,  
6 that there are no significant impacts.

7 However, I've reviewed the significance  
8 criteria the staff have used in a number of  
9 different licensing proceedings before this  
10 Commission, and those criteria vary widely from  
11 case to case.

12 In addition, I believe that the  
13 significance criterion that the staff is using in  
14 this particular case is mathematically flawed.  
15 Their calculation suggests that you take the  
16 number of plumes that are predicted to occur  
17 during wintertime months, during hours when it's  
18 not raining, when there's no fog, and when there  
19 is no significant cloud cover.

20 And you divide that number by the number  
21 of hours during winter months when there is no  
22 rain, no fog and no significant cloud cover.

23 HEARING OFFICER WILLIAMS: Mr.  
24 Rubenstein, let me ask you a question. Is this  
25 more or less a theoretical dispute between

1 applicant and staff? I mean, if there is no  
2 disagreement about the impacts, why is it  
3 necessary to discuss methodology and theoretical  
4 differences?

5 MR. RUBENSTEIN: Because despite the  
6 fact that there were no significant impacts, the  
7 staff is proposing conditions of certification  
8 that we strongly object to.

9 And my concern is that as we get to that  
10 discussion of the conditions, we will inevitably  
11 get back to some of the underlying principles.

12 I will not go into too much --

13 HEARING OFFICER WILLIAMS: Thank you.

14 MR. RUBENSTEIN: -- detail. In short,  
15 the approach that the staff uses to apply  
16 significance criteria would be the flip side of an  
17 applicant saying you should only evaluate the  
18 significance of plumes in the summer months,  
19 because the summer months is when the visibility  
20 in California's Central Valley is typically the  
21 best.

22 Looking at an analysis that way would  
23 clearly tilt the calculation mathematically to  
24 show plume frequencies that are extremely small.  
25 The staff does the obverse. They say they're only

1 going to look at plume frequency during the winter  
2 months, and only during those hours when a plume  
3 might be visible. That, in turn, biases the  
4 calculation in the opposite direction.

5 Third concern I have relates to the  
6 photosimulations that were included in the staff's  
7 testimony. In particular, if you take a look at  
8 the testimony of Dale Edwards, which is the impact  
9 analysis. And take a look at the visual plumes  
10 figure 1 and figure 2.

11 Figure 1 is intended to be a background  
12 representation of the project area. And figure 2  
13 is intended to be a simulation of the plant with a  
14 plume.

15 Figure 1, the background case, shows a  
16 sky that is mostly cloudy. And my understanding  
17 is that this particular photograph was likely  
18 taken during winter months. Winter months are the  
19 time when both we and staff agree plumes are most  
20 likely to form.

21 COMMISSIONER PERNELL: Who took the  
22 photographs?

23 MR. RUBENSTEIN: Figure 1 is KOP-1 from  
24 a data response; and I believe this particular  
25 photograph was taken by Mr. Priestley.

1 DR. PRIESTLEY: Yeah, and if I can  
2 add, --

3 COMMISSIONER PERNELL: Well, just a  
4 follow up. Was that done in the winter months?

5 DR. PRIESTLEY: Yes, it was; it was done  
6 around February.

7 COMMISSIONER PERNELL: Okay.

8 MR. RUBENSTEIN: So figure 1 is a  
9 basecase. It would be an appropriate basecase for  
10 comparison of a plume simulation because plumes  
11 tend to form during the winter months. Not  
12 necessarily at this time of day, as you can see by  
13 the color of the sky, it's at least some time in  
14 the morning. But, not near the sunrise hours when  
15 plume formation is most significant.

16 You then take a look at figure 2, which  
17 is intended to be a comparison with that basecase,  
18 you'll see an utterly cloudless sky. That  
19 photograph, I believe, was taken by the staff.  
20 And it appears to be taken at the same time as  
21 figure 3, which is identified as having been taken  
22 on August 20, 2002, during the summer.

23 I believe that figure 2 was, in fact,  
24 taken during the summer; it clearly is not the  
25 same as figure 1. And the super-position of a

1 large plume coming from the plant during the  
2 summer months is simply a physical impossibility.  
3 Neither we nor the staff have modeled that to  
4 occur.

5 Consequently, I believe that that  
6 comparison figure is misleading and does not  
7 accurately present a before-and-after case with  
8 respect to plume formation.

9 Figures 3 and 4, which refer to KOP-2,  
10 at least in this case figures 3 and 4 represent  
11 the same photograph. However, once again, these  
12 photographs were taken in August, during the  
13 summer month, as identified at the very bottom of  
14 the photograph. And, again, they depict a plume  
15 occurring on a background under circumstances that  
16 are simply not physically possible. You will not  
17 get plumes forming when you have this kind of sky  
18 condition during a summer month.

19 Consequently, I don't believe that the  
20 photosimulations of the plumes are representative  
21 at all of what could occur at the plant.

22 Finally, let me get to the point of  
23 disagreement with the staff, and that relates to  
24 the staff's proposed conditions of approval.

25 I believe that since our analysis and

1 the staff's analysis both show that there is no  
2 significant effect associated with plume  
3 formation, then no conditions are necessary.

4 In past proceedings that has been the  
5 Commission's practice, is that no conditions are  
6 necessary if plume formation is found to be  
7 insignificant. And it's only in cases where plume  
8 abatement has been found to be required, or has  
9 been proposed by an applicant, that conditions  
10 have been proposed.

11 The condition that's proposed by the  
12 staff requires the plant to be designed as  
13 proposed. And here I'm talking about the  
14 condition as opposed to the verification the staff  
15 has proposed.

16 They say, make sure you design the plant  
17 to the way you proposed it. That's something  
18 that's implicit, if not explicit, in the  
19 Commission's licensing procedures. You can't  
20 build something different than what you've applied  
21 for a license for.

22 Consequently, their condition would  
23 appear to me to be redundant. And there's no  
24 reason for an additional condition to emphasize  
25 that point here.

1           The fundamental problem, though, has to  
2 do with the verification language. The  
3 verification language that the staff has proposed  
4 goes well beyond what has been proposed in any of  
5 the proceeding I've been involved in; and in  
6 addition, I believe, goes beyond what is  
7 reasonable and practicable.

8           In particular, both conditions Plume-1  
9 and Plume-2 -- I'm sorry, I need to make sure I  
10 have the correct version; there were about three  
11 versions of the staff's conditions, and I want to  
12 make sure I direct you to the correct one.

13           Staff's proposed condition Plume-1  
14 includes a table which --

15           PRESIDING MEMBER KEESE: Can you tell me  
16 where that is? Can anybody tell me where --

17           MR. EDWARDS: We've got copies here  
18 which provides the --

19           PRESIDING MEMBER KEESE: Is it in the --

20           MR. EDWARDS: It's not in the FSA.

21           MS. DeCARLO: It's the handout passed  
22 out yesterday as staff's most recent iteration of  
23 the plume conditions.

24           PRESIDING MEMBER KEESE: Okay. I don't  
25 know that --

1 COMMISSIONER PERNELL: Could you help us  
2 out by giving us a copy?

3 PRESIDING MEMBER KEESE: Yeah.

4 MS. DeCARLO: Sure.

5 COMMISSIONER PERNELL: Because I am a  
6 little disorganized this morning.

7 MR. RUBENSTEIN: Now, Lisa, can you  
8 confirm that this is the condition that was  
9 emailed to us on October 17th? Or is this  
10 something different?

11 MS. DeCARLO: I think it might have  
12 changed slightly. The October 17th version. It's  
13 the same version we handed out yesterday. I  
14 believe you all got a copy --

15 MR. RUBENSTEIN: No, no.

16 MR. WHEATLAND: No.

17 MS. SPEAKER: We didn't see it  
18 yesterday.

19 PRESIDING MEMBER KEESE: I don't think  
20 anybody got a copy. We didn't --

21 MS. DeCARLO: I apologize, you didn't  
22 receive a copy yesterday.

23 PRESIDING MEMBER KEESE: Let's go off  
24 the record.

25 HEARING OFFICER WILLIAMS: Why don't

1 we -- yeah, let's go off the record.

2 (Off the record.)

3 HEARING OFFICER WILLIAMS: Let the  
4 record reflect that we've marked staff's visible  
5 plume document as staff exhibit 1L for  
6 identification.

7 MR. SARVEY: Can I get a copy of that,  
8 please?

9 HEARING OFFICER WILLIAMS: Mr. Sarvey  
10 needs a copy. It's entitled, visible plumes, and  
11 it contains --

12 MR. SARVEY: Oh, no, I was talking about  
13 the picture that -- I thought we were docketing a  
14 picture.

15 MR. WHEATLAND: No.

16 HEARING OFFICER WILLIAMS: No, it's the  
17 visible plumes --

18 MR. SARVEY: I have that; I'm sorry.

19 HEARING OFFICER WILLIAMS: -- condition  
20 Plume-1 and Plume-2, and verification. And it's  
21 been marked as staff exhibit 1L for  
22 identification.

23 MR. RUBENSTEIN: Looking at exhibit 1L,  
24 which is the staff's latest proposal for visible  
25 plume conditions, as I said earlier, I have no

1 objection in principle to the language of the  
2 condition, itself, because it simply requires the  
3 applicant to design the cooling tower so that the  
4 plume frequency will be the same as what was  
5 modeled by the staff, and basically to insure that  
6 the cooling tower's designed the same way as we  
7 represented to the staff.

8 The verification language, however, goes  
9 well beyond that. In particular, the verification  
10 language in Plume-1 contains a table which is  
11 labeled, design exhaust data for cooling tower.  
12 The heading for the table is mislead in and of  
13 itself.

14 Most of the parameters shown in the  
15 table are not design parameters. They are  
16 engineering values that are calculated by either  
17 the cooling tower vendor or by engineers who  
18 receive data from the cooling tower vendor.

19 And those calculated values are  
20 presented in this table, in some cases to seven  
21 significant figures. It is utterly impossible to  
22 insure that even if exactly the same cooling tower  
23 as we used as the basis for the information we  
24 provided to the staff, even if exactly the same  
25 cooling tower were to be ordered from a vendor,

1 that the vendor would come back with engineering  
2 data that matched these numbers to seven  
3 significant figures.

4 Because, as I said, these are not design  
5 parameters; this is not how a cooling tower is  
6 designed. A cooling tower is designed based on  
7 information such as the heat rejection rate that  
8 it has to deal with. And on various water-related  
9 issues. The stack gas exit temperature and the  
10 mass flow rates are not bits of information that  
11 an applicant gives to a cooling tower vendor and  
12 says, give me a cooling tower to match these  
13 numbers. That's simply not possible.

14 The verification language, if unchanged,  
15 would absolutely guarantee that no matter what the  
16 applicant did, this issue would have to be  
17 revisited during compliance phase, because there's  
18 no way that a cooling tower design is going to  
19 come back from a vendor that will exactly match  
20 these numbers.

21 That then gets back to the issues I was  
22 raising earlier, because that would mean that  
23 during the compliance phase the applicant would be  
24 forced to deal with the staff regarding issues  
25 about modeling a new cooling tower, or a different

1 cooling tower, or even the same cooling tower with  
2 numbers that are slightly different with these.  
3 But modeling in the context that there are  
4 significant disagreements between the applicant  
5 and the staff regarding the modeling methodology,  
6 regarding the significance criteria.

7 In short, I believe that because there  
8 is, in my opinion, still errors in the staff's  
9 modeling techniques, there's a lack of a  
10 standardized approved model for visible plume  
11 simulations; there's a lack of adequate peer  
12 review of the staff's modeling approach; there are  
13 inconsistent criteria that the staff used in  
14 different proceedings at different times to  
15 evaluate the significance of plumes. And I  
16 believe that there's a mathematical fallacy in the  
17 staff's significance criteria that biases the  
18 calculation towards high numbers.

19 For all of those reasons I believe it's  
20 inappropriate to establish a verification, not  
21 even a condition, but a verification requirement  
22 that forces the applicant back into this arena  
23 once again after the project's been approved.

24 As I said earlier, I do not believe that  
25 there need to be any conditions regarding physical

1 plumes, simply because both we and the staff,  
2 using completely different techniques, have  
3 reached the same conclusion which is that there's  
4 no significant impact.

5           However, if the Committee believes that,  
6 in fact, some condition is necessary to insure  
7 that the tower and the heat recovery steam  
8 generators are designed in the same manner as we  
9 have indicated, I have proposed some fairly simple  
10 conditions and verification requirements referred  
11 to as plume one, and plume two, that would achieve  
12 that objective.

13           But, again, my recommendation and my  
14 opinion is that given that we have no significant  
15 impacts here, and consistent with past Commission  
16 practice, there's no need for any conditions  
17 whatsoever.

18           And that concludes my comments regarding  
19 the staff's testimony.

20           HEARING OFFICER WILLIAMS: Mr.  
21 Wheatland, do you want to mark --

22           MR. WHEATLAND: Yes, please, I'd like to  
23 mark the one-page document that indicates plume-1  
24 and plume-2 as the applicant's next exhibit in  
25 order.

1 HEARING OFFICER WILLIAMS: Yeah, it  
2 would be 4-I-1.

3 MR. WHEATLAND: The panel is available  
4 for cross-examination.

5 PRESIDING MEMBER KEESE: Let me just ask  
6 with respect to what you've given us here, I  
7 believe I heard that a verification program such  
8 as is proposed here is something novel in the  
9 siting of power plants, as far as you're  
10 concerned?

11 MR. RUBENSTEIN: In terms of Commission  
12 decisions, I'm quite certain of that. I've never  
13 seen verification like this before.

14 PRESIDING MEMBER KEESE: Are the  
15 verifications in the one you've submitted to us,  
16 is that what you have been used to in the past,  
17 what we've been -- what staff has been proposing  
18 in the past, and has been adopted?

19 MR. RUBENSTEIN: Frankly, Commissioner  
20 Keese, I can't recall any case where there has  
21 been a condition or a verification regarding plume  
22 formation when the staff's conclusion has been  
23 there's no significant impact.

24 So this whole concept of having  
25 conditions or verifications is novel in my

1 experience.

2 PRESIDING MEMBER KEESE: Thank you.

3 Thank you.

4 COMMISSIONER PERNELL: A question,  
5 actually this is for staff. Have you had a chance  
6 to review the --

7 MS. DeCARLO: No, we have not. This  
8 is --

9 COMMISSIONER PERNELL: -- alternative  
10 language --

11 MS. DeCARLO: -- actually the first  
12 time-- no, this is the first opportunity we've  
13 had to look at this. The applicant never provided  
14 us with this in advance.

15 COMMISSIONER PERNELL: I mean if you  
16 take a minute to look at it, I bet we can -- if  
17 you agree with it -- kind of cut through the  
18 chase. But, if not, then we got to go through  
19 cross-examination and --

20 MS. DeCARLO: Yeah, I would request that  
21 we have a couple of minutes to take a look at this  
22 before we proceed with cross-examination.

23 HEARING OFFICER WILLIAMS: Okay. Also,  
24 applicant, would you review staff's revised  
25 proposed conditions of certification soils and

1 water-5, 6 and 7 that was distributed this  
2 morning, as well?

3 MR. WHEATLAND: Yes.

4 HEARING OFFICER WILLIAMS: We'll go off  
5 the record for about five minutes.

6 (Brief recess.)

7 HEARING OFFICER WILLIAMS: We're back on  
8 the record, and staff and applicant conferred over  
9 the plume conditions in an effort to reach some  
10 kind of mutual agreement.

11 Unfortunately, they were unsuccessful.  
12 So we're going to begin with staff's cross-  
13 examination. But before we do that, Commissioner  
14 Pernell has some questions.

15 COMMISSIONER PERNELL: Thank you, Mr.  
16 Williams. Mr. Rubenstein, just for my  
17 understanding, the specifications for the plant  
18 includes the cooling towers, correct?

19 MR. RUBENSTEIN: That's correct.

20 COMMISSIONER PERNELL: And you indicated  
21 that as a -- well, you indicated that the visible  
22 plume that had on 1L, that table, table plume 1,  
23 these numbers here cannot match the output of the  
24 cooling tower or -- help me understand your  
25 concern here.

1           MR. RUBENSTEIN: The numbers in table  
2 plume 1 are data that we had provided to the staff  
3 in response to a data request. The staff said  
4 tell us what the stack gas exit temperature is  
5 from the cooling tower for a range of ambient  
6 conditions. Tell us what the stack gas mass flow  
7 rate is for a range of ambient conditions.

8           Those are not design parameters. Those  
9 are answers to the questions from the staff for  
10 information they legitimately needed to model  
11 plume frequency.

12           And so we, in consultation with the  
13 cooling tower vendor, calculated those numbers for  
14 them. In order to get as great a degree of  
15 precision as possible when we did those  
16 calculation, we reported, for example, that at 45  
17 degrees Fahrenheit and 50 percent relative  
18 humidity with the duct firing turned off, the  
19 stack gas exit temperature from the cooling tower  
20 was 61.4 degrees Fahrenheit; and the mass flow  
21 rate was 7,265,005 pounds per hour --

22           COMMISSIONER PERNELL: All right, so  
23 that's a representation of the cooling tower that  
24 is proposed?

25           MR. RUBENSTEIN: That was the best

1 engineering judgment available at the time to  
2 answer the staff's question. But that is not a  
3 design parameter. We don't go to the cooling  
4 tower vendor and say, give us a cooling tower that  
5 will have a stack gas exit temperature of 61.4  
6 degrees Fahrenheit and that mass flow rate. We  
7 can't do that.

8           Instead we go to the cooling tower  
9 vendor and we will tell them, give us a cooling  
10 tower that will be able to accommodate, for  
11 example, a heat rejection rate of 1887 million  
12 Btus per hour at that ambient condition.

13           It's a fundamentally different process.

14           COMMISSIONER PERNELL: Right, but  
15 depending upon what you go and ask the vendor for,  
16 does that affect the visible plume coming out of  
17 the tower?

18           MR. RUBENSTEIN: It can.

19           COMMISSIONER PERNELL: Okay. And then  
20 let me ask you another question as it relates to  
21 the cooling towers. Can you, depending upon the  
22 operation of the plant, change the visibility of  
23 the plume?

24           In other words, you got your cooling  
25 tower; it's set. So now you got a plant operator.

1 If that plant operator does something that either  
2 increases or decreases the output, does that  
3 change the visibility of the plume?

4 MR. RUBENSTEIN: There may be some  
5 things that a plant operator can do that would  
6 affect visibility of the plume. We, in the data  
7 we provided to the staff, as I said, gave our best  
8 engineering judgment as to how the plant would, in  
9 fact, be operated.

10 But, Mr. McLucas is on the panel. I  
11 don't know if you were sworn in, though.

12 MR. McLUCAS: Yes.

13 MR. RUBENSTEIN: Okay. You might need  
14 to help me here as to whether, in fact, there are  
15 some physical changes an operator can make if the  
16 design is set, that would affect whether a plume is  
17 formed or not from the cooling tower.

18 And then we'll talk about the heat  
19 recovery steam generator second, because that's a  
20 different question.

21 MR. McLUCAS: I believe on the cooling  
22 tower, of course, it's going to be a function of  
23 the ambient conditions --

24 COMMISSIONER PERNELL: I understand  
25 that.

1           MR. McLUCAS: -- what the operator can  
2 control. The plant output will control the heat  
3 rejection, and the heat rejection, all that ends  
4 up as evaporation in the cooling towers.

5           So increasing output on the plant would  
6 increase plume; decreasing output would tend to  
7 decrease plume.

8           Within the tower, if you were to reduce  
9 the air flow generally that would increase plumes.  
10 If you were to increase the air flow, that would  
11 reduce plumes. They are constant speed fans, so  
12 you wouldn't be changing air flow, other than if  
13 you were to turn off an individual cell, what that  
14 could do is put more heat rejection in the cells  
15 that were operating.

16           Likewise, if you were to turn off a  
17 circulating water pump that would tend to reduce  
18 the effectiveness of the cooling tower, reduce the  
19 amount of heat it's transferring, and yet keep the  
20 air flow up to where it would -- reduce plume.

21           So there's limited things that the  
22 operator can do. Obviously, reducing output to  
23 reduce plume is not one that would be very  
24 favorable.

25           COMMISSIONER PERNELL: Right. So, --

1           MR. McLUCAS: But in terms of the plant  
2           output variable, I believe the analysis that we've  
3           done and that the staff has done both take into  
4           account that worst case, because we did look at  
5           the worst case operations. And so it's not like a  
6           plant operator can increase the output beyond what  
7           we've already modeled.

8           So I think we've got the plant operation  
9           bounded as a maximum for --

10          COMMISSIONER PERNELL: So your model for  
11          the visible plume is the worst case scenario, is  
12          that what you're saying?

13          MR. RUBENSTEIN: In terms of plant  
14          output, yes, I believe it's the worst case  
15          scenario. Obviously in terms of weather  
16          conditions, it's --

17          COMMISSIONER PERNELL: Right, well, we  
18          understand the weather conditions. Okay. Thank  
19          you, Mr. Williams.

20          HEARING OFFICER WILLIAMS: Staff.

21                            CROSS-EXAMINATION

22          BY MS. DeCARLO:

23                 Q        What design and operating parameters  
24                 have you proposed for the cooling tower?

25                 MR. RUBENSTEIN: Could you be more

1 specific about what you mean by design and  
2 operating parameters?

3 MS. DeCARLO: What proposal did you  
4 submit to staff regarding how the cooling tower  
5 would be designed and operated?

6 MR. WHEATLAND: Are you talking about  
7 the modeling assumptions that were provided to the  
8 staff? Or are you talking about the design of the  
9 plant as proposed in the AFC?

10 MS. DeCARLO: How about the operating  
11 and exhaust variables for the cooling tower?

12 MR. RUBENSTEIN: Those are not designed.  
13 The variables that we provided to the staff for  
14 use in their modeling analysis is the same  
15 variables that we used in our modeling analysis;  
16 are identified in the April 3, 2002 revised  
17 visible water vapor plume analysis that we  
18 provided.

19 In terms of the design parameters for  
20 the cooling tower, they're located, I believe, in  
21 two places. One is in the -- sorry, my AFC just  
22 self-destructed here.

23 One set of parameters is included in  
24 table 8.1A-3 of the AFC, which includes cooling  
25 tower parameters that are relevant to the air

1 emissions calculations. And so same parameters  
2 also apply to the plume calculations.

3 There is also another table in the AFC  
4 which identifies the stack parameters that were  
5 used for dispersion of the cooling tower. That's  
6 table 8.1B-5. And, again, those parameters apply  
7 to the visible plume analysis as well as to the  
8 air emissions analysis.

9 The remaining data that were provided to  
10 the staff in the April 3rd filing were calculated  
11 from these other parameters.

12 MS. DeCARLO: And is it your position  
13 that the applicant should not be held to the  
14 design and operating parameters proposed?

15 MR. RUBENSTEIN: It's my position that -  
16 - my opinion that the applicant should be held to  
17 design the cooling tower in the same manner as  
18 we've represented to the Commission.

19 It is also my position that it's  
20 unreasonable to expect the operation of the  
21 cooling tower to result, for example, in a mass  
22 flow that is identical to that which we have  
23 estimated to seven significant figures.

24 MS. DeCARLO: Well, if it's not  
25 identical then, how much variability would you

1 propose that staff allow regarding the proposal?

2 MR. RUBENSTEIN: The amount of  
3 variability depends on the parameter. As we had  
4 indicated to the staff last week, we believe that  
5 the cooling water circulating water flow rate  
6 should be an absolute maximum, as opposed to a  
7 precise number. Because that number is also  
8 limited with respect to air emissions.

9 And the other design parameter that we  
10 refer to was the heat rejection rate to the  
11 cooling tower. And we believe that a 5 percent  
12 tolerance on the high side for that should provide  
13 sufficient margin for design.

14 Again, the proposal would be that the  
15 heat rejection rate to the tower cannot be more  
16 than 5 percent greater than the values we provided  
17 to the staff.

18 There is no reason, in terms of plume  
19 formation, to restrict the cooling tower if the  
20 heat rejection rates were lower, because that  
21 would only diminish plume formation.

22 MS. DeCARLO: Now your initial complaint  
23 with staff's condition is that it merely requires  
24 the applicant to do what was proposed, is that  
25 correct?

1 MR. RUBENSTEIN: Yes.

2 MS. DeCARLO: Is it your testimony that  
3 the construction design of power plants never  
4 deviate from what was proposed?

5 MR. RUBENSTEIN: No.

6 MS. DeCARLO: Without any conditions  
7 whatsoever on the plumes, would you be submitting  
8 any information to enable staff to verify the  
9 consistency of the design of the cooling tower  
10 with what was proposed?

11 MR. RUBENSTEIN: I believe so. I  
12 believe in other sections of the Commission's  
13 decision, unrelated to visual plumes, there are  
14 going to be requirements that the applicant file  
15 information regarding the cooling tower design and  
16 the HRSG design.

17 MS. DeCARLO: And does that level -- do  
18 those submittals reach the level of detail staff  
19 has requested here?

20 MR. RUBENSTEIN: I've never seen some of  
21 the information the staff has requested here, even  
22 in the analysis we've proposed.

23 For example, the staff is requesting a  
24 cooling tower clogging frequency curve, and  
25 frankly, I have no idea what that is. I've never

1       seen it before, and we did not provide one to the  
2       staff for this proceeding.

3               MS. DeCARLO:  Has Calpine provided such  
4       information in other proceedings?

5               MR. RUBENSTEIN:  It's possible, but not  
6       to my knowledge.  I have never seen one of those.

7               MS. DeCARLO:  Has this size cooling  
8       tower ever been proposed in a CEC proceeding?

9               MR. RUBENSTEIN:  Are you referring to  
10       size in terms of heat rejection rate, number of  
11       cells, circulating water flow rate --

12              MS. DeCARLO:  Heat rejection rate.

13              MR. RUBENSTEIN:  I don't know.

14              MS. DeCARLO:  How about on those power  
15       plants you've worked on, has this ever been  
16       proposed?  Certified by the Energy Commission?

17              MR. RUBENSTEIN:  I don't know because  
18       the cooling tower heat rejection rate is not a  
19       parameter that we normally deal with; nor is it a  
20       parameter that the Commission Staff has normally  
21       requested.

22              MS. DeCARLO:  I'm asking about the  
23       design of the cooling tower, itself.  Have any of  
24       the power plants that you've worked on in Energy  
25       Commission proceeding have a design of this type

1 of cooling tower?

2 MR. RUBENSTEIN: I don't know.

3 MS. DeCARLO: You don't know what you've  
4 worked on before?

5 MR. RUBENSTEIN: I know exactly what  
6 I've worked on before. But, as I said, this  
7 particular parameter, which is what you've asked  
8 about, the heat rejection rate, is one that I  
9 don't generally use in licensing proceedings.

10 This proceeding has been fairly unique.

11 MS. DeCARLO: Are design specifications  
12 the only factor in determining plume size?

13 MR. RUBENSTEIN: No.

14 MS. DeCARLO: Do the conditions you  
15 propose provide any other parameters other than  
16 design factors for staff review?

17 MR. RUBENSTEIN: We've proposed several  
18 conditions over the last ten days, can you be more  
19 specific?

20 MS. DeCARLO: Sure. The most recent one  
21 I have in front of me here.

22 MR. RUBENSTEIN: And then your question  
23 again was? About that?

24 MS. DeCARLO: Does this provide for  
25 review of anything other than design factors?

1 HEARING OFFICER WILLIAMS: When you say  
2 this, are you referring to applicant's 4R-2?

3 MS. DeCARLO: Yes. I'm sorry.

4 MR. RUBENSTEIN: It provides for CPM  
5 review of the final design specifications for the  
6 cooling tower portion of those specifications that  
7 are related to plume formation, that's all that it  
8 requires.

9 MS. DeCARLO: And it doesn't lay out  
10 what exactly those design specifications will be,  
11 does it?

12 MR. RUBENSTEIN: No, it does not.

13 MS. DeCARLO: And does it give staff any  
14 ability whatsoever to reject a proposed design for  
15 lack of compliance with the proposal?

16 MR. RUBENSTEIN: It doesn't give the  
17 staff any unique ability in the context of these  
18 conditions, however I am assuming, perhaps  
19 incorrectly, that in other portions of the  
20 Commission's decision the staff will have the  
21 ability to raise questions if, in fact, the plant  
22 is not designed as it has been represented to the  
23 Commission. So I would put that in the same  
24 category.

25 For example, if someone came in and said

1       they were going to put in a 300 megawatt gas  
2       turbine instead of 180 megawatt gas turbine, I  
3       imagine that there are other conditions either  
4       regarding project description or engineering that  
5       would insure that the staff could take compliance  
6       action to insure that deviation did not occur.

7               MS. DeCARLO:  And what would that  
8       compliance action consist of?

9               MR. RUBENSTEIN:  I don't know.  You'd  
10       have to ask someone on the Commission as to what  
11       that compliance action would be.

12              MS. DeCARLO:  Well, you're suggesting  
13       that there are other alternatives for enforcement,  
14       and I'm just trying to figure out what you mean by  
15       that, what specifics.

16              MR. RUBENSTEIN:  Well, you can interpret  
17       that as a lay answer.  I'm assuming that if  
18       someone tried to build a 300 megawatt turbine  
19       instead of a 200 megawatt turbine, that the  
20       Commission's action would be very swift.

21              MS. DeCARLO:  But you're not allowing  
22       the CPM to make that action here.  You're -- are  
23       you suggesting that staff take this to the full  
24       Commission for their decision?

25              MR. RUBENSTEIN:  No, what I'm saying is

1 that I believe there are other conditions that  
2 would give the Commission Staff the same authority  
3 in the case of a cooling tower design change as  
4 they have in the event of a turbine size change.

5 MS. DeCARLO: But you can't point to any  
6 specific conditions that --

7 MR. RUBENSTEIN: No.

8 MS. DeCARLO: -- those would be? Okay.

9 MR. RUBENSTEIN: No.

10 MS. DeCARLO: That's all the cross-  
11 examination.

12 HEARING OFFICER WILLIAMS: Thank you.  
13 Any redirect?

14 MR. WHEATLAND: Can we go off the record  
15 for a second, please.

16 HEARING OFFICER WILLIAMS: Off the  
17 record.

18 (Off the record.)

19 HEARING OFFICER WILLIAMS: Mr. Sarvey,  
20 cross-examination?

21 CROSS-EXAMINATION

22 BY MR. SARVEY:

23 Q From my understanding from your  
24 testimony, both you and staff concluded there will  
25 be visible plumes, is that correct?

1 MR. RUBENSTEIN: That's correct.

2 MR. SARVEY: What you disagree on is  
3 over the frequency and the size, or just the  
4 frequency?

5 MR. RUBENSTEIN: I think we have  
6 disagreements on both the size and the frequency,  
7 but we agree on the conclusion that using either  
8 of our analyses the impacts are less than  
9 significant.

10 MR. SARVEY: Okay. Is this a reasonable  
11 simulation of the plume, or is this a rejected?

12 HEARING OFFICER WILLIAMS: Would you  
13 state what you're holding up there, Mr. Sarvey?

14 MR. SARVEY: Oh, I'm sorry. KOP-5  
15 visual resources figure 9.

16 MR. RUBENSTEIN: That was replaced by  
17 the staff. That's the staff simulation --

18 MR. SARVEY: Right.

19 MR. RUBENSTEIN: They replaced it. I  
20 have never, myself, seen a plume from any power  
21 plant that looks like that.

22 MR. SARVEY: Okay. So is this a  
23 reasonable --

24 MR. RUBENSTEIN: I'm sorry, Bob, I need  
25 to clarify that. I have seen a plume like that at

1 a coal-fired power plant equipped with a wet  
2 scrubber in Hawaii on a hot, humid day.

3 MR. SARVEY: I can imagine. Okay, this  
4 is visible plumes figure 2, KOP-1. So this is a  
5 reasonable simulation of the plume?

6 MR. RUBENSTEIN: Not in my opinion.

7 MR. SARVEY: But in staff's opinion?

8 MR. RUBENSTEIN: You'd have to ask them.

9 MR. SARVEY: Okay, I'll ask --

10 MR. RUBENSTEIN: They presented --

11 MR. SARVEY: I'm sorry, I'm sorry.

12 MR. RUBENSTEIN: -- that simulation, but  
13 again, I've never seen a plume like that, and I  
14 don't believe it's an accurate representation of  
15 either the background in which a plume would  
16 occur, or of the density of the plume, itself.

17 MR. SARVEY: Do you have an accurate  
18 representation of what you feel this plume's going  
19 to look like?

20 MR. RUBENSTEIN: Not with me. I have  
21 taken photographs of plumes in other cooling  
22 towers and they don't look anything like that.

23 MR. SARVEY: So, in this proceeding, as  
24 evidence the applicant has not introduced any  
25 visual simulations of their plume, is that

1 correct?

2 MR. RUBENSTEIN: That's correct.

3 MR. SARVEY: So, in absence of the  
4 staff's -- I mean the applicant's visual plume  
5 simulation the only simulation we have in evidence  
6 is the staff's, correct?

7 MR. RUBENSTEIN: In my opinion the only  
8 evidence you have is the inaccurate simulation of  
9 the staff's.

10 MR. SARVEY: Okay, I'll accept that.  
11 But, this is the only -- this is the only  
12 simulation we have of a plume. Okay.

13 Now, you stated that the staff's plume  
14 analysis was inaccurate. And you have not,  
15 yourself, provided a plume -- a simulation of the  
16 plume. How can either you or the staff, if you  
17 feel that this is inaccurate, say that the impacts  
18 from this plume are insignificant, when you do not  
19 have a representative model of the plume?

20 MR. RUBENSTEIN: You don't need to do a  
21 photosimulation to evaluate the frequency with  
22 which the plume will form, or to evaluate the  
23 dimensions of the plume.

24 In the analysis that I referred to  
25 earlier and in my testimony it was an analysis

1       dated April 3, 2002, we provided a detailed  
2       description of the expected frequency and  
3       dimensions of visible water vapor plumes from both  
4       the cooling tower and the heat recovery steam  
5       generators.

6               As well, we proposed criteria for  
7       evaluating the significance of those plumes, and  
8       concluded, based on the data in that analysis,  
9       that neither the plume frequency nor the  
10      dimensions would rise to a level of significance.

11             MR. SARVEY:  Doesn't your determination  
12      of level of significance have anything to do with  
13      the background that the plume is obscuring?  Or  
14      are you just talking about the size and dimension  
15      of it?  There's some visual aspects, the impact to  
16      the background, do you have any analysis related  
17      to that?

18             MR. RUBENSTEIN:  Yes, that's all  
19      included in the April 3rd filing.

20             MR. SARVEY:  Okay.  And without a visual  
21      simulation, and by your testimony we don't have an  
22      accurate simulation of this plume, how can you  
23      determine that there is no significant impact to  
24      the background view for people that live east of  
25      this facility?

1 MR. RUBENSTEIN: Mr. Sarvey, as I said  
2 earlier in my testimony, the simulation you're  
3 holding up is not physically possible, because it  
4 appears to show a wintertime plume on a summer  
5 background.

6 The answer to your question, which I  
7 believe I've given before, is that you don't need  
8 to do a plume simulation to evaluate significance.  
9 And the significance that we evaluated was based  
10 on the frequency and the dimensions of the plumes,  
11 as well as the existing visual character of the  
12 area and the scenes that might be affected.

13 Now, all of that is discussed in the  
14 April 3rd filing.

15 MR. SARVEY: All right, but without the  
16 modeled plume that you're saying exists, how can  
17 you say that that plume will not impact this  
18 viewshed?

19 MR. RUBENSTEIN: We modeled the plume,  
20 Mr. Sarvey. What we didn't do is put it onto a  
21 photograph.

22 MR. SARVEY: You didn't do what?

23 MR. RUBENSTEIN: We didn't --

24 MR. SARVEY: Put it on the record?

25 MR. RUBENSTEIN: -- put it onto a

1 photograph.

2 MR. SARVEY: You modeled it, but you  
3 didn't put it on a photograph.

4 MR. RUBENSTEIN: The modeling results  
5 are included in the April 3rd filing.

6 MR. SARVEY: So this is -- I said it  
7 before, this is the only thing we have on  
8 evidence. Okay.

9 Now, do you live in San Joaquin County?

10 MR. RUBENSTEIN: No, I don't.

11 MR. SARVEY: Do you live east of the  
12 project site? I should say do you live east near  
13 the project site.

14 MR. WHEATLAND: I'm going to object to  
15 the question.

16 HEARING OFFICER WILLIAMS: Where are you  
17 going, Mr. Sarvey?

18 MR. SARVEY: Can you identify any other  
19 plumes in the project area?

20 MR. RUBENSTEIN: Yes. That's discussed  
21 in the April 3rd filing. And in particular  
22 there's a table, table 10, on page 12 which shows  
23 the frequency of agricultural burning in San  
24 Joaquin County for the three-year period between  
25 1997 and 1999.

1           And it shows that ag burning which, in  
2 my professional experience, definitely generates  
3 plumes, occurs on an average of 276 days per year.

4           HEARING OFFICER WILLIAMS: Mr.  
5 Rubenstein, is there an exhibit number on that  
6 document that you've been referring to? The April  
7 3rd filing?

8           MR. RUBENSTEIN: Yes.

9           MR. SARVEY: Let me restate my question.

10          HEARING OFFICER WILLIAMS: Wait a  
11 second, Mr. Sarvey, let's --

12          MR. SARVEY: Okay.

13          HEARING OFFICER WILLIAMS: -- sort out  
14 what he said referring to -- in response to your  
15 question.

16          HEARING OFFICER WILLIAMS: Two triple D.  
17 Thank you. You may continue, Mr. Sarvey.

18          MR. SARVEY: Can you identify any  
19 industrial facilities in the project area that are  
20 emitting plumes?

21          MR. RUBENSTEIN: I believe when we  
22 discussed that in the April 3rd filing we did not  
23 identify any industrial facilities that emit  
24 plumes of a sufficient size to impact the visual  
25 quality of the area.

1 MR. SARVEY: Have you observed any  
2 agricultural plumes in the area, as well?

3 MR. RUBENSTEIN: Have I?

4 MR. SARVEY: Yeah.

5 MR. RUBENSTEIN: Oh, yes.

6 MR. SARVEY: Do you consider Mount  
7 Diablo and the surrounding range a scenic  
8 resource?

9 MR. RUBENSTEIN: I'd have to defer that  
10 to Mr. Priestley; you're getting outside the range  
11 of visible plumes.

12 MR. SARVEY: I'm sorry.

13 DR. PRIESTLEY: Yeah, in general, yes.

14 MR. SARVEY: Are there any scenic  
15 highways that cross near the project area?

16 DR. PRIESTLEY: Yes.

17 MR. SARVEY: And these are designated  
18 scenic highways, correct?

19 DR. PRIESTLEY: Yes, they are.

20 MR. SARVEY: Mr. Priestley, were you  
21 present when I cross-examined the manager from  
22 TriMark Development?

23 DR. PRIESTLEY: No, I was not.

24 MR. SARVEY: Were you here when I cross-  
25 examined Adolph Martinelli?

1 DR. PRIESTLEY: That was yesterday?

2 MR. SARVEY: Yes.

3 DR. PRIESTLEY: I was here for  
4 yesterday's testimony.

5 MR. SARVEY: Okay, thank you. Gary, has  
6 this equipment configuration ever been used by  
7 Calpine before?

8 MR. RUBENSTEIN: I don't mean to split  
9 hairs, Bob, but there are many aspects of this  
10 plant, and I'm not quite sure what it is you're  
11 referring to.

12 MR. SARVEY: The specific HRSG, the  
13 turbines you're proposing, do you have a facility  
14 in operation at this time, those exact components?

15 MR. RUBENSTEIN: The gas turbines, the  
16 7FB models, those specific models are not in  
17 operation at any Calpine facility.

18 The heat recovery steam generators are  
19 all custom designed for an individual project, and  
20 so by definition, they're always unique.

21 MR. SARVEY: Thank you.

22 MR. RUBENSTEIN: However, they're  
23 provided by vendors who have designed similar  
24 HRSGs before.

25 MR. SARVEY: Have you ever modeled a

1 facility with the equipment that you are proposing  
2 for a visible plume?

3 MR. RUBENSTEIN: Yes, that was the  
4 analysis that I was referring to as the April 3rd  
5 filing.

6 MR. SARVEY: Any project that's  
7 currently operating?

8 MR. RUBENSTEIN: Let me make sure I  
9 understand your question --

10 MR. SARVEY: With the -- well, I  
11 guess --

12 MR. RUBENSTEIN: -- have we modeled --

13 MR. SARVEY: I'm sorry, Gary, this is a  
14 stupid question because I already asked you and  
15 you said you didn't have the equipment  
16 configuration so you couldn't possibly have ever  
17 modeled it. So, I apologize.

18 MR. RUBENSTEIN: Okay. We have modeled  
19 existing plants before, but not --

20 MR. SARVEY: Yeah, I'm sorry, Gary.

21 MR. RUBENSTEIN: -- this particular  
22 design. Okay.

23 MR. SARVEY: What weather conditions  
24 have caused the worst case plume?

25 MR. RUBENSTEIN: Typically those would

1 be cold ambient conditions with extremely high  
2 humidity. Typically conditions associated with  
3 the formation of fog in the Central Valley.

4 MR. SARVEY: Have you ever seen the  
5 plumes from the Tracy Biomass Plant?

6 MR. RUBENSTEIN: I believe I have. Not  
7 in connection with this project.

8 MR. SARVEY: Have you ever observed  
9 these plumes from east of the Tracy Biomass Plant?

10 MR. RUBENSTEIN: Not that I can recall.

11 MR. SARVEY: Thank you, I'm through.

12 HEARING OFFICER WILLIAMS: Thank you,  
13 Mr. Sarvey. Redirect?

14 MR. WHEATLAND: Yes, a couple questions.

15 REDIRECT EXAMINATION

16 BY MR. WHEATLAND:

17 Q Ms. DeCarlo asked you questions  
18 regarding other provisions of the proposed  
19 certification by the staff regarding enforcement  
20 of conditions of certification on the plant  
21 design. Do you wish to augment your answer in  
22 that area?

23 MR. RUBENSTEIN: Yes. There is a  
24 general discussion of the Commission's enforcement  
25 authority in the final staff assessment at page 8-

1 13, which cites to provisions in the Public  
2 Resources Code sections 25534 and 25900. And the  
3 staff assessment goes on to indicate that the  
4 Commission can amend or revoke the certification  
5 for a facility or impose a civil penalty for any  
6 significant failure to comply with the terms of  
7 the Commission's decision.

8 MR. WHEATLAND: You were also asked  
9 several questions about the staff's proposed  
10 table. Does this table merely require that the  
11 plant will not cause a significant plume impact,  
12 or does it do something more than that?

13 HEARING OFFICER WILLIAMS: Which  
14 proposed table?

15 MR. WHEATLAND: This is the table plume  
16 1 in exhibit 1L.

17 MR. RUBENSTEIN: It goes beyond that.  
18 As I've said several times this morning, I don't  
19 have a problem in principle with the condition.  
20 The problem arises with the verification.

21 And again, by way of example, table  
22 plume 1, looking at the first case on the far left  
23 of the table, says that the stack gas temperature  
24 has to be 61.4 degrees Fahrenheit or it will be  
25 considered some kind of a deviation from what the

1 staff has previously analyzed.

2 That means that 61.5 degrees would be a  
3 deviation. It means 61.3 degrees would be a  
4 deviation.

5 COMMISSIONER PERNELL: But, Mr.  
6 Rubenstein, these are your numbers, right?

7 MR. RUBENSTEIN: These were our best  
8 estimates. If the condition was worded for stack  
9 gas temperature in terms of plume formation --  
10 this might sound counterintuitive, but lower is  
11 better. If there is a lower stack temperature for  
12 the cooling tower, that means that there is less  
13 moisture contained in that plume.

14 And consequently there is less potential  
15 for the formation of a plume, everything else  
16 being equal.

17 Consequently, if you wanted to insure  
18 that a particular design cooling tower did not  
19 result in a higher frequency of plumes, you would  
20 want to set a maximum on the temperature, not a  
21 minimum.

22 And then if you wanted to take into  
23 account the fact that the final design might be  
24 somewhat different than the engineering  
25 calculations that were done originally, you might

1 say that the stack temperature could not exceed  
2 the estimated value by more than 10 percent.

3 So, for example, rather than saying for  
4 this particular parameter that the temperature has  
5 to be 61.4 degrees Fahrenheit, you would say that  
6 the stack temperature can't be any more than 10  
7 percent above the 61.4 degrees Fahrenheit.

8 But that's not what the staff is doing.  
9 It's like saying that the speed limit is 50 miles  
10 per hour, but characterizing it as the speed  
11 limit, when you're driving is 50, and you're in  
12 violation if it's 50.1 and you're in violation if  
13 you're 49.9.

14 And I don't think that's realistic. I  
15 don't think that's reasonable.

16 HEARING OFFICER WILLIAMS: But that  
17 would seem easy to fix. I mean, even your  
18 suggestion that there be variables, plus or minus,  
19 or whatever. Why can't there be an agreement on  
20 that? That seems pretty standard that you would  
21 include some flexibility in the numbers.

22 MR. RUBENSTEIN: I don't disagree with  
23 that in principle, Mr. Williams. We have  
24 submitted other proposals to the staff that looked  
25 at other parameters that had some flexibility

1 built in, and those were rejected.

2 HEARING OFFICER WILLIAMS: Staff, can  
3 you address that question about why you are not  
4 going to include some flexibility within operating  
5 parameters?

6 MS. DeCARLO: Actually, it's our  
7 argument that there is some flexibility included  
8 in our condition. I'm going to let Will Walters  
9 speak to that.

10 Actually, he hasn't been sworn in yet,  
11 so can --

12 HEARING OFFICER WILLIAMS: Okay.

13 MS. DeCARLO: -- we address that in our  
14 direct, and then if we haven't addressed it  
15 thoroughly enough --

16 HEARING OFFICER WILLIAMS: Okay, okay.

17 MS. DeCARLO: -- we can come back to  
18 your question?

19 HEARING OFFICER WILLIAMS: Thank you.

20 MR. WHEATLAND: We have no further  
21 redirect.

22 COMMISSIONER PERNELL: I have one  
23 question. Mr. Rubenstein, I'm having a bit of a  
24 disconnect. And I know that you can help me with  
25 this.

1           So let me jus be frank. Do the staff  
2 have the final design specifications for the  
3 cooling tower?

4           MR. RUBENSTEIN: They have the design  
5 specifications for the cooling tower that were  
6 available at the time that we prepared the  
7 analyses. As I'm sure you're aware, once the  
8 plant is approved, and this is true for all  
9 plants, they proceed to a stage called final  
10 engineering where all of the values are refined.  
11 And so there will be one more design iteration.

12           Of course, the Commission does not have  
13 that now, but it is those final engineering  
14 specifications that will be submitted post-  
15 certification.

16           COMMISSIONER PERNELL: Right. And one  
17 of the conditions is that they review and approve  
18 whatever that final specification is. And you  
19 have objections to that, is that correct?

20           MR. RUBENSTEIN: No, I have objections  
21 to their review of the specific numbers and the  
22 specific parameters that they've included in this  
23 verification.

24           As I've said, in the language that I  
25 handed out that was marked as exhibit 4I-2, if the

1 Committee believes that some review is  
2 appropriate, I propose that language. I did not  
3 propose specific design specifications such as  
4 heat project rate or other things, because that is  
5 one of the elements of the continuing disagreement  
6 that we're having with the staff as to exactly  
7 what it is that needs to be provided.

8 COMMISSIONER PERNELL: All right. I'm  
9 looking at the two -- maybe I should put my  
10 glasses on -- I'm looking at what is staff's L1  
11 and their verification -- 1L -- and what they're  
12 saying in their verification is that for review  
13 and approval and approve the final design  
14 specifications for the cooling tower.

15 And what you say is, in your compromise  
16 language, is that they review the final design,  
17 and you leave out the word approval.

18 So I guess my question is, now that we  
19 know that there isn't a final design to the  
20 cooling towers, what staff is saying is we need to  
21 see that and approve it so that we can -- I'm  
22 assuming what staff is saying -- that they need to  
23 see and approve that, and not just see it and let  
24 it go if it's way out of whack.

25 And the other thing I might bring up is

1 your analogy of, you know, 150 megawatt versus a  
2 300 megawatt is not even apples and oranges there.  
3 It's probably more, you know, apples and corn.  
4 Because that's way out of whack, and not just the  
5 Energy Commission, but the Air Board and everybody  
6 else would catch that. So I think it's out of  
7 balance.

8 And what I'm trying to get to is if  
9 there's some concern about the final  
10 specifications then we need to address those. And  
11 if staff doesn't have a final specifications, then  
12 they need to have some type of verification to see  
13 that.

14 That's just my opinion. So, is it your  
15 testimony that we don't have the final -- staff  
16 doesn't have the final specifications for the  
17 cooling tower?

18 MR. RUBENSTEIN: No, that's not my  
19 position.

20 COMMISSIONER PERNELL: Okay.

21 MR. RUBENSTEIN: I'm a bit reluctant to  
22 do this, but amongst the flurry of emails that we  
23 exchanged with the staff in the last week, we did  
24 propose a verification language that included a  
25 table of parameters.

1           And there were a table of design values  
2           for the cooling tower and most particularly heat  
3           rejection rate and the circulating water flow  
4           rate. And in that language, rather than making  
5           the general statement that the Commission Staff  
6           could approve the design of the cooling tower,  
7           which given the nature of the dispute we thought  
8           was too vague, we proposed language that would  
9           allow the CPM to confirm that the cooling tower  
10          design specifications, and I mean true design  
11          specifications, in the table were not exceeded.

12                   And the staff rejected that. So we --

13                   COMMISSIONER PERNELL: Is true design  
14           defined as final design?

15                   MR. RUBENSTEIN: I'm sorry, by true  
16           design what I meant is parameters that we provide,  
17           that the applicant provides to a cooling tower  
18           vendor, as opposed to the calculated values that  
19           the staff is talking about.

20                   Just to be very specific, what we were  
21           talking about were the heat rejection rate and the  
22           circulating water flow rate as being the design  
23           parameters which included a margin of tolerance.  
24           And we propose to have the CPM have the ability to  
25           reject the cooling tower if either of those

1 parameters was exceeded.

2 That's in contrast --

3 COMMISSIONER PERNELL: Okay.

4 MR. RUBENSTEIN: -- I'm sorry.

5 COMMISSIONER PERNELL: I'm sorry, I  
6 think I understand.

7 MR. RUBENSTEIN: Okay.

8 COMMISSIONER PERNELL: Thank you.

9 HEARING OFFICER WILLIAMS: Staff, would  
10 you like to respond to --

11 MS. DeCARLO: Recross or --

12 HEARING OFFICER WILLIAMS: No, just to  
13 Mr. Rubenstein's comment that there was an offer  
14 of some design, delineation; it was rejected by  
15 staff.

16 MS. DeCARLO: Yeah, we can respond to  
17 that in our direct if that would be appropriate?

18 HEARING OFFICER WILLIAMS: Okay, fine.  
19 You may proceed.

20 RE-CROSS-EXAMINATION

21 BY MS. DeCARLO:

22 Q Okay. Doesn't the enforcement provision  
23 you've identified allow enforcement only of the  
24 terms and conditions of the decision?

25 MR. RUBENSTEIN: Yes, it does.

1 MS. DeCARLO: Are you aware that the  
2 section 24900 that's specified in that enforcement  
3 provision applies to injunctions issued by a  
4 court?

5 MR. RUBENSTEIN: No, because it was in a  
6 sentence that referred to the Commission's legal  
7 authority. I didn't realize it was referring to  
8 someone else's legal authority.

9 MS. DeCARLO: So it's not your testimony  
10 that if staff has some concerns that the proposed  
11 project isn't designed as proposed, then our only  
12 remedy would be to go to the courts for an  
13 injunction?

14 MR. RUBENSTEIN: No, that's not my  
15 testimony.

16 MS. DeCARLO: Okay, that's all.

17 HEARING OFFICER WILLIAMS: Anything  
18 further?

19 MR. WHEATLAND: No, nothing further,  
20 thank you.

21 HEARING OFFICER WILLIAMS: Okay. Staff,  
22 do you want to proceed to direct?

23 MS. DeCARLO: Yes, we have two witnesses  
24 for visible plumes, Dale Edwards and William  
25 Walters, and they both need to be sworn in.

1 Whereupon,

2 DALE EDWARDS and WILLIAM WALTERS

3 were called as witnesses herein, and after first

4 having been duly sworn, were examined and

5 testified as follows:

6 DIRECT EXAMINATION

7 BY MS. DeCARLO:

8 Q Mr. Edwards, can you please state your  
9 name for the record.

10 MR. EDWARDS: Dale Edwards, that's  
11 D-a-l-e, Edwards, E-d-w-a-r-d-s.

12 MS. DeCARLO: Did you prepare the  
13 testimony entitled visible plumes impact analysis  
14 in the final staff assessment marked as exhibit 1?

15 MR. EDWARDS: Yes, I did.

16 MS. DeCARLO: Was a statement of your  
17 qualifications attached to this testimony?

18 MR. EDWARDS: Yes, it was.

19 MS. DeCARLO: What is your job title?

20 MR. EDWARDS: I'm Supervisor of the  
21 Visual, Cultural and Socioeconomics Unit.

22 MS. DeCARLO: Could you briefly state  
23 your education and experience as it pertains to  
24 visible plumes analysis?

25 MR. WHEATLAND: We'll stipulate to his

1 qualifications.

2 MS. DeCARLO: Okay. Mr. Walters, can  
3 you please state your name for the record.

4 MR. WALTERS: William Walters,  
5 W-i-l-l-i-a-m W-a-l-t-e-r-s.

6 MS. DeCARLO: And are you sponsoring the  
7 testimony entitled visible plumes modeling results  
8 that was contained in the final staff assessment  
9 marked as exhibit 1?

10 MR. WALTERS: Yes.

11 MS. DeCARLO: And do the opinions  
12 contained in your testimony represent your best  
13 professional judgment?

14 MR. WALTERS: Yes.

15 MS. DeCARLO: Mr. Edwards, what did you  
16 analyze in accordance with this project?

17 MR. EDWARDS: Being that this is a  
18 visible plume analysis, this analysis or my  
19 analysis was based strictly on information  
20 primarily provided from Will Walters' plume  
21 modeling analysis, which was derived from  
22 information obtained from the applicant regarding  
23 the size and operational characteristics of the  
24 plume as -- of the cooling tower and HRSG systems  
25 as proposed.

1           MS. DeCARLO: Can you please summarize  
2 your analysis?

3           MR. EDWARDS: The plume analysis, as I  
4 just mentioned, was primarily focused on looking  
5 at the frequency of the plumes that would occur  
6 from the HRSG and the cooling -- from the heat  
7 recovery steam generators and the cooling tower,  
8 and also the impacts of the visible plumes from  
9 those two systems.

10           Based on the information that was  
11 provided from the plume modeling analysis from Mr.  
12 Will Walters -- Will Walters, as I call him, the  
13 HRSG frequency is 11.8 percent; and the cooling  
14 tower frequency was 16.5 percent. These are the  
15 percentage of hours out of that November through  
16 April daylight, no-rain, no-fog hours, and also  
17 clear weather conditions.

18           These values are greater than the  
19 staff's 10 percent frequency threshold which we  
20 use as a point of determining whether a complete  
21 impact analysis needs to be done or not.

22           So in this case, since both the HRSG and  
23 cooling tower exceeded the 10 percent threshold an  
24 analysis was done for the impacts of those two  
25 plumes.

1           Staff modeling also -- the modeling that  
2           was provided to myself also included dimensions of  
3           the plumes. And those were particularly of use  
4           for the 10 percent plume -- or the 10th percentile  
5           plume, in particular for the HRSG that was the  
6           numbers are 187 feet long and 280 feet high. And  
7           for the cooling tower, 174 feet long and 298 feet  
8           high.

9           The impact analysis was based on two key  
10          observation points that are located along Byron  
11          Bethany Road, KOP-1 being approximately .75 miles  
12          south, near Kenneman Road; and KOP-2, which is  
13          approximately two miles south, also on Byron  
14          Bethany Road looking towards the project site.

15          For both of those KOPs staff has  
16          provided both a photograph of existing condition  
17          and a simulation of the plumes as they would  
18          appear for the sizes I just described.

19          And staff's determination was, in each  
20          case, that the result of the analysis for impact  
21          was adverse, but less than significant, based on a  
22          combination of factors that I can describe later,  
23          if asked, perhaps. But I'll not do that at this  
24          point.

25          Regarding the cumulative impact

1 analysis, staff determined that the plume's  
2 contribution to the existing condition which  
3 includes the Tracy substation and all the areas'  
4 transmission lines and other water-related  
5 facilities; and also with the power plant as  
6 proposed, that the plume's contribution for  
7 cumulative impact does not result in a significant  
8 cumulative impact.

9 I can make one point regarding the  
10 photos that was raised earlier about the  
11 difference between the existing condition which  
12 shows clouds and the plume simulation which is a  
13 clear condition, staff chose the clear condition  
14 specifically because that's the weather condition  
15 that we considered as having the high contrast  
16 hours, and so therefore we would, in all cases,  
17 use a clear photo for our simulation of what we're  
18 trying to depict for the intent of our analysis.

19 And that basically covers it.

20 MS. DeCARLO: And would that clear photo  
21 represent a reasonable worst case situation?

22 MR. EDWARDS: Yes, based on at least a  
23 10 percentile plume, which is staff's standard  
24 methodology.

25 HEARING OFFICER WILLIAMS: Which exhibit

1 is that?

2 MS. DeCARLO: It's contained in the  
3 final staff assessment.

4 MR. EDWARDS: It's part of the final  
5 staff assessment.

6 MS. DeCARLO: Now, would your conclusion  
7 of less than significant impact change if the  
8 cooling tower were designed and operated  
9 differently than what was proposed?

10 MR. EDWARDS: At a certain point, yes.  
11 There is flexibility in this determination and  
12 that is made obvious by the fact that the staff's  
13 proposed condition includes most of the meat of  
14 the condition, if you will, in the verification,  
15 which gives latitude to staff and doesn't  
16 necessarily put the numbers into the category of a  
17 speed limit, more or less, that says that if you  
18 don't do this then you're in error, or you're out  
19 of compliance.

20 It is a staff determination contrary to  
21 if it were above the verification portion of the  
22 condition, and what I like to call the  
23 requirement, which would go back to the full  
24 Commission for consideration if the numbers didn't  
25 get hit on exactly.

1 MS. DeCARLO: Mr. Walters, can you  
2 please summarize your testimony?

3 MR. WALTERS: Yes, I evaluated the plume  
4 frequency and plume dimensions using for the  
5 cooling tower, using both the SACTI and the CSVP  
6 model. The CSVP model was revised. Perhaps a  
7 better description is enhanced to change some  
8 normal air quality parameters to be more explicit  
9 to plume centerline as opposed to worst case air  
10 quality type analyses.

11 And for the HRSG I evaluated the plumes  
12 again with this enhanced CSVP model.

13 The plume frequencies and plume  
14 dimensions were provided in the analysis. I would  
15 like to mention one note that through recent  
16 communication I've realized that the SACTI model  
17 was done for the high temperature case, and it  
18 should have been done for the low temperature  
19 case. The low temperature case is actually a  
20 higher heat rejection rate, so the SACTI results  
21 would be a little bit larger if they would have  
22 been done properly.

23 I didn't realize at the time when we  
24 received the data from the applicant that that  
25 data was for the high temperature case for the

1 megawatt heat rejection rate.

2 And --

3 COMMISSIONER PERNELL: Would that change  
4 your position?

5 MR. WALTERS: No, it doesn't. What it  
6 does is it would show that the two models would be  
7 closer in terms of their predicted plume sizes for  
8 the various frequencies analyzed.

9 MS. DeCARLO: Now, a lot of talk has  
10 been mentioned about the conditions. Why do you  
11 believe that these conditions are necessary in  
12 this instance?

13 MR. WALTERS: Well, there are several  
14 unique factors regarding this case. I'll start  
15 with the HRSGs. For the HRSGs for this case, the  
16 duct burners are very large, and the temperatures  
17 are very low.

18 I don't think we've certified a case  
19 with temperatures within 20 degrees of these;  
20 certainly not within 15 degrees. Or at least I  
21 haven't analyzed them that low.

22 So the combination of the low  
23 temperature and the higher moisture content, the  
24 duct burners essentially create a higher moisture  
25 content, increase the plume frequency

1 significantly from what we normally see on these  
2 large turbine projects.

3 So, what we're trying to make sure on  
4 this particular condition is those temperatures  
5 don't go any lower than what was proposed by the  
6 applicant, because the plume frequencies would go  
7 even higher.

8 Realizing that some of the initial data  
9 provided by the applicant were even much lower  
10 temperatures, as low as 135 degrees Fahrenheit for  
11 the exhaust, which they amended later, I want to  
12 make sure that we don't see temperatures like that  
13 in actual operation. Because then our analysis is  
14 not supported.

15 MS. DeCARLO: Now, the applicant earlier  
16 mentioned -- oh, I'm sorry.

17 MR. WALTERS: Now to go to the cooling  
18 tower and some of the unique factors on the  
19 cooling tower.

20 The first unique fact with the cooling  
21 tower is its size. Most of the cooling towers  
22 we've analyzed are in the 300 to 400 megawatt heat  
23 rejection range. This one's in the high 800s, and  
24 if we were to give the 5 percentile that the  
25 applicant wants, in the low 900 megawatts, so it's

1 two to two and a half times larger than any of the  
2 other cooling towers that we have analyzed, or at  
3 least certified, to date. And, again, at least  
4 ones that I have worked on, and I have been  
5 working on the cases since Mountain View that have  
6 come through the Commission.

7 The other unique part about this  
8 particular cooling tower, or maybe not unique, but  
9 design consideration that I have for wanting the  
10 conditions, the fact that the design requires or  
11 identifies very high air flow rate per amount of  
12 heat rejection.

13 And that essentially defines the exhaust  
14 temperature and how much plume is going to be  
15 formed. Essentially the lower the air flow rate  
16 the higher the temperature, the higher the  
17 moisture content, the more plume.

18 Some of the other cases that we've been  
19 analyzing, the ratios of kilogram per second per  
20 megawatt typically range between about 12 to 18 in  
21 value, and occasionally go higher. But in one  
22 case, for example, Hanford, it went higher because  
23 they were actually trying to lower the plume  
24 frequency and it was used actually for that case.  
25 Of course, that case was never built, but at least

1 when it was certified they went to a higher value,  
2 it was a little bit over 20, to abate the plumes  
3 from that -- well, actually much smaller cooling  
4 tower, since it was only about 67 megawatt versus  
5 the, you know, close to 900 megawatt that we're  
6 talking about here.

7 The numbers for this particular project  
8 for duct firing range between about 20 and 22  
9 kilogram per megawatt -- kilogram per second of  
10 air flow per megawatt heat rejection. And for no  
11 duct firing it's 33 to 35.

12 It wouldn't be that difficult for that  
13 design to change and to go back down to about 15,  
14 and the plume frequencies would increase  
15 substantially.

16 So what we're trying to do on these  
17 conditions is just make sure that our analysis and  
18 the basis for Dale's findings, you know, are  
19 correct, because the analysis actually bears out  
20 what the design is going to be, and that's what  
21 the condition is requiring. Just so that we can  
22 evaluate the design and make sure that what we  
23 have identified as a nonsignificant impact will  
24 still, in our opinion, once the final design comes  
25 out, be a nonsignificant impact.

1 MS. DeCARLO: Now, the applicant  
2 mentioned earlier a condition that they had  
3 proposed which includes some design parameters.  
4 Can you please explain why this was rejected by  
5 staff?

6 MR. WALTERS: The design parameters that  
7 the applicant identified were the water flow rate  
8 and the heat rejection. Without any corresponding  
9 way of identifying the air flow rate, there's no  
10 tie-in to the plume frequency whatsoever.

11 So there was no way for us to evaluate  
12 that. They could easily lower the air flow rate  
13 of the design and we wouldn't necessarily be  
14 looking at that, because those weren't the  
15 parameters that were provided. Without being able  
16 to identify basically the stack gas exit  
17 temperatures, based on the amount of heat per unit  
18 air, we can't really evaluate the design to make  
19 sure that is what we've evaluated to date in this  
20 case.

21 COMMISSIONER PERNELL: What would you  
22 need to evaluate that?

23 MR. WALTERS: Well, essentially the  
24 information that we've provided in the paragraph  
25 after table plume-1 in the condition, would

1 include all of the variables we would need to make  
2 sure that the design is essentially what we've  
3 been looking for before, or is essentially what  
4 they proposed.

5 COMMISSIONER PERNELL: Which is the  
6 final design specification?

7 MR. WALTERS: Right, final design  
8 specifications, which would include both the size  
9 of the cooling tower, the size being important  
10 mainly, I think, more for just the overall visual  
11 impact of the facility, but also I need to know  
12 the diameter, because that does impact the plume  
13 equations to some degree.

14 We just want to make sure design is  
15 about the same as what they provided previously.

16 But what we really need, we need the  
17 fogging frequency curves and the curve equations  
18 that were identified in that paragraph so we can  
19 evaluate the design.

20 I think the important thing to identify  
21 or to mention, we're going to evaluate the design,  
22 we're not going to remodel. We're just going to  
23 take a look at the exhaust parameters and make  
24 sure that they're in line with what we did model  
25 before. We don't have to remodel again. We just

1 need to make sure that the exhaust temperatures  
2 are essentially in line, or close to what we've  
3 looked at previously.

4 PRESIDING MEMBER KEESE: The language  
5 seems pretty clear. The project owner shall  
6 insure that each unit, that the plume frequency  
7 will not increase from the design as certified.

8 Does that give the Commission -- if they  
9 violated, when you say insure, that means if they  
10 do something differently we have an authority to  
11 do something about it?

12 MS. DeCARLO: Do you want me to answer  
13 that?

14 PRESIDING MEMBER KEESE: Yes.

15 MS. DeCARLO: Yes, but the condition,  
16 itself, needs to be specific so we know actually  
17 what noncompliance is.

18 PRESIDING MEMBER KEESE: Okay, in  
19 general. Now, the design, as certified, is that  
20 what we're talking about here? You want to know  
21 with enough specificity what the design is that we  
22 are certifying to hold them to that standard that  
23 they'll insure that it met that design? Is that  
24 what is on the table here?

25 MR. WALTERS: Well, we want to make sure

1 that the final design specifics are reasonably  
2 close to those that we have modeled, yes. I mean  
3 they have provided us --

4 PRESIDING MEMBER KEESE: I mean we've  
5 all agreed with this -- both parties have agreed  
6 to this language, applicant and staff have agreed  
7 to this language, which would seem to me to  
8 indicate that you have enforcement, as staff, to  
9 see that the insuring takes place designed as  
10 certified.

11 Is that what we're trying to clarify?

12 MR. WALTERS: Well, --

13 PRESIDING MEMBER KEESE: Are we trying  
14 to -- which part of it are we trying to work on  
15 here, the insuring or the design as certified?

16 MS. DeCARLO: Basically how to verify  
17 that they have designed it as they proposed.

18 PRESIDING MEMBER KEESE: And currently  
19 you --

20 MR. WALTERS: Currently we don't have --  
21 we don't have -- if we already had --

22 PRESIDING MEMBER KEESE: If they built  
23 it differently, you wouldn't know?

24 MR. WALTERS: -- final design parameters  
25 from the applicant, and we were okay with those

1 final design parameters, then we wouldn't be here.  
2 But we don't have the final design parameters,  
3 yet. And that's what we need to review.

4 PRESIDING MEMBER KEESE: So you're  
5 saying you're actually looking for a little more  
6 than design as certified?

7 MR. WALTERS: Well, we're looking for  
8 the parameters to match, the information --

9 PRESIDING MEMBER KEESE: The design that  
10 they submitted --

11 MR. WALTERS: The design parameters and  
12 the operating parameters based on that design.

13 PRESIDING MEMBER KEESE: And what they  
14 have submitted to us in this process so far is not  
15 sufficient for you to determine whether they've  
16 insured they met that?

17 MR. WALTERS: What they've submitted --

18 PRESIDING MEMBER KEESE: I'm trying to  
19 figure out what it is we're looking for.

20 MR. WALTERS: What they've submitted so  
21 far isn't the final design. They could change  
22 everything. And without being able to get the  
23 right information, we won't know.

24 All we're trying to do is get the  
25 information from the --

1           PRESIDING MEMBER KEESE:  Once they have  
2           given you that, is there a particular reason for  
3           monthly reports after that?  I mean if they've met  
4           the design parameters, what is the basis for  
5           monthly reports?

6           I mean I would understand an annual, you  
7           know, so that if the alarm goes up and the plume  
8           is out there 180 days a year, you know, something.  
9           We have to do --

10          MR. WALTERS:  Yeah, well, actually the  
11          way the conditions read, and there aren't any  
12          monthly reports, all we're requiring is if there's  
13          a problem that has been identified with the  
14          cooling tower, that we weren't even able to pick  
15          up after we've reviewed the design, if we have a  
16          lot of complaints, if we've been able to somehow  
17          otherwise identify the fact they're not operating  
18          it the way we think they should be, like, for  
19          example, we drive by and they appear to have all  
20          three turbines going, but only nine of the cooling  
21          tower cells are on.  You know, we know that that's  
22          something that wouldn't be something we'd expect  
23          to see --

24          PRESIDING MEMBER KEESE:  And this is not  
25          something that would come up ordinarily by the

1 compliance manager? I mean if somebody made a  
2 complaint, it wouldn't get into the process at  
3 all, unless we have specific terms?

4 MR. WALTERS: Well, what exactly -- what  
5 we're trying to do is get the specific terms so  
6 that the CPM knows what they need to do in order  
7 to be able to determine if they are or aren't in  
8 compliance, based on the complaints.

9 Because the complaints may happen even  
10 with what we consider to be insignificant plume  
11 formation. At the frequencies that we're  
12 considering insignificant someone may still have  
13 complaints. And so this provides a mechanism for  
14 the CPM to identify, no, these frequencies are  
15 within the design parameters.

16 PRESIDING MEMBER KEESE: Okay. Thank  
17 you.

18 HEARING OFFICER WILLIAMS: Commissioner  
19 Pernell has --

20 COMMISSIONER PERNELL: Are we done?

21 MS. DeCARLO: No.

22 HEARING OFFICER WILLIAMS: No, they  
23 haven't been cross-examined.

24 COMMISSIONER PERNELL: Oh. I'll wait.

25 MS. DeCARLO: We still have some more

1 direct.

2 HEARING OFFICER WILLIAMS: Okay,  
3 continue.

4 BY MS. DeCARLO:

5 Q Now, based upon today's discussion, do  
6 you have any proposed changes to plume-1 and  
7 plume-2?

8 MR. WALTERS: Yeah, we have some  
9 modifications we could make to try to -- to get  
10 the two sides a little closer together. What we  
11 would propose is in the verification we would  
12 substitute our first paragraph with their  
13 paragraph, identify in 4I-2 plume-1 with the  
14 addition of review and approve the final design,  
15 rather than just review.

16 And that we would delete the table in  
17 its entirety. And then keep the following  
18 paragraphs that identify the information that we  
19 need to review the design and the compliance part  
20 of the verification for, the operating compliance  
21 part of the verification.

22 COMMISSIONER PERNELL: Okay, you would,  
23 just so I get this, you would substitute your  
24 first paragraph on the plume-1 with theirs?

25 MR. WALTERS: With theirs, with the

1 addition of "and approve" after review on the  
2 second line -- in the verification, excuse me.

3 Yeah, this is the first paragraph in the  
4 verification.

5 So the whole sentence would be: At  
6 least 30 days prior to ordering the cooling towers  
7 the project owner shall provide to the CPM for  
8 review and approval the final design  
9 specifications of the cooling tower related to  
10 plume formation."

11 COMMISSIONER PERNELL: Okay.

12 MR. WALTERS: And then we would follow  
13 with the paragraph below the table and maintain  
14 the rest of the text.

15 PRESIDING MEMBER KEESE: Are you -- the  
16 word, the necessary, is that what you're -- that  
17 one paragraph, or the next paragraph, also?

18 MR. WALTERS: We maintain both of them.  
19 The rest of the text after the table.

20 COMMISSIONER PERNELL: What you're  
21 deleting is "the project owner shall not order the  
22 cooling tower?"

23 MR. WALTERS: No, I guess apparently we  
24 still need to keep that sentence.

25 COMMISSIONER PERNELL: Are we changing

1 anything other than the table 1?

2 MR. WALTERS: We're adding "approval" to  
3 the first paragraph, and then we are keeping it, I  
4 guess we are keeping the last sentence of our  
5 first paragraph in the verification.

6 COMMISSIONER PERNELL: Okay.

7 MS. DeCARLO: And we can provide you  
8 with a hard copy of the -- or an electronic copy,  
9 both, of the revised --

10 HEARING OFFICER WILLIAMS: I take it  
11 this is a new proposal?

12 MS. DeCARLO: It's based on the concerns  
13 expressed, in an attempt to meet halfway.

14 HEARING OFFICER WILLIAMS: Let's go off  
15 the record.

16 (Off the record.)

17 HEARING OFFICER WILLIAMS: We note the  
18 hour; it's approximately 11:23 or so, and that  
19 Chairman Keese has to leave. Commissioner Pernell  
20 will be staying.

21 And the Chairman had some remarks that  
22 he wanted to provide for guidance to the parties  
23 before he departs. So we'll do that now.

24 PRESIDING MEMBER KEESE: We received  
25 this morning staff's revised proposed conditions

1 of certification soil and water-5, 6, and 7. And  
2 I'm going to give some guidance here.

3 The Committee preliminarily feels that  
4 there are significant financial incentives for the  
5 applicant, BBID and Mountain House, and perhaps  
6 other providers/producers of recycled water to  
7 supply East Altamont Energy Center with recycled  
8 water.

9 We are preliminarily inclined, number  
10 one, to require the applicant to use all recycled  
11 water made available to them by BBID.

12 Number two, to require the applicant to  
13 use due diligence to locate additional supplies of  
14 recycled water should BBID not deliver a specified  
15 percentage of East Altamont's recycled water needs  
16 by a date certain.

17 We are not inclined to tie the hands of  
18 the parties in accomplishing the delivery of  
19 recycled water by imposing terms that BBID,  
20 Mountain House or other suppliers of recycled  
21 water are required to accept.

22 So, we make this observation as guidance  
23 for the parties in briefing on this issue.

24 HEARING OFFICER WILLIAMS: Okay, before  
25 we get back into testimony we'll take a five-

1 minute break and allow the Chairman to depart.

2 And then we'll come back.

3 MS. SARVEY: -- Mr. Chairman, for a  
4 moment, before you depart?

5 HEARING OFFICER WILLIAMS: What's the --

6 MS. SARVEY: I want to apologize to him.

7 HEARING OFFICER WILLIAMS: Oh.

8 COMMISSIONER PERNELL: On the record?

9 MS. SARVEY: I'd like to apologize, too,  
10 for my tone last night. I am sorry. I can't  
11 afford to bring my legal counsel with me. I spoke  
12 with him this morning, and he assured me that I  
13 have legal recourse for my public health and  
14 safety. I was very distraught that no one  
15 examined the health effects on my community. And  
16 a lot of my friends are dying of cancer right now,  
17 under the age of 35. And my children are very  
18 sick.

19 So, please, accept my apology. I'm  
20 sorry I can't afford to bring counsel with me.

21 PRESIDING MEMBER KEESE: No problem,  
22 thank you.

23 HEARING OFFICER WILLIAMS: Okay, we'll  
24 take a five-minute break.

25 (Brief recess.)

1 COMMISSIONER PERNELL: Everyone take  
2 their seats, please, we're about to begin.

3 HEARING OFFICER WILLIAMS: Staff, do you  
4 want to complete your examination?

5 MS. DeCARLO: Yes, we'll finish up our  
6 direct. There's an indication that we may be able  
7 to reach consensus with the applicant on the  
8 condition, so we'll reserve our direct on our  
9 subsequent proposed changes until we can finalize  
10 any consensus, if there is one.

11 MR. WHEATLAND: Do you want to do so  
12 now? Do you want to just take a break from it now  
13 and --

14 COMMISSIONER PERNELL: I think the way  
15 we'll proceed is we'll have staff finish their  
16 direct. We will take a break. And when we come  
17 back we'll be on visual resources to give the  
18 parties time to further discuss visual analysis  
19 for the plume.

20 MR. WHEATLAND: Okay.

21 BY MS. DeCARLO:

22 Q Now in plume-1 staff requests some  
23 information on fogging frequency curves. Has  
24 staff received this information in any other case?

25 MR. WALTERS: Yes, we've received this

1 information from Calpine and Calpine's vendor on  
2 the Pastoria case in a compliance issue for that  
3 case. That data is easily or reasonably easily  
4 completed by the cooling tower vendors.

5 MS. DeCARLO: And is it your opinion  
6 that the condition staff has proposed provide  
7 enough flexibility to the applicant to allow for  
8 some minor changes to the design and operating  
9 parameters?

10 MR. WALTERS: Yeah, I think the  
11 important thing, at least obviously I don't think  
12 we're going to have the table 1 in the condition  
13 anymore, but even with that table we weren't  
14 identifying those particular numbers as exact.

15 They were provided essentially for the  
16 CPM as marks to look, you know, in terms of how  
17 close is the design to these numbers. We did not  
18 identify in any way, shape or form any of them  
19 being maximums or minimums. They're just general  
20 roadmarks to look at to see how far the design may  
21 have moved from.

22 MS. DeCARLO: Now the applicant made  
23 some assertions about the differences between  
24 staff's and the applicant's modeling approach.  
25 Would you like to explain how staff models

1 potential impacts?

2 MR. WALTERS: Well, I think I'll explain  
3 some of the differences in the modeling approach.  
4 There were a few. One of the larger differences  
5 was the meteorological data used.

6 Initially the applicant used some Tracy/  
7 Brentwood data which, when I say Tracy/Brentwood  
8 it was wind data from a Tracy station and relative  
9 humidity data from a Brentwood station. That  
10 combination of data didn't have a lot of other  
11 parameters that are useful in determining  
12 significant impacts, things like present weather.  
13 And so they moved on to another data set, as did  
14 we.

15 The issue was the data set they used  
16 didn't really provide a very good proxy to the  
17 conditions for the more local Tracy/Brentwood data  
18 set, and had a much lower relative humidity.

19 We took a look at some other data sets  
20 that had all of the information that we were  
21 looking for in order to do our analysis, in order  
22 to define clear conditions and to exclude all of  
23 the weather hours with, you know, that had rain  
24 and fog and extreme low visibility.

25 And we determined that the Sacramento

1 data was a much better proxy, and provided more  
2 consistent results for plume, particularly for  
3 plume frequency than the 1976 Stockton data that  
4 was used.

5 So that was one difference; and that's  
6 one major difference in terms of the plume  
7 frequency analysis.

8 And that data is provided in our staff  
9 analysis and the comparisons of the data is  
10 provided.

11 Another significant difference, and I  
12 think I'll limit it to the cooling towers, is our  
13 analysis on the cooling towers, using an  
14 equivalent stack approach, which we do identify as  
15 probably conservative in terms of plume height  
16 determination, particularly in the extreme cases  
17 of very low temperature and high relative  
18 humidity, at least attempts to model the entire  
19 water exhaust from the cooling tower, the  
20 applicant's modeling approach only models one  
21 cooling tower cell. And identifies the plume  
22 sizes based on that one cell, which is a 19-cell  
23 tower, so one cell and the dimensions from one  
24 cell really, you know, can't be used equivalently  
25 for a 19-cell tower. And so that's a very major

1 difference in our modeling results.

2 Also we attempted to resolve our  
3 modeling results using two models, the SACTI model  
4 and the CSVP model. And that, again, was one  
5 other difference in our modeling results. And  
6 through that we did identify that the two models  
7 did show, one showed longer plumes that were a  
8 little shorter; the other one showed shorter  
9 plumes that were -- or taller plumes that were a  
10 little bit less long. And so we just identified  
11 that as being some differences in some of the  
12 models.

13 But the overall sizes, if you want to  
14 take a look at like plume magnitude in terms of  
15 like cubic meters, they were reasonably close  
16 between our two models. So, those were some of  
17 the major differences in the modeling approach.

18 MS. DeCARLO: And will these differences  
19 have any impact on staff's determination of  
20 whether the proposed project complies with the  
21 conditions staff has proposed?

22 MR. WALTERS: No. We're really only  
23 evaluating the design at this point. We've  
24 already done the modeling. All we're really  
25 trying to do in these conditions is identify that

1 the design that we modeled is the design that is  
2 built and operated.

3 MS. DeCARLO: Now, Mr. Edwards, was  
4 staff's analysis based on an absolute worst case  
5 scenario?

6 MR. EDWARDS: No, it's a reasonable  
7 worst case scenario in our opinion. And to give  
8 you an example of what that means, is that there  
9 are plumes that are going to be larger than what  
10 have been predicted at the 10th percentile. There  
11 will also be plumes that will be much smaller.

12 But the 10th percentile is, well,  
13 basically approximately in the middle of those  
14 results from the zero to 16.53, I think is the  
15 total percentage of plume in this case.

16 But that provides a plume size that  
17 staff uses for our visual simulations; and it's  
18 also the one we analyze for our plume impact. And  
19 that's consistent with what we've done over  
20 several cases in the past.

21 MS. DeCARLO: And in your opinion could  
22 a plume ever have a negative impact?

23 MR. EDWARDS: Certainly. And it is a  
24 combination of the frequency and also the size and  
25 the setting around the facility that has the

1 plume. Depending on whether you have many  
2 residents, few residents, or the proximity of  
3 those residents, and et cetera.

4 So there are many factors that go into  
5 what the impact could be, but plumes in certain  
6 circumstances are highly dependent on the sheer  
7 size and frequency of them as one of the key  
8 factors, can certainly be significant and adverse.

9 MS. DeCARLO: And did you have any  
10 errata you wanted to read into the record?

11 MR. EDWARDS: Yes, I do. This is for,  
12 again, the visible plume's impacts analysis on  
13 page 5.11B-6, the second paragraph starting on  
14 line 4. These are some old dimensions that were  
15 left over from a prior modeling run, which as was  
16 described earlier, we revised our modeling for  
17 this FSA analysis.

18 But starting on line 4 of that second  
19 paragraph, the number 425 should be shown as 285.  
20 The next number on that line is 591; it should be  
21 298. Dropping down a line, the number 387  
22 regarding this is reading extend downwind  
23 approximately 387 feet for the HRSG, this 387  
24 should be 187. And then the next line down, the  
25 figure 1397 feet should be 174 feet.

1           These changes are consistent with the  
2 table that shows up later in the analysis.

3           And also on page 5.11B-11 in the second  
4 line from the top of the page, there's a figure  
5 there that shows 11.1 percent; this should be 11.8  
6 percent. This is also a change to be consistent  
7 with the table that is shown directly below that.

8           And that concludes my errata.

9           MS. DeCARLO: And do these changes in  
10 any way affect the conclusions you made about the  
11 impacts?

12           MR. EDWARDS: They're consistent with  
13 the conclusions for impacts.

14           MS. DeCARLO: That's concludes staff's  
15 testimony.

16           HEARING OFFICER WILLIAMS: Staff, would  
17 you file a written errata to that?

18           MS. DeCARLO: Yes, we will.

19           HEARING OFFICER WILLIAMS: And we'll  
20 identify it as 1N. I think earlier I misspoke  
21 when I said that the staff revised condition soils  
22 and water-5, 6, and 7, that's 1M. I think I  
23 called it something different earlier. I just  
24 wanted to clarify that. Yeah, I called it 1J, I  
25 think. It's 1M.

1 MR. WHEATLAND: I'm sorry, are you  
2 talking about the staff's revised proposed  
3 condition of certification for soil and water-5,  
4 6, and 7?

5 HEARING OFFICER WILLIAMS: Right.

6 MR. WHEATLAND: And what number do you  
7 give that?

8 HEARING OFFICER WILLIAMS: That's 1M.

9 MR. WHEATLAND: 1M --

10 HEARING OFFICER WILLIAMS: Yes.

11 MR. WHEATLAND: All right, now we object  
12 to the portions of that document coming in as an  
13 exhibit. We do not object to the actual  
14 conditions that are set forth on the last couple  
15 of pages, the last four pages under water and soil  
16 resources.

17 HEARING OFFICER WILLIAMS: Right.

18 MR. WHEATLAND: Where there are actual  
19 revisions to the conditions, because that's what  
20 the Committee directed them to do was to come back  
21 with revised conditions.

22 But we would object to the additional  
23 argument that is made in the first three pages,  
24 because that can't possibly be an exhibit.  
25 There's no witness to sponsor it.

1           Certainly staff can make these arguments  
2           in their brief. But we think that the arguments  
3           here which are both legal and factual to be highly  
4           inappropriate to enter as a late-filed exhibit  
5           without a sponsoring witness.

6           MS. DeCARLO: The arguments are made  
7           just to enable the Committee to understand why  
8           applicant has agreed with some of the proposed  
9           condition changes that the applicant has proposed,  
10          and disagreed with others. And to explain the  
11          basis for the conditions that we had proposed.

12          MR. WHEATLAND: So therefore can we just  
13          admit into evidence only that portion of the  
14          document which are the actual proposed conditions?

15          MS. DeCARLO: I prefer to enter in the  
16          argument, as well, because it pertains to the  
17          conditions and allows the Committee to understand  
18          what --

19          MR. WHEATLAND: All right, so although  
20          you previously have stricken the applicant's legal  
21          arguments as evidence and made that public  
22          comment, you're now moving into evidence the legal  
23          arguments and other arguments that are in this  
24          document?

25          MS. DeCARLO: The difference is that

1 these legal arguments, or whatever you're  
2 referring to, I don't know, aren't made by  
3 attorneys; they're made by staff, and staff's  
4 interpretations of the various LORS.

5 MR. WHEATLAND: Right, okay. Well, my  
6 motion then would be to strike the first three  
7 portions of 1M as an exhibit that would be moved  
8 into evidence, and allow that to be public  
9 comment. And to accept, then, the water and soil  
10 resources conditions, which are the last four  
11 pages of this document.

12 COMMISSIONER PERNELL: You object to  
13 that?

14 MS. DeCARLO: Staff would just suggest  
15 that these are admissible as testimony to be  
16 admitted.

17 HEARING OFFICER WILLIAMS: Yeah, I think  
18 we'll uphold the objection and we'll admit the  
19 conditions, but not the prelude associated  
20 language. I think certainly staff is free to  
21 argue that.

22 So, your objection is sustained.

23 Anything else?

24 COMMISSIONER PERNELL: Okay, the  
25 Committee will take a lunch break, and the cross

1 and recross will happen after visual resources.

2 We're off the record.

3 HEARING OFFICER WILLIAMS: No, no. Mr.  
4 Sarvey, you have a question?

5 MR. SARVEY: We'll cross them after  
6 visual resources, then, is how we're going to do  
7 it? Because I do want to cross-examine the staff  
8 on this.

9 COMMISSIONER PERNELL: Yeah, you will  
10 have the ability to do that. We just want to  
11 break for lunch now, and then we will go straight  
12 through without a break until the end.

13 MS. DeCARLO: And how long is the lunch  
14 break?

15 COMMISSIONER PERNELL: Half an hour.  
16 Anything else? We're off the record.

17 (Whereupon, at 11:57 a.m., the hearing  
18 was adjourned, to reconvene at 12:30  
19 p.m., this same day.)

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1 AFTERNOON SESSION

2 12:28 p.m.

3 COMMISSIONER PERNELL: Okay, we're back  
4 on the record. Mr. Williams.

5 HEARING OFFICER WILLIAMS: Thank you,  
6 Commissioner Pernell. Are there any matters that  
7 the parties want to address before we move on to  
8 visual?

9 MR. WHEATLAND: No.

10 MS. DeCARLO: No, not at this time.

11 HEARING OFFICER WILLIAMS: Okay. So,  
12 let's, applicant, do you want to --

13 MR. WHEATLAND: Yes, thank you. Mr.  
14 Priestley has been previously sworn as a witness.  
15 The testimony that he'll be sponsoring is visual  
16 resources at chapter 2.12 of the applicant's  
17 direct testimony.

18 This is a separate chapter from the  
19 visual plume modeling and impacts analysis that we  
20 discussed before lunch. Do you wish to identify  
21 that chapter as a separate exhibit, or will we be  
22 considering it under the same exhibit number?

23 HEARING OFFICER WILLIAMS: While we're  
24 there, do you want to move your visual plume  
25 exhibits in?

1 MR. WHEATLAND: Yes, please, I would  
2 like to move into evidence the visual plume  
3 exhibits that we introduced this morning.

4 HEARING OFFICER WILLIAMS: Are there any  
5 objections?

6 MR. SARVEY: Which exhibits are we  
7 talking about?

8 HEARING OFFICER WILLIAMS: It's 4I, the  
9 plume analysis, 4I-1, applicant's visual resources  
10 errata. And 4I-2, proposed conditions.

11 MR. SARVEY: Is there any pictures  
12 involved in this, or is --

13 HEARING OFFICER WILLIAMS: Yeah, the  
14 pictures --

15 MR. SARVEY: Oh, these pictures here?

16 MR. WHEATLAND: Well, this one on the  
17 left is 4I-1.

18 MR. SARVEY: Okay. Yeah, I have no  
19 objection to any of them.

20 HEARING OFFICER WILLIAMS: Okay, so  
21 those will be admitted. And, also, staff, do you  
22 want to move your exhibits in, as well?

23 MS. DeCARLO: Yes, for visible plumes?

24 HEARING OFFICER WILLIAMS: Yes.

25 MS. DeCARLO: Yes, staff's analysis and

1 the FSA. I don't believe we had any errata for  
2 the visible plumes.

3 HEARING OFFICER WILLIAMS: Okay. Any  
4 objection to that?

5 MR. SARVEY: Would it be more prudent to  
6 cross-examine before we admit these exhibits?

7 HEARING OFFICER WILLIAMS: Yeah,  
8 probably.

9 MR. SARVEY: Thank you.

10 HEARING OFFICER WILLIAMS: So, --

11 MR. WHEATLAND: Okay, do you want to  
12 give the visual resources testimony a separate  
13 exhibit number?

14 HEARING OFFICER WILLIAMS: Oh, yeah, it  
15 will be next in order, exhibit 4J.

16 MR. WHEATLAND: 4J.

17 Whereupon,

18 THOMAS PRIESTLEY

19 was recalled as a witness herein, and having been  
20 previously duly sworn, was examined and testified  
21 further as follows:

22 DIRECT EXAMINATION

23 BY MR. WHEATLAND:

24 Q Dr. Priestley, do you have before you a  
25 copy of exhibit 4J?

1 A Yes, I do.

2 Q And was this testimony as set forth in  
3 exhibit 4J prepared by you or at your direction?

4 A Yes, it was.

5 Q And does exhibit 4J contain your  
6 qualifications?

7 A Yes, it does.

8 Q Would you please summarize your  
9 qualifications.

10 HEARING OFFICER WILLIAMS: Can we get a  
11 stipulation on the qualifications of Dr.  
12 Priestley?

13 MS. DeCARLO: Yes.

14 HEARING OFFICER WILLIAMS: Okay.

15 MR. WHEATLAND: All right, thank you.

16 BY MR. WHEATLAND:

17 Q Is the testimony that you are sponsoring  
18 and the facts contained therein true to the best  
19 of your knowledge?

20 A Yes, they are.

21 Q And do the opinions represent your best  
22 professional judgment?

23 A Yes, they do.

24 Q Do you adopt exhibit 4J as your  
25 testimony in this proceeding?

1           A     I do.

2           Q     Would you please summarize your  
3 testimony?

4           A     I'd like to start by saying that really  
5 the bottomline of my testimony is that my  
6 professional analysis is that the East Altamont  
7 Energy Center, as proposed, will not have a  
8 substantial adverse impact on visual resources.  
9 And I will be -- that case has been laid out in my  
10 written testimony, and in my oral testimony I will  
11 try to hit the highlights.

12                     So I'd like to begin by making reference  
13 to this figure, copies of which are now being  
14 distributed. This is a figure which we filed on  
15 October 11th, and it consists of a recent air  
16 photo of the project site. It's entitled, East  
17 Altamont Energy Center site landscape context.

18                     And what we have done is on top of the  
19 air photo we have overlaid the outline of the  
20 plant and the proposed project landscaping. We  
21 have put labels on the major features in the  
22 project area. And we have also drawn some lines  
23 indicating the areas that are within one-quarter  
24 mile of the boundary of the plant. You can see  
25 that we have this white line around the fenceline

1 of the plant. And we've indicated the areas that  
2 are within one-quarter mile of the fenceline, and  
3 the areas between one-quarter and a half-mile of  
4 the fenceline, as well.

5 And the relevance of these lines is that  
6 in conducting visual analysis, particularly  
7 careful attention is usually paid to the near  
8 foreground zone which is the area within one-  
9 quarter mile of the viewer; and the far foreground  
10 zone, which is usually considered to be the area  
11 between a quarter- and one-half mile from the  
12 viewer.

13 And I'll be talking a little bit more  
14 about these zones later in my presentation.

15 So, in the AFC analysis and in my  
16 written testimony I've documented the existing  
17 visual conditions in the project site and the  
18 project vicinity.

19 And so the basic facts of the situation  
20 is that the site, itself, is flat and open; it has  
21 no permanent vegetation, and doesn't contain any  
22 features that would be considered to be scenic.

23 And then the landscape in the project  
24 are is a landscape that has been highly altered,  
25 in that it has been cleared and graded, and

1 converted to use for large scale irrigated  
2 agriculture.

3 In addition, the project area contains  
4 an unusually high concentration of major  
5 infrastructure facilities which are now a highly  
6 visible element of the overall landscape pattern.

7 An example of what I'm talking about is  
8 right across Mountain House Road, which is right  
9 here, from the facility we have, first of all, the  
10 Delta-Mendota Canal, which is bordered by high  
11 levees. There is a large transmission corridor  
12 that parallels it, coming down into the Tracy  
13 substation, which is quite a large facility.

14 Next to it we have the Tracy pumping  
15 plant. And then along Kelso Road we have an MID  
16 transmission line that comes into the substation.

17 So, essentially what we have here right  
18 across the street from the project site is a very  
19 substantial node of infrastructure.

20 And now I'd like to direct your  
21 attention to AFC figure 8.11-3A, that's this one.  
22 It's also essentially the same figure as figure 2A  
23 in the FSA. And this is the view from KOP-1 which  
24 is located at the corner of Mountain House Road  
25 and Byron Bethany Road, looking south towards the

1 project site.

2 COMMISSIONER PERNELL: Perhaps you could  
3 just change the pictures.

4 DR. PRIESTLEY: Pardon?

5 COMMISSIONER PERNELL: Are you trying to  
6 get enough room to get over there?

7 DR. PRIESTLEY: Yes.

8 COMMISSIONER PERNELL: Why don't you  
9 just move that -- we've already --

10 DR. PRIESTLEY: Well, I'd like to keep  
11 this one up, I'll be referring to it as we move  
12 along.

13 COMMISSIONER PERNELL: Just trying to be  
14 helpful.

15 DR. PRIESTLEY: It looks like I'm mobile  
16 now.

17 So this photo is of interest because it  
18 gives an idea of the existing character of the  
19 landscape in the area. Here's our site down here  
20 behind these large transmission towers that are a  
21 part of the transmission corridor I referred to.

22 We have a wood pole transmission line  
23 going down the east side of Mountain House Road.  
24 And over on the right side of Mountain House Road  
25 we're seeing a corner of the Tracy substation.

1           And, in fact, if this photo had been  
2 oriented straight down the road, which would be  
3 more like what you will be seeing if you're  
4 actually driving down the road, you would be  
5 seeing more of the substation with its relatively  
6 tall buss structures.

7           I'd also like to point out AFC figure  
8 8.11-8A, which is the same as figure 7A in the  
9 FSA. And this is the view from key observation  
10 point 6, which is here on Kelso Road. It's a view  
11 looking west down Kelso Road. And the relevance  
12 of this is it provides a pretty good view of the  
13 Tracy substation. And as you can see, the 500 kV  
14 portion of this substation, which is the part  
15 closest to the project site, is completely  
16 unscreened, and the rather tall buss structures  
17 there are a visually prominent part of the  
18 existing landscape scene.

19           My professional assessment, which I've  
20 documented both in the AFC and in my written  
21 testimony I've filed, is that for the most part  
22 the existing level of visual quality in the  
23 project area is moderately low.

24           The only exception to that is, my  
25 assessment, is that the view from over here, KOP-

1 5, Byron Bethany Road, is moderate to moderately  
2 high. And I want to note that both CEC Staff and  
3 I seem to generally agree with this assessment,  
4 that visual conditions or the landscape quality  
5 conditions in the area are moderately low. CEC  
6 Staff has said that their determination is that  
7 the visual quality is low to moderate.

8 And my assessment of the area's visual  
9 character is that in the views from all the key  
10 observation points the landscape has this highly  
11 altered character, in that it has been modified to  
12 accommodate the large-scale agriculture and the  
13 infrastructure facilities, which are now visually  
14 important, and in fact, characteristic elements of  
15 the current landscape pattern in this area.

16 What I want to do next is turn our  
17 attention to the question is who are the viewers  
18 in this area. And I want to start by talking  
19 about the residential viewers.

20 Now, one thing we can see by looking at  
21 the site landscape context map is within the are,  
22 the near foreground area within a quarter-mile of  
23 the project site there are no residences and no  
24 residential viewers.

25 And then if we look at the area one-

1 quarter to one-half mile, the far foreground, we  
2 discover that in fact there will be no residential  
3 viewers at the time that the project is  
4 constructed.

5 There is a residence at the corner of  
6 Mountain House Road and Kelso Road. This  
7 residence is now unoccupied, and this is located  
8 on property that belongs to the applicant. And  
9 would not be occupied at the time that the project  
10 is built.

11 There is another residence on Kelso Road  
12 just inside that half-mile area. This residence  
13 is occupied at the moment, but Calpine has reached  
14 an agreement with the owner of this property that  
15 should the project be approved and built, that  
16 this property would be sold to Calpine and this  
17 residence would no longer be occupied.

18 There's a third residence that is just  
19 outside the one-half mile distance zone. Calpine  
20 has reached an agreement with the owner of this  
21 property that would move these residents to the  
22 far side of their property where they would be  
23 further away from the project; and, in fact, in an  
24 area where their views toward the project would be  
25 screened by the Tracy pumping plant and Tracy

1       substation.

2               So, as a consequence, there are no  
3       residences or there will be no residences located  
4       in the foreground distance zones that would be  
5       potentially most sensitive to visual changes  
6       brought about by the project.

7               I think that the other residential area  
8       that is worth noting is over here, the Livermore  
9       Yacht Club, which is say approximately three-  
10      quarters of a mile distance. Those viewers would  
11      not have a view of the project in that these  
12      residences are oriented to the water. And because  
13      of the levees that surround the site, from these  
14      homes there is not a view towards the project  
15      site.

16              The other kind of viewer we need to look  
17      at are recreational viewers. The closest  
18      recreational viewers to the site would be those  
19      people who are using the rivers and marina which  
20      is over here by the Livermore Yacht Club. Again,  
21      that's about three-quarters of a mile away from  
22      the project site.

23              And, again, the people using this  
24      facility are primarily oriented in their  
25      activities to the water. So, my professional

1 judgment is that views toward the project site are  
2 not an important part of the experience of being  
3 here and using this facility. This assessment was  
4 confirmed in conversation with the owner of this  
5 facility, who also pointed out to me that to the  
6 extent that anyone at his facility is looking this  
7 way, they are already seeing the Tracy substation.  
8 And, in addition, he pointed out to me that in  
9 terms of views, say, towards Mount Diablo it would  
10 be this way. And it would not be blocked by the  
11 presence of the project.

12 The other kind of viewers that we need  
13 to look at are highway viewers. And so the  
14 project site would be most visible to people  
15 traveling up and down Mountain House Road where,  
16 in fact, it would be quite clearly within the cone  
17 of vision of the driver. And the cone of vision  
18 is defined as the area which would be within the  
19 driver's vision. If the driver were looking  
20 straight ahead, and of course, the width, the  
21 number of degrees of the cone of vision varies  
22 depending upon the speed.

23 The typical angle used is 45 degrees,  
24 which is the cone of vision at about 50 miles per  
25 hour. So that means essentially what we're

1 looking at is the area within like 22.5 degrees on  
2 either side of the centerline of the road.

3 So, certainly the power plant would be  
4 within the cone of vision of drivers on Mountain  
5 House Road. But the area within which the project  
6 would be within relatively close view within a  
7 half mile or within a quarter mile, in fact, are  
8 relatively short.

9 There's also an area of Kelso Road that  
10 is in relative proximity, say with a quarter- to a  
11 half-mile of the project site. But here the  
12 project would not be within the cone of vision of  
13 the driver. And from this area over here, the  
14 west, really wouldn't be visible, because the  
15 views would be entirely screened by what's  
16 happening at Tracy substation.

17 The other area of interest here is Byron  
18 Bethany Road where from for a short distance in  
19 here the project would be within the view cone of  
20 the driver. And then for an area down in the  
21 vicinity of Lindeman Road and south, it would be  
22 within the driver's view cone.

23 BY MR. WHEATLAND:

24 Q Dr. Priestley, excuse me for  
25 interrupting, but when you refer to the first area

1 on the map, could you describe that in words for  
2 the transcript, please.

3 A Okay. So, to go back, talking about  
4 Byron Bethany Road, the area I'm talking about is  
5 the area roughly from the Delta-Mendota Canal,  
6 heading south, and extending to an area where the  
7 driver would be parallel with the, say the  
8 northeast corner of the project site.

9 And the second area within which the  
10 project would be within the cone of vision of the  
11 driver would be from an area that starts maybe  
12 several hundred feet north of the Byron Bethany  
13 Road, and then would extend southward until past  
14 Lindeman Road and down into the vicinity of the  
15 BBID water tanks.

16 So, what I'd like to do now is shift  
17 gears and talk a little bit about the project and  
18 its appearance.

19 The details of the project and its  
20 design are presented both in the AFC and also in a  
21 filing related to the revised landscape plan that  
22 we made on April 3, 2002.

23 And at this point I want to change the  
24 simulations for just a second.

25 (Pause.)

1 DR. PRIESTLEY: Okay, what we're looking  
2 at is figure March 02-2A, which is a view from  
3 KOP-1 showing the appearance of the project as it  
4 would appear at ten years after construction under  
5 the revised landscape plan which we have proposed.

6 The other figure is figure March 02-3A,  
7 KOP-2, visual simulation of the project at ten  
8 years under the current landscape plan that we  
9 have filed.

10 So, in terms of the features of the  
11 project, the most visually prominent elements of  
12 the project which would be the stacks, which would  
13 be 175 feet high, the HRSGs, which would be 108  
14 feet tall to the top to the relief valves and vent  
15 silencers, the cooling towers, which would be 43  
16 feet tall to the top of the deck, and 57 feet high  
17 to the tops of the cones. And these will be  
18 surrounded by an assembly of smaller equipment  
19 tanks and buildings.

20 And so the project elements will be  
21 arranged on the site in a very neat and orderly  
22 manner. The applicant has proposed using a  
23 palette of neutral gray colors to help the project  
24 blend into its background.

25 I want to talk for just a minute about

1 the landscaping. Federal and state wildlife  
2 agencies have raised serious concerns about the  
3 potential of trees planted around the project  
4 providing roosts for raptors that could  
5 potentially prey on the San Joaquin kit fox, which  
6 is a protected species.

7           So to respond to these concerns we have  
8 gone to considerably lengths to revise the  
9 landscape plan. At the AFC level we came in with  
10 a landscape plan that used a lot of eucalyptus and  
11 acacia, very tall, fast growing evergreens. But  
12 because these raise concerns for the federal  
13 biologists, we expended considerable effort  
14 working with various kinds of specialists to come  
15 up with a plant palette that would not be  
16 attractive to raptors.

17           And what you see reflects, I think, the  
18 best of our efforts to provide maximal screening  
19 within the constraints of the wildlife concerns.

20           So briefly what we're proposing in terms  
21 of landscaping is to surround the eastern and the  
22 northeastern and southwestern sides of the project  
23 with very dense rows of Lombardi poplars, which  
24 are quite fast growing and have a limb structure  
25 which would not be attractive to raptors.

1                   And because the Lombardi poplars are  
2                   deciduous and would not have leaves during a  
3                   couple months of the year, we have proposed  
4                   planting dense rows of casuarina trees in front of  
5                   them. The casuarinas are evergreen; they also  
6                   have a leafing structure or a branching structure  
7                   that's not attractive to raptors. But they don't  
8                   grow quite as tall or quite as fast as the  
9                   Lombardi poplars.

10                   And around the western parts of the  
11                   plant where height isn't quite so critical, we  
12                   have proposed the use of lower growing species.  
13                   And then in the area right along Mountain House  
14                   Road, in addition to screening species right along  
15                   the fenceline, we're proposing informal plantings  
16                   of native species along the side of the road that  
17                   will provide wildlife habitat values and also  
18                   aesthetic interest for the people driving by.

19                   Kind of an important point I want to  
20                   make as we think about the landscaping is that as  
21                   we evaluate landscaping and its effectiveness in  
22                   mitigating project impacts, we have to look at  
23                   more than just the level of screening, itself.  
24                   There are other dimensions that have to be  
25                   considered.

1           And these would include what's the  
2 inherent attractiveness of the landscaping and the  
3 landscape composition. And also, to what extent  
4 or how does the landscaping helping to relate the  
5 project structures to the overall landscape  
6 pattern.

7           And my assessment is that the  
8 landscaping that we have proposed here does a  
9 pretty good job in terms of these dimensions.  
10 First of all, it has a very orderly appearance,  
11 and then in fact, the contrast between the regular  
12 rows of Lombardi poplars in the backdrop, and then  
13 the more informal pattern, branching pattern of  
14 the casuarinas in the foreground, and the contrast  
15 in the colors creates an attractive composition.  
16 And creates a sense of depth and visual interest.

17           Also, the lower growing natives along  
18 Mountain House Road will provide, you know, some  
19 seasonal variations in color and other features  
20 that can be appreciated by those driving by on the  
21 road. And that the landscape composition does a  
22 pretty good job of hiding the lower elements of  
23 the plant, creating a more unified visual  
24 composition that creates, you know, kind of a  
25 sense of unity of the whole.

1           And in more distant views the design has  
2 a horizontality, which is very consistent with the  
3 other horizontal lines visible in this landscape.

4           So, in terms of determining the  
5 project's impacts on visual resources, what we  
6 need to do is take a look at the four questions  
7 related to visual impacts in appendix G of the  
8 CEQA guidelines.

9           And as it turns out, on three of these  
10 questions, my assessment is actually consistent  
11 with that of staff. The first issue or first  
12 question, would the project have a substantial  
13 adverse effect on a scenic vista, both staff and I  
14 agree that it would not.

15           The second question is would the project  
16 substantially damage scenic resources, including  
17 but not limited to trees, rocks, rock  
18 outcroppings, and historic buildings within a  
19 state scenic highway, both staff and I are in  
20 agreement that it would not.

21           And then on the fourth question, would  
22 the project create a new source of substantial  
23 light or glare that would adversely affect day or  
24 nighttime views in the area. On this question,  
25 staff and I have had some differences of opinion

1 in terms of impact. But on this one we have come  
2 to agreement on a set of mitigation measures which  
3 are acceptable to the applicant, and which in the  
4 eyes of staff will resolve their concerns to the  
5 extent that they would no longer find that there  
6 is a significant impact related to night lighting  
7 of the facility.

8 So actually the only area on which staff  
9 and I disagree is on the third CEQA visual  
10 resource question, which is would the project  
11 substantially degrade the existing visual  
12 character or quality of the site and its  
13 surroundings.

14 And even on that question we do have an  
15 area of agreement, in that we both agree that the  
16 plumes associated with the operation of the  
17 project would not create significant impacts.

18 So what's left, the area where we  
19 disagree has to do with the impacts of the project  
20 structures, themselves, on the visual character  
21 and quality of the site and its surroundings.

22 And my analysis is that the overwhelming  
23 evidence is that the project will not  
24 substantially degrade the character and quality of  
25 the site and its surroundings. And it's quite

1 true, the project's going to be large, and it's  
2 going to be highly visible.

3 But, first of all, it will have a very  
4 neat and orderly appearance. Its surfaces will  
5 have colors and finishes that minimize their  
6 reflectivity and maximize their visual absorption  
7 into the setting.

8 It will be surrounded by multiple rows  
9 of dense landscaping designed to integrate the  
10 project facilities into their overall setting.  
11 And to be visually attractive in its own right.

12 And it will not substantially alter the  
13 character of the setting, which is, I've  
14 described, is a very highly altered landscape of  
15 large-scale agriculture and infrastructure in  
16 which there's already an unusually high  
17 concentration of facilities, including the 500 kV  
18 Tracy substation right across the road from the  
19 project site.

20 And it will not substantially decrease  
21 the existing level of visual quality in the  
22 project area, which is now moderately low in most  
23 cases.

24 An additional factor which I alluded to  
25 earlier is in terms of the sensitivity of the

1 view. In fact, we don't have sensitive viewers in  
2 close proximity to the project site. All  
3 residential viewers will be a half a mile or more  
4 away. The recreational viewers will be more than  
5 half a mile away, and do not have views in which  
6 the project site is an important element of the  
7 view. In terms of road users, the project site is  
8 in view for a relatively short periods of time, as  
9 people drive very fast down these roads in areas  
10 where the project would be within their cone of  
11 vision. So, the effects on drivers would be  
12 relatively fleeting.

13 So, before I close, though, there are a  
14 couple of points I want to make, and that is my  
15 assessment is that staff's conclusion is wrong for  
16 a number of reasons. A couple that I will make  
17 reference to is first of all, the FSA analysis  
18 doesn't really take full account of the current  
19 landscape context, which, again, as I've  
20 indicated, is very highly altered.

21 And it tends to over-state the  
22 sensitivity of the setting. The fact that there  
23 are no residential or recreational users in the  
24 near or far foreground viewing areas.

25 And a particular concern to me is that

1 it appears that staff has used the wrong landscape  
2 plan as the basis for their analysis. In the  
3 text, the FSA describes the landscape plans, and  
4 it appears to make reference to the features of  
5 the plan that we proposed on April 3rd. But if  
6 you look at the landscape plan that staff just put  
7 into the document as part of their errata, it's  
8 for our old plan, which has been substantially  
9 changed.

10 And if you look at the visual  
11 simulations that staff used in the FSA, those are  
12 the wrong simulations, those are the simulations  
13 that were submitted as part of the AFC and are no  
14 longer relevant.

15 And then, you know, finally in reading  
16 the text of the staff analysis it sounds like they  
17 may not have taken the landscaping into  
18 consideration at all in making their final  
19 determinations of significance.

20 Something else I'll just mention briefly  
21 is that you've probably seen the summary analysis  
22 of impacts in figure --

23 BY MR. WHEATLAND:

24 Q Dr. Priestley, can we, just in the  
25 interests of time, because we have only until 3:00

1 today, if there are questions on that area, let's  
2 see if there are questions, and just summarize  
3 here to --

4 A Okay.

5 Q Because I want to be sure that we have a  
6 lot of time for cross, and a lot of time for the  
7 other issues we need to do.

8 A Okay. Then the final matter that I will  
9 mention is that I have come to other conclusion  
10 different from staff on the issue of cumulative  
11 impacts. My assessment is that the project, as we  
12 have proposed it, particularly taking all of the  
13 project design features into account, taking the  
14 landscaping into account, will not create a  
15 greater contribution to visual impacts in the area  
16 than, say, than other elements, particularly the  
17 unscreened Tracy substation.

18 So, with that, I'd like to close.

19 Q Thank you.

20 COMMISSIONER PERNELL: Thank you.

21 MR. WHEATLAND: Thank you, Dr.

22 Priestley. With that, he is available for cross-  
23 examination.

24 HEARING OFFICER WILLIAMS: Staff, you  
25 may proceed.

1 MS. DeCARLO: Thank you.

2 CROSS-EXAMINATION

3 BY MS. DeCARLO:

4 Q Dr. Priestley, in your testimony in the  
5 visual resources section of the AFC you list  
6 several factors to which you gave consideration,  
7 quote, "in making the determination of the extent  
8 and implications of the visual changes that the  
9 project would cause."

10 In giving consideration to these  
11 factors, did you use a method of analysis that has  
12 been formally adopted by a government agency or  
13 professional organization?

14 A Yeah, I used a method of analysis that  
15 is consistent with CEQA practice. I've had the  
16 occasion to --

17 Q I believe the question was did you use a  
18 method of analysis that has been formally adopted  
19 by a government agency or professional  
20 organization. Yes or no.

21 A So, to answer your question, you know,  
22 in the way you have asked it, my answer would be  
23 no.

24 Q Okay. Thank you. What methodology did  
25 you use?

1           A     Again, as I have indicated to you, I  
2     have used an approach to analysis of the visual  
3     impacts of this project that is very consistent  
4     with CEQA practice.  And I have described this  
5     methodology at a number of points in the AFC.

6                     And essentially what I have tried to do  
7     is to identify the various factors affecting,  
8     related to the quality of the existing environment  
9     to the nature of the changes to the sensitivity of  
10    the viewers in a way that uses everyday language  
11    that is understandable to the public, readily  
12    understandable to a decision maker.  And which  
13    does not hide any assumptions or get the  
14    assumptions lost in a more -- in an overly  
15    complex, say, mathematical system.

16           Q     Okay.  Is this methodology of your  
17    approach published anywhere besides your  
18    testimony?

19           A     Again, this is -- it follows the  
20    principles that --

21           Q     I believe the question was does it -- is  
22    it published anywhere besides your testimony?

23           A     So I guess what I can say in response to  
24    this, in my testimony I have described the method  
25    that I have used.  It is very consistent with the

1 kinds of methodologies that you see --

2 Q Again, if we can focus on the --

3 A -- that you see elsewhere.

4 Q -- actual question?

5 HEARING OFFICER WILLIAMS: Dr.

6 Priestley, --

7 COMMISSIONER PERNELL: Excuse me.

8 HEARING OFFICER WILLIAMS: -- Dr.

9 Priestley, if you can, answer the question with a  
10 yes or no.

11 COMMISSIONER PERNELL: Or if you don't  
12 know, it's fine to say I don't know.

13 DR. PRIESTLEY: Okay, well, -- I do  
14 know, so to answer the question exactly the way  
15 you have asked it, the answer would be no.

16 BY MS. DeCARLO:

17 Q Thank you. And can you point to where  
18 your testimony, the description of the methodology  
19 is contained?

20 A Yeah, this exists several places in the  
21 AFC. Okay, so if you'd like to turn to 8.11-6 I  
22 describe the use of key observation points. On  
23 the next page I describe the kinds of factors I  
24 took into consideration in evaluating the existing  
25 visual quality of the setting.

1           And then if you turn to page 8.11-8 I  
2           have a table based on research by landscape  
3           scholars at Virginia State -- or Virginia Tech in  
4           Blacksburg that lay out kind of a rating system to  
5           evaluate the existing quality, or the quality of  
6           landscapes.

7           And then if you turn to page 8.11-12,  
8           the section on environmental consequences, it  
9           begins with a section called analysis procedure.  
10          And here, again, I lay out the procedure that I  
11          follow.

12          And then in section 8.11.2.2 on page  
13          8.11-13 I lay out the impact evaluation criteria  
14          that I applied.

15          Q     Okay, thanks. In your analysis or your  
16          testimony dated October 1st, you state that the  
17          FSA analysis of visual resources is based upon an  
18          elaborate evaluation process to assess the  
19          significance of visual impacts.

20          Did your approach consider all the  
21          factors of the methodology used by staff?

22          A     Yeah, I want to preface this, my answer,  
23          if I can, by saying I have a lot of problems with  
24          the method in question and really question some of  
25          the things that were considered, and the way in

1 which they were considered.

2 So, the kind of the flat answer to your  
3 question is no, I did not consider all of those  
4 things, particularly not in the way that they did.

5 Q Did you consider any of them?

6 A Oh, yes.

7 Q So which factors did you not consider?

8 A Okay. So, a case in point, and maybe  
9 this kind of illustrates some of the differences.  
10 In many cases there was a consideration of the  
11 same kind of factor, but in a very different kind  
12 of way.

13 There is a factor here called viewer  
14 concern, which to me, as I read this, I can't see  
15 the source of the information on which it is  
16 based. In fact, I would be very interested to  
17 know whether staff, say, interviewed local  
18 residents, did focus groups or has some other  
19 source of information, in fact, of what the  
20 expectations of the viewers in the area are. So  
21 this is one where the approach that I took was a  
22 little bit different.

23 Q Are there any others?

24 A Yeah, well, one of the things I can say  
25 that is different, too. You know, I looked to one

1 degree or another, I would say that I have covered  
2 all of these factors, but in a different kind of  
3 way.

4 And it's fair to say that I did some  
5 other things, too, that staff didn't do.

6 Q Now, for those factors that you did  
7 consider, does your testimony discuss the extent  
8 of the consideration that you gave?

9 A It does not clearly describe.

10 Q Okay. And why not?

11 A I would say that the way I laid out my  
12 method is consistent with the way in which  
13 standard CEQA -- if you look at standard CEQA  
14 documents, it's very consistent with the way  
15 methods have been laid out.

16 Q Does your approach have a means of  
17 consistently and logically considering each of the  
18 factors, and synthesizing the information to  
19 arrive at an assessment of the project's impacts?

20 MR. WHEATLAND: Whoa, can we go back  
21 through that one more time? A little bit --

22 (Laughter.)

23 MS. DeCARLO: Sure.

24 MR. WHEATLAND: Can you say that --

25 MS. DeCARLO: Okay, I'll split it up

1 into several sentences.

2 BY MS. DeCARLO:

3 Q Does your approach have a means of  
4 consistently and logically considering each of the  
5 factors?

6 A Essentially it does, yeah, because again  
7 I have a standard list of factors that I look at  
8 in evaluating the existing conditions in the area,  
9 and in evaluating the impacts. So as I make my  
10 analysis I kind of march through each of those  
11 factors and take it into consideration.

12 Q And where in your testimony is there a  
13 description of how you do that?

14 A To the extent that there is a  
15 description of that, it would be in the sections  
16 that we have just referenced.

17 Q Okay. Those page numbers you referenced  
18 for methodology?

19 A Yes.

20 Q Okay. Did you assign values to each of  
21 the factors that you considered in assessing the  
22 significance of the project's visual impacts?

23 A No, I did not.

24 Q Okay. Then how did you take each factor  
25 into consideration?

1 A It was a qualitative judgment.

2 Q So no quantitative analysis was  
3 involved?

4 A The only extent to which there's like  
5 quantitative, quote, "quantitative analysis"  
6 unquote, is to the extent that I looked at very  
7 explicit things that, in fact, have a valid  
8 numerical value, like for example, distance of the  
9 viewer from the facility.

10 Q Okay. Did you give equal weight to each  
11 factor?

12 A Yeah, it would be fair to say that I  
13 didn't, again. The final evaluation was a  
14 qualitative one that took all of the factors into  
15 consideration. And I think it's fair to say that  
16 the weightings for the various factors were  
17 different. Its final decisions informed by  
18 professional judgment and experience.

19 Q So would you say that depending upon the  
20 project that you're reviewing different weights  
21 could be assigned to different factors in each of  
22 the different analyses?

23 A It's possible because, again, it's  
24 very -- I think it's quite context dependent.

25 Q Does your testimony contain an

1 explanation of the scales that you used for each  
2 factor?

3 A It contains at least -- yeah, there are  
4 several explanations. One is I have defined my  
5 definitions of foreground, middle ground and  
6 background. And that is essentially a scale.

7 Also, I have defined the scale that I  
8 used for assessing existing landscape quality;  
9 that's the Buhyoff Scale. And that is defined in,  
10 I think, sufficient detail to give people an idea  
11 of what the qualities of the landscapes that fall  
12 into the different landscape quality ratings are.

13 Q What about other factors?

14 A I think if you look at the analysis you  
15 won't find explicit definitions of the scales, but  
16 what I have tried to do is to describe a  
17 phenomenon that I am dealing with, you know, in  
18 commonsense, everyday language that is  
19 understandable what it is that I am talking about,  
20 and why it is that things have been given the  
21 descriptors that they have.

22 Q Does your testimony contain a  
23 description of how you synthesized all the  
24 information in your determination of  
25 insignificance?

1           A     In a way, yes. I think, yeah, if you  
2 look on pages 8.11-13 and 8.11-14 and read the  
3 description here, you can see that that in fact I  
4 make reference to the CEC Staff's previous  
5 approach to assessing visual impacts.

6           Now, I tried to do this in a way that I  
7 felt was consistent with, you know, the standards  
8 in the field, and consistent with CEQA practice,  
9 but at the same time to the extent that I could, I  
10 wanted to do this in a way that was consistent  
11 with the approach that CEC Staff was taking at the  
12 time.

13           So if you look on these two pages you  
14 will see that I have laid out some of the decision  
15 rules that CEC Staff was using at that time. And  
16 I made an effort to work within those.

17           Q     Now in your testimony in the AFC on page  
18 8.11-22 you state: To assess whether the project  
19 would have significant impacts on the project  
20 area's visual resource, the project's effects were  
21 evaluated by applying a set of criteria that CEC  
22 Staff have developed to implement CEQA  
23 significance guidelines."

24           Your testimony cites three such  
25 criteria, is that correct?

1 A Yes.

2 Q One of those criteria is substantial  
3 reduction in the visual quality of views  
4 identified to be of moderate or high visual  
5 quality and high or moderately high viewer  
6 sensitivity, is that correct?

7 A That's right.

8 Q Does your AFC testimony cite as the  
9 source of the three criteria the final staff  
10 assessment for the Delta Energy Center?

11 A Yeah, I will have to look, you know, I  
12 may have.

13 Q Yeah, I'd just direct your attention to  
14 page 8.11-13, footnote 2.

15 A So, yes, the answer is yes, then, yeah.

16 Q Okay. And did you perform the visual  
17 analysis for the applicant for that project?

18 A For Delta?

19 Q Yes.

20 A Yes, I did.

21 Q Are you aware that a staff consultant  
22 prepared the visual resources section for staff on  
23 that project?

24 A Yes, I am.

25 Q Did you work as a consultant to

1 applicants on Energy Commission projects prior to  
2 the Delta project?

3 A Yes, I did.

4 Q Was the visual analysis methodology that  
5 staff's consultant used for the Delta project  
6 different from the methodology that staff had used  
7 in previous projects?

8 A You know, we're getting back into  
9 ancient history here, so -- I'm recalling that I  
10 had seen this method used on other projects, but  
11 in terms of, you know, the chronology, whether it  
12 was before or after Delta, I can't tell you for  
13 sure.

14 Q Okay, so you wouldn't know whether  
15 staff's assessments for any of the previous  
16 projects used the criterion regarding reduction of  
17 visual quality that you cited in Delta?

18 A Again, you know, my recollection is that  
19 it had been used on other projects, but before or  
20 after I can't tell you.

21 Q Do you know if the same staff consultant  
22 who prepared the visual resources section from  
23 Delta also prepared the visual resources section  
24 for Metcalf?

25 A Yes, I'm aware of that.

1           Q     Did the visual resources section of the  
2     FSA for the Metcalf project include what you have  
3     described as the staff significance criteria that  
4     you cited in the Delta project?

5           A     Yeah, at that point staff seemed to have  
6     started taking another tack.

7           Q     And you testified that you had worked on  
8     several projects previous to the Delta decision,  
9     is that correct?

10          A     That's correct.

11          Q     Did you use what you characterize as the  
12     staff's significance criteria on all of those  
13     projects?

14          A     No, I did not, in fact, because this  
15     approach kind of emerged during the time I was  
16     working on those things. So it wasn't until, say,  
17     after -- it was in the period after Delta and just  
18     as this project was starting up that this seemed  
19     to be the direction that I needed to take to be  
20     consistent with staff.

21          Q     And so did you use the significance  
22     criteria that you attribute to staff concerning  
23     reduction of visual quality on any other project?

24          A     Excuse me?

25          Q     Did you use the significance criteria

1 for reduction of visual quality that you attribute  
2 to staff in any other project?

3 A You know, this may be the only -- again,  
4 I'm working on a lot of these projects, but I'm  
5 thinking that this may have been the only one  
6 where this set of criteria made it into, you know,  
7 my final draft of the AFC.

8 But I know in doing preliminary  
9 evaluations of other projects that, in fact, I  
10 have used this approach. So it was only  
11 subsequent to filing this AFC that I began getting  
12 signals that staff was going in a different  
13 direction.

14 Q Do you know if Energy Commission Staff  
15 used that criteria for any other project, other  
16 than Metcalf?

17 A Yeah, to be honest I am not specifically  
18 aware.

19 Q Then are you surprised to know that  
20 staff have not used that criterion for any project  
21 other than Delta and Metcalf?

22 A In a way I'm not surprised, because, you  
23 know, have certainly been aware, you know, that a  
24 shift has taken place. But, you know, that had  
25 not happened at the time that I submitted this

1 AFC.

2 Q Since you used the criterion concerning  
3 visual quality on the assumption that it was one  
4 of staff's significance criteria, and now it is  
5 evident that your assumption was incorrect, isn't  
6 it true that all the subsequent portions of your  
7 analysis that relied on this assumption are now  
8 invalid?

9 A No.

10 Q Can you explain?

11 A Yeah. I adopted, although I had some  
12 quibbles with this particular set of criteria, I  
13 thought that professionally they were generally  
14 acceptable, and provided a reasonable approach to  
15 understanding of these things. And even though  
16 staff has gone off in another direction right now,  
17 there's absolutely no reason to discard or  
18 discredit the analysis that I undertook. Because  
19 it certainly conforms to the principles of good  
20 sound visual resource analysis.

21 Q Do you agree that it can no longer be  
22 characterized as staff's significance criteria,  
23 though?

24 A Yeah, I guess, you know, if I were to go  
25 back and edit this I would use different language

1 to characterize exactly what these were. But  
2 these were certainly the criteria that staff was  
3 using at one time.

4 Q Thanks. Now, the geographical scope  
5 normally used by professionals to evaluate visual  
6 effects is a viewshed of a project, or the area  
7 from which it can be seen, is that true?

8 A Yes.

9 Q Did you use this approach in your  
10 analysis?

11 A To the extent that in doing the initial  
12 issue scoping work, there was kind of an informal  
13 assessment of the viewshed in terms of visiting,  
14 you know, the various areas around the project and  
15 developing an understanding of the areas from  
16 which it could be seen.

17 And then, you know, the next step from  
18 there is to identify the key observation points.  
19 And I might point out that those were selected in  
20 collaboration with staff. We came to those key  
21 observation points which were a subset of the  
22 viewpoints within the larger viewshed. And staff  
23 was in agreement on the specific set of points  
24 that we selected.

25 Q So you used the viewshed approach along

1 with staff in identifying the key observation  
2 posts?

3 A To the --

4 Q Points.

5 A Yeah, to the extent that we made an  
6 information identification of the general areas  
7 from which the project could be seen, and then  
8 from there moved very quickly to identify where  
9 those places from which views of the project would  
10 have, you know, more critical effects, potential  
11 effects on views.

12 Q Now, in your October testimony on page  
13 2.12-3 it identifies water and energy facilities  
14 in the immediate vicinity of the proposed project  
15 site, is that correct?

16 A Okay, that was kind of fast. So, we're  
17 talking about page 2.12-3 --

18 Q Right, it identifies water and energy  
19 facilities in the immediate vicinity of the  
20 proposed project and in the region, is that  
21 correct?

22 A Yeah, so that goes --

23 Q Yes or no. I'm sorry, I need to get  
24 through a lot of questions, so --

25 A Yeah, what I want to say is actually

1 what you're talking about is page 2.12-3, and then  
2 on 2.12-4 I have a list.

3 And now I think I've lost track of  
4 exactly what your question --

5 MR. WHEATLAND: That was her question.

6 MS. DeCARLO: That was my question,  
7 thank you.

8 BY MS. DeCARLO:

9 Q Also, on page 2.12-4 your testimony  
10 states that: The landscape character of the  
11 project site and its immediate surroundings is  
12 consistent with the character of the larger  
13 landscape region of which they are a part. This  
14 larger landscape region has a visual character  
15 that is dominated by an unusually high  
16 concentration of water and energy facilities of  
17 state and regional importance," is that correct?

18 A Okay, now would you tell me where this  
19 text is?

20 Q On 2.12-4.

21 A Okay, second paragraph.

22 Q Correct.

23 A And the question is?

24 Q I'll go on to the next.

25 A Okay.

1 Q That identification was sufficient. And  
2 does the testimony proceed to list a number of  
3 facilities in addition to those that are in the  
4 immediate vicinity of the project site?

5 A Okay, I hate to have to ask this, but,  
6 you know, I couldn't understand the first part of  
7 the question. If you could --

8 MR. WHEATLAND: She's just identifying  
9 your testimony here. She's not asking you a  
10 question about it yet, is that right?

11 MS. DeCARLO: Right.

12 BY MS. DeCARLO:

13 Q You list a number of facilities after  
14 that identified paragraph, is that correct?

15 A Right, I do, yeah.

16 Q Isn't it true that of those facilities  
17 outside the immediate project vicinity only the  
18 wind turbines in the hill area west and south of  
19 the project site are visible from any of the KOPs  
20 used in your analysis?

21 A We can take a look at this. To some  
22 extent the Clifton Court Forebay is visible.  
23 Yeah, and it's quite true, the others are part of  
24 this, you know, larger landscaped region and  
25 pattern, but when you are actually standing right

1 there at the project site, or in close proximity  
2 to the project site, except for the windmills you  
3 are unlikely to see them.

4 But as you're driving through the  
5 region, this is going to be part of your overall  
6 experience.

7 Q But they are not relevant to the  
8 valuation of the visual impacts of the proposed  
9 project, isn't that correct?

10 A Well, no, in a way they are because they  
11 really have to do with establishing the overall  
12 character of the larger region of which our  
13 project site and its immediate vicinity are a  
14 part.

15 Q And on page 2.12-1 your testimony states  
16 that the closest of the wind turbines is  
17 approximately 1.5 miles from the project site, is  
18 that correct?

19 A Okay, that's where on --

20 Q Well, actually --

21 A It's on page what?

22 (Pause.)

23 BY MS. DeCARLO:

24 Q Now, you mentioned that the Clifton  
25 Court Forebay is visible, partially visible. Can

1 you tell me from which KOP that is?

2 A It's visible to some extent from KOP-2.

3 Q And do you have KOP-2 up there in one of  
4 your photographs?

5 A Right now we don't. Well, we have a few  
6 of KOP-2 with the project.

7 Q Can you point out where Clifton Court  
8 Forebay is in that picture, please?

9 A Okay, in this view it would be located,  
10 to the extent that you could see it, --

11 COMMISSIONER PERNELL: There's a mike  
12 right there.

13 MS. DeCARLO: There's a microphone.

14 COMMISSIONER PERNELL: Straight ahead.

15 MR. WHEATLAND: Dr. Priestley, point to  
16 it so the Committee can see it also, please.

17 DR. PRIESTLEY: So to the extent that  
18 you would be able to see it in the existing view  
19 you would have kind of a glimpse of it off on the  
20 horizon in this general area.

21 BY MS. DeCARLO:

22 Q So it only consists of a glimpse, is  
23 that correct?

24 A That's correct.

25 Q Isn't it correct to say that your

1 testimony emphasizes the importance of the  
2 existing Tracy substation as an element of the  
3 existing landscape in the viewshed of the proposed  
4 project?

5 A I would say yes, it's one of the  
6 important factors in my analysis.

7 Q And is it correct to say that you  
8 consider the substation to be one of the major  
9 elements that would limit the degree of change to  
10 the existing setting that the proposed project  
11 would cause?

12 A There are a number of elements there to  
13 your question. But I think in general it is one  
14 of the factors taken into consideration in  
15 understanding the current character and visual  
16 quality of the project site.

17 Q Would you say it's a major factor?

18 A Yeah, I'd say it's a major factor. Not  
19 the only, but a major.

20 Q And, in fact, your testimony cites to  
21 the Tracy substation as a major reason why the  
22 visual impacts of the proposed project would not  
23 be significant, is that correct?

24 A Not exactly in that way. It's one of  
25 the important reasons, but is not necessarily the

1 major reason.

2 Q But it's a major reason, correct?

3 A Yes.

4 Q Now in your visual resources section of  
5 the AFC you stated that from KOP-1 the project  
6 would change the view from one that is now a rural  
7 scene, with prominently visible electric  
8 transmission and substation structures, to a scene  
9 that is less rural and that appears more intensely  
10 developed, is that correct?

11 A You are referring to page?

12 Q 8.11-18.

13 A Okay, yeah, that's what I say.

14 Q Now can you please refer to figure 8.11-  
15 3A in your testimony. Do you have it in front of  
16 you?

17 A Yeah, I have it in front of me now.

18 Q Is the Tracy substation visible in that  
19 figure?

20 A Yes, it is. Off to the right side of  
21 the view.

22 Q And how far are the structures of the  
23 Tracy substation from KOP-1?

24 A So in this view in the vicinity of about  
25 a half to three-quarters of a mile.

1 Q Okay, thank you. Now can you please  
2 refer to the figure marked 02-2A in your October  
3 testimony?

4 Do you have that in front of you?

5 A Yes.

6 Q Now this shows a simulation of the  
7 project at ten years. How far would the taller  
8 structures of the proposed power plant be from  
9 KOP-1?

10 A Roughly they would be less than a half a  
11 mile.

12 Q And what is the approximate height of  
13 the tallest structures in the Tracy substation?

14 A Yeah, I can't give you an exact figure,  
15 but I'm assuming that the buss structures would be  
16 in the vicinity of 50, 60 feet.

17 Q And what is the height of the tallest  
18 structures of the proposed project?

19 A As I indicated before, the stacks are  
20 175 feet high; it's about 108 or so to the tops of  
21 the vents on the HRSGs.

22 Q So the tallest project structures would  
23 appear substantially taller than the tallest  
24 structures in the Tracy substation, is that  
25 correct?

1 A Of the Tracy substation, that's true.

2 Q Would the upper portions of the power  
3 plant extend into the sky above the ridgeline of  
4 the coast range?

5 A Yes, they would.

6 Q Does any portion of the Tracy substation  
7 extend into the sky above the ridgeline of the  
8 coast range?

9 A In this particular view, they don't.

10 Q And would the power plant appear more  
11 solid and massive than the substation?

12 A Yeah, in places that would be true.

13 Q Now, please turn to page 8.11-8 in your  
14 testimony. Now this is a discussion of existing  
15 setting as seen from KOP-1.

16 On line 6 and 7 you state that: For  
17 southbound drivers on Byron Bethany Road the  
18 proposed project site is, quote, "at the outer  
19 edge of the normal cone of vision," is that  
20 correct?

21 A That is certainly correct for the major  
22 project structures.

23 Q Okay. Now, refer back to your figure  
24 March 02-2A. In that figure the existing Tracy  
25 substation is visible to the right of the proposed

1 project site, across Mountain House Road, is that  
2 correct?

3 A That's right.

4 Q So for southbound motorists on Byron  
5 Bethany Road in the vicinity of KOP-1, the Tracy  
6 substation is even farther from the normal cone of  
7 vision than is the proposed project site, which  
8 you say is at the outer edge of the normal cone of  
9 vision, is that correct?

10 A No, that is not correct. A couple  
11 things. Earlier when I introduced the view from  
12 KOP-1, one of the things I alluded to is the fact  
13 that when this picture was taken the view was kind  
14 of angled so that we would take in the entire  
15 power plant site. And, in fact, if you were  
16 driving down Byron Bethany Road and looking  
17 straight down the road you would have a view that  
18 would have less than what's on the left, and more  
19 of what's on the right.

20 So, in fact, more of the Tracy  
21 substation would be within your cone of vision,  
22 and less of the power plant site.

23 Q Are you referring to Mountain House Road  
24 in that instance, or Byron Bethany?

25 A Oh, I'm sorry. In this case I am

1 referring to Mountain House Road.

2 Q Okay, the question was for Byron Bethany  
3 Road.

4 A Yeah, I'm sorry.

5 Q Do you want me to repeat the question?

6 A Okay, well, to answer, if you're asking  
7 a question about Byron Bethany Road, --

8 Q Um-hum.

9 A -- yeah, it would be true that you would  
10 be seeing less at that particular point, anyway,  
11 that you would be seeing -- that you wouldn't be  
12 seeing very much of the substation.

13 Q Okay, so overall would you say that the  
14 power plant appears substantially more prominent  
15 than the existing substation from KOP-1?

16 A From that particular -- if, again, your  
17 scenario is somebody driving down Byron Bethany  
18 Road, for a brief period the power plant would be  
19 within the cone of vision, and it would be more  
20 visible in that view than the substation.

21 Q And in that view the Tracy substation  
22 would have little effect on the degree of visual  
23 change that the proposed project would cause, is  
24 that correct?

25 A In that particular view, and the effect

1 of the project would be limited in that it would  
2 be within your cone of vision for a relatively  
3 brief period of time as you are driving down Byron  
4 Bethany Road.

5 Q Okay, now let's go to KOP-2. Please  
6 look at figure 8.11-4A from your AFC section.

7 A Okay, I have it.

8 COMMISSIONER PERNELL: Ms. DeCarlo?

9 MS. DeCARLO: Yes.

10 COMMISSIONER PERNELL: Are we about  
11 done, or are you still --

12 MS. DeCARLO: No, we're going to go  
13 through each KOP. We just want to establish the  
14 methodology that the applicant used in their  
15 analysis point-by-point. I'll try to make this  
16 quick. And if the applicant lends themselves to  
17 the yes or no answers it definitely makes it a lot  
18 quicker.

19 MR. WHEATLAND: Can we go off the  
20 record?

21 HEARING OFFICER WILLIAMS: Off the  
22 record.

23 (Off the record.)

24 COMMISSIONER PERNELL: Back on the  
25 record.

1 MS. DeCARLO: Are you ready?

2 MR. WHEATLAND: I'm just consulting with  
3 him; I'm trying to shorten this time as much as we  
4 can. Thank you.

5 BY MS. DeCARLO:

6 Q Okay, now looking to figure 8.11-4A, is  
7 the Tracy substation on the west side of Mountain  
8 House Road just out of the picture and to the  
9 left?

10 A Yes, it is.

11 Q Now, turn to figure 8.11-5A. Does that  
12 figure show the existing view of the proposed  
13 transmission line route from KOP-6 on Kelso Road?

14 A No. 5A? No, it doesn't. This is a  
15 different viewpoint.

16 Q Oh, I'm sorry. 7A. My mistake.

17 A Okay, --

18 Q 6A.

19 COMMISSIONER PERNELL: Which is it?

20 MS. DeCARLO: 6A.

21 DR. PRIESTLEY: We're looking at 6A now?

22 Okay, and the question is?

23 BY MS. DeCARLO:

24 Q Does that figure show the existing view  
25 of the proposed transmission line route from KOP-6

1 on Kelso Road?

2 A Actually I don't think it does. No, it  
3 doesn't. This is a different view.

4 Q Does 8A?

5 A Okay, let's see. Yes, 8A does.

6 Q Okay. Does the figure show a row of  
7 evergreen trees extending north from Kelso Road  
8 for some distance along the west side of Mountain  
9 House Road?

10 A Yes, it does.

11 Q Does that row of trees extend north  
12 beyond the location of KOP-2?

13 A It does, yeah, it does for a short  
14 distance. In fact, I think if you're looking KOP-  
15 2 you can see the shadow of some of those trees on  
16 the road.

17 Q Okay. Do those trees appear taller from  
18 KOP-2 than the structures of the Tracy substation?

19 A From KOP-2, if you were looking in that  
20 direction, yeah, they would screen the facilities  
21 and the substation.

22 Q And approximately how close together are  
23 they planted in that simulation? Can you give us  
24 any indication?

25 A You know, I can't tell you. They're

1 pretty close together.

2 Q Would you say that they are fairly  
3 densely planted?

4 A That's fair.

5 Q So would you say the trees largely  
6 screen the view of the Tracy substation from KOP-  
7 2?

8 A When you are right there, right at that  
9 particular spot, but as you go up the road a  
10 little bit, they don't.

11 Q So from KOP-2, the Tracy substation has  
12 little effect on the degree of change to the  
13 visual setting that the proposed project would  
14 cause, is that correct?

15 A From right exactly at that point.

16 Q Now, let's go to KOP-3. Please look at  
17 figure 8.11-5A. Does that figure show the  
18 existing view toward the project site from KOP-3  
19 on Mountain House Road?

20 A Yes, it does.

21 Q Is the intersection of Mountain House  
22 Road and Kelso Road visible in the left portion of  
23 that picture?

24 A Yes, it is.

25 Q And is the Tracy substation immediately

1 to the northwest of that intersection behind the  
2 trees visible on the west side of Mountain House  
3 Road?

4 A Yes, it is.

5 Q Several KOP-3 existing trees largely  
6 screen the view of the Tracy substation, don't  
7 they?

8 A That's true.

9 Q So from KOP-3 the Tracy substation has  
10 little effect on the degree of change to the  
11 visual setting that the proposed project would  
12 cause, isn't that correct?

13 A The substation, itself.

14 Q Now let's go to KOP-4. Please look at  
15 figure 8.11-6A.

16 A Okay.

17 Q Does that figure show the existing view  
18 toward the proposed project site from KOP-4 on  
19 Kelso Road?

20 A Yes, it does.

21 Q Is the Tracy substation visible in that  
22 figure?

23 A The substation, itself, is not visible.

24 Q So from KOP-4 the Tracy substation does  
25 not have a substantial effect on the degree of

1 visual change that the proposed project would  
2 cause, is that correct?

3 A The substation, itself, does not.

4 Q Now let's go to KOP-5. Can you please  
5 look at figure 8.11-7A.

6 A Okay.

7 Q Does that figure show the existing view  
8 of the project site from KOP-5 on Byron Bethany  
9 Road?

10 A Yes, it does.

11 Q Is the Tracy substation visible in the  
12 picture?

13 A In this particular view it is not, but  
14 if the view had been angled just slightly to the  
15 left, it would, in fact, be quite visible.

16 Q But in this view it is not?

17 A Right, in the way this view has been  
18 framed, it is not.

19 Q Is the Tracy substation in the normal  
20 field of vision for northbound motorists on Byron  
21 Bethany Road at KOP-5?

22 A We'd have to look and see if it is  
23 exactly at this viewpoint, but it's certainly  
24 within the cone of vision for people traveling on  
25 Byron Bethany Road. We'd have to, you know, check

1 to see if it's visible from exactly this point.

2 Q Okay. Now in your testimony on page  
3 8.11-18 you state: Given that the plant will have  
4 an orderly appearance and will be surrounded by  
5 significant tree plantings that screen the  
6 generating facility's lower features, will  
7 visually integrate it into the overall landscape  
8 composition and will provide a new element of  
9 visual interest. The visual quality rating of the  
10 view would not necessarily be decreased once the  
11 plant is in place." Is that correct?

12 A Okay, would you point me to what you're  
13 referring to, again?

14 Q Sure. It's on page 8.11-18.

15 A So this is my AFC?

16 Q Your AFC testimony, correct. Second  
17 paragraph.

18 A Okay, I see it. Yeah, this is my  
19 analysis.

20 Q Okay, what do you mean by an orderly  
21 appearance?

22 A Yeah, what I mean by an orderly  
23 appearance is that the facilities are arranged,  
24 you know, kind of in a systematic way. There's  
25 some repetition of the major elements, you know,

1 like everything is aligned, for example.

2 Q Okay, and how does that affect the  
3 visual impacts of the plant?

4 A Yeah, my professional opinion is that it  
5 reduces the potential for a visual impact as  
6 opposed to a facility that might have things  
7 arranged in, you know, kind of a discordant kind  
8 of way.

9 Q Now your other reasons for stating that  
10 the project would not necessarily decrease the  
11 visual quality of the view were that the proposed  
12 landscaping would screen the project's lower  
13 features, visually integrate it into the overall  
14 landscape composition, and provide a new element  
15 of visual interest, is that correct?

16 A That is correct.

17 Q Now, is it correct that your AFC  
18 testimony on pages 8.11-18 through 8.11-20 cite  
19 the same factors of an orderly appearance and  
20 landscaping as reasons why the proposed project,  
21 quote, "will not appreciably alter the visual  
22 quality rating of the views from KOPs-2, 3 and 4?"

23 A Yes, that's correct to say that this is  
24 consistent.

25 Q Now your most recent visual simulations

1 of the proposed project, the versions that are in  
2 your April 3rd testimony titled, figures March 02-  
3 2A through 4D?

4 A Yes.

5 Q Do those simulations show the project  
6 with proposed landscaping as it is expected to  
7 appear ten years after the start of project  
8 operation and 20 years after the start of project  
9 operation?

10 A Yes, that's correct.

11 Q Is your assessment of the visual impacts  
12 of the project based on how it would appear after  
13 ten years of growth of the applicant's proposed  
14 landscaping?

15 A Yes.

16 Q Does the California Environmental  
17 Quality Act or guidelines thereto state that  
18 visual impacts of a project are not significant  
19 unless they last for at least ten years?

20 MR. WHEATLAND: I'm going to object,  
21 calls for a legal conclusion.

22 MS. DeCARLO: Wasn't his analysis based  
23 upon the requirements of CEQA?

24 HEARING OFFICER WILLIAMS: You might  
25 want to ask him that question.

1 MS. DeCARLO: Okay. I'll retract that  
2 and rephrase.

3 BY MS. DeCARLO:

4 Q Did you analyze this project in  
5 accordance with the requirements of CEQA?

6 A Yes, I did.

7 Q Okay. And does -- are you aware of any  
8 requirement in CEQA regarding timeline for  
9 determination of visual impact?

10 A Yeah, I am not.

11 Q Okay, so you're not aware of anything  
12 that said that an impact is not significant if it  
13 lasts for ten years or less?

14 MR. WHEATLAND: I'm going to object.  
15 It's been asked and answered.

16 HEARING OFFICER WILLIAMS: Overruled.

17 MS. DeCARLO: That's fine.

18 BY MS. DeCARLO:

19 Q Is there any other law that requires you  
20 to value the significance of visual impacts --  
21 I'll rephrase that, I'm anticipating an objection.

22 Did you conduct your analysis in  
23 accordance with any other law besides CEQA?

24 A In addition to doing a CEQA analysis, of  
25 course, we also had to look at the relationship of

1 the project to local ordinances.

2 Q And do any of those local ordinances say  
3 that a project isn't significant if the impacts  
4 last for ten years or less?

5 A They are silent on this issue.

6 Q Okay. Then please explain why you chose  
7 that timeframe for your assessment.

8 A The expected life span of a project of  
9 this type, as I understand it, is in the vicinity  
10 of 30 years. And it seemed a reasonable point,  
11 you know, in the life of this project. Ten years,  
12 I think, provides a pretty representative point in  
13 the lifespan of a project for evaluation of its  
14 effect.

15 It's, you know, certainly much more  
16 conservative than, say, picking 15 or 20 years.  
17 So, you know, my professional judgment was that  
18 ten years was a very reasonable time horizon to  
19 use.

20 Q Does the length of time that a visual  
21 impact must last without effective mitigation  
22 before it is considered significant depend on how  
23 long it takes for feasible mitigation measures to  
24 become effective?

25 A Yeah, there are a lot of parts to that

1 question. But what I want to say is not  
2 necessarily.

3 Q So it's neither yes nor no?

4 A That's right. I mean it would require a  
5 more of a response than I think we have time for  
6 me to give right now.

7 Q Well, can you please provide at least a  
8 partial response, besides not necessarily?

9 A So, your question again is?

10 Q Does the determination of significance  
11 of the length of a project -- of the proposed  
12 mitigation measure depend on how long it takes  
13 that mitigation measure to become effective?

14 MR. WHEATLAND: The significance of a  
15 proposed mitigation measure?

16 MS. DeCARLO: Yes.

17 DR. PRIESTLEY: I think --

18 BY MS. DeCARLO:

19 Q The significance of the impact.

20 A Okay, so you're talking about the  
21 effectiveness of the measure or the significance  
22 of the impact. I think it's a factor that you  
23 want to take a look at and take into  
24 consideration.

25 Q So would the impact be less than

1 significant even if those measures took 30 years  
2 to become effective with regard to this project?

3 A If they took 30 years -- well, again,  
4 you need to define what is effective. And I think  
5 that, again, this is an area of where there can be  
6 some discussion. You know, at what point does the  
7 landscape begin to add value in terms of  
8 mitigating the visual effects of the project.

9 And, you know, my assessment is the fact  
10 that it would be before ten years. So, there is -  
11 - as the landscape is in its partial development,  
12 it still, you know, adds value in terms of  
13 reducing impacts.

14 Q Okay, thanks. Now in your testimony on  
15 page 2.12-7, you state that: The proposed  
16 landscaping plant will, in a reasonably short  
17 period of time, screen most of the project's lower  
18 elements from view."

19 What is your definition of a reasonably  
20 short period of time?

21 A In this case I'm assuming something on  
22 the order of five to seven years.

23 Q And on what do you base that definition?

24 A I don't have a basis; again, it's more,  
25 I guess, common sense and logic having to do with

1 the lifespan of the project. I can't refer you to  
2 a specific, you know, law or study.

3 Q Okay, thanks. Also in your testimony  
4 you state that in a relatively short period of  
5 time the proposed landscaping will screen out most  
6 of the project's smaller and more visually complex  
7 features.

8 In your definition to what is the short  
9 period of time relative?

10 A Again, taking into account what is the  
11 lifespan of this project, using that as kind of  
12 the, you know, kind of definition of the kind of  
13 the universe time we're looking at.

14 Q So for projects for which landscaping is  
15 proposed, such as this project, do you follow the  
16 principle that visual impact should be evaluated  
17 with landscaping as it is expected to appear at a  
18 time that is some proportion of the economic life  
19 of the project?

20 A In this -- I think that was my  
21 assumption in this particular case.

22 Q So with this case, with the expected  
23 economic lifespan of 30 years, ten years is an  
24 insignificant impact?

25 I'm sorry, you evaluated the impacts of

1 the project as it is expected to appear ten years  
2 after mitigation.

3 A My -- yeah, my analyses were done based  
4 on the ten-year simulations assuming that in the  
5 interim that there would also be some reasonable  
6 level of mitigation, as well.

7 Q Do you always follow this principle in  
8 your assessment of the visual effects of projects?

9 A I would say that in my most recent  
10 projects, anyway.

11 Q How about your not-so-recent projects?

12 MR. WHEATLAND: Objection, relevance.

13 MS. DeCARLO: It goes to the basis and  
14 consistency of his methodology.

15 HEARING OFFICER WILLIAMS: Sustained.

16 DR. PRIESTLEY: I can't -- you know, I  
17 can't --

18 MR. WHEATLAND: It's sustained.

19 HEARING OFFICER WILLIAMS: You don't  
20 have to answer.

21 DR. PRIESTLEY: Oh, okay.

22 BY MS. DeCARLO:

23 Q And what is the rationale for using the  
24 principle basis of economic life?

25 A Yeah, again we have to establish a

1 rational basis for the decisions in the criteria  
2 that we use. So, one logical place to start is to  
3 think about well, how long is this facility going  
4 to be there; you know, what is its lifespan. And  
5 at what point during its overall lifespan is it  
6 reasonable to assume that there should be, you  
7 know, some reasonable degree of screening.

8 Q So for a project with a lifespan less  
9 than 30 years, you would evaluate its impacts with  
10 landscaping as it would appear at some time less  
11 than the end of its economic life, is that true?

12 A Let's see if I understand the question  
13 properly? For something that has a shorter  
14 lifespan one might expect the screening to be  
15 effective sooner.

16 Q So if this project had a shorter  
17 lifespan you would expect -- you would evaluate  
18 the proposed mitigation --

19 A Yeah, I might be --

20 Q -- at some time --

21 A -- I might be looking for faster  
22 mitigation for something that is, yeah, more  
23 temporary in nature.

24 Q And is a description of this principle  
25 located anywhere in your testimony?

1           A     No, it is not.

2           Q     And why didn't you set forth your basis  
3     on that?

4           A     I can say that this has only, I guess,  
5     become an issue -- again, my approach, I think, is  
6     pretty consistent with CEQA practice, and this  
7     issue, as you are bringing it up, has only become  
8     an issue from Energy Commission Staff that's, you  
9     know, fairly new on the scene. And this AFC was  
10    prepared some time ago before this was, you know,  
11    a matter of dispute.

12          Q     Now consider a project identical to the  
13    proposed project with the same proposed  
14    landscaping, but with a lifespan, economic  
15    lifespan of ten years, rather than 30 years.

16                 According to your principle would you  
17    evaluate the project's impacts with landscaping as  
18    it is expected to appear at a time that is less  
19    than ten years?

20          A     Yeah, if I were doing an evaluation of a  
21    project, one like this that lasted only ten years,  
22    and if there were impacts that needed to be  
23    mitigated, yeah, I would probably be looking for  
24    my landscaping to be effective within a shorter  
25    period of time.

1 Q And can you -- how many years would that  
2 be?

3 A Yeah, I mean on the spot, I mean I can't  
4 tell you on the spot.

5 Q And because of that shorter time period  
6 of growth would the visual impacts of the project  
7 be greater than those of the proposed project?

8 A Well, again, it would all depend, well,  
9 what is the project.

10 Q Same project --

11 A The very same --

12 Q -- just a different lifespan.

13 A -- the very same project?

14 Q Yes. Same landscaping.

15 A And so the question is?

16 Q Would the visual impacts of that  
17 project, with the lifespan of only ten years, be  
18 similar to the visual impacts of this project or  
19 less than or greater than?

20 MR. WHEATLAND: Assuming what?

21 BY MS. DeCARLO:

22 Q Assuming that it's based on this  
23 principle that you're evaluating the mitigation at  
24 some point less than ten years, less than the  
25 lifespan of the project.

1           A     Yeah, I'd have to say this question has  
2     a number of parts to it.  And so, an answer that I  
3     will give you now is that I might conclude that a  
4     project with a relatively short lifespan, in fact,  
5     overall might have less of an impact than one that  
6     is going to be there for a longer period of time.

7           Q     Is it true that an impact is mitigated  
8     less by a measure that gradually increases in  
9     effectiveness than by a measure that is identical  
10    except that it is immediately effective?

11          A     Well, with the latter you certainly have  
12    a more immediate effect.

13                   HEARING OFFICER WILLIAMS:  Counsel,  
14    you've got two minutes.

15    BY MS. DeCARLO:

16          Q     Did you also assess the degree of visual  
17    impact that a project would cause at any point  
18    prior to ten years after the end of construction?

19          A     Only informally as I, you know, again  
20    used my professional judgment to try to understand  
21    what is the potential degree of coverage that you  
22    would have, you know, over time as -- between the  
23    time the landscaping is installed and ten years.  
24    And you might have noticed that in the filing we  
25    made, I guess it was back on April 3rd, I have a

1 table in which I indicate the interim sizes of the  
2 various vegetation that we use.

3 And that was, you know, precisely the  
4 idea to provide a basis for --

5 Q Okay, thanks. That's enough.  
6 Specifically did you assess the visual impacts of  
7 the project at the start of operation with the  
8 landscaping as it would appear when planted?

9 A I would say that's one of the things  
10 that we --

11 Q Yes or no?

12 A -- take into -- took into account, yeah.

13 Q Okay. Is it true, would you agree that  
14 the project's visual impacts would be the greatest  
15 at the start of operation with little landscaping  
16 growth before the plants have had an  
17 opportunity --

18 A Yeah, that's a reasonable statement.

19 Q So in the case of a mitigation measure  
20 that gradually attains effectiveness, do you  
21 evaluate the impacts of a project only after the  
22 mitigation becomes effective?

23 A No, not necessarily. We look at some  
24 reasonable point in time at the lifespan of the  
25 project and take a look at, well, how big is the

1       vegetation then, and how much coverage are we  
2       getting, and kind of how effective is it at that  
3       point.

4           Q     Earlier in your discussion you  
5       acknowledged that the Tracy substation is  
6       partially screened, is that correct?

7           A     That's correct.

8           Q     And your own photographs show that the  
9       views from KOPs 3 and 6 document the existence of  
10      this screening, is that correct?

11          A     That is correct.

12          Q     And, in fact, the substation is screened  
13      along its south side and along the southern half  
14      of its east side, is that correct?

15          A     That's all correct.

16          Q     But your discussion of cumulative  
17      impacts on page 2.12-11 states in part that,  
18      quote, "It is simply incorrect to state that the  
19      landscaped features of the East Altamont Energy  
20      Center will cause a greater contribution to visual  
21      impact than the unscreened Tracy substation." Is  
22      that your testimony?

23          A     That's on page 2.12- what?

24          Q     Eleven.

25          A     Eleven. Yeah, that's my testimony.

1           Q     So your testimony there that the Tracy  
2           substation is unscreened is, in fact, inaccurate,  
3           is it not?

4           A     No. That's not inaccurate, because  
5           certainly much of the west side and the northern  
6           side of the substation are entirely unscreened.

7                     In particular, it's -- one can  
8           essentially say that the 500 kV portion of the  
9           substation is unscreened.

10                    MS. DeCARLO: Okay, that'll be it for  
11           staff. Thank you.

12                    HEARING OFFICER WILLIAMS: Thank you.  
13           Mr. Sarvey?

14                                    CROSS-EXAMINATION

15           BY MR. SARVEY:

16           Q     You testified earlier that this project  
17           wouldn't have any impact to recreational users, is  
18           that correct?

19           A     That's essentially correct.

20           Q     Have you seen this document from the  
21           East Bay Regional Park District docketed January  
22           22, 2002 for this project?

23                    MR. WHEATLAND: Well, we can't see it  
24           from over there.

25                    MR. SARVEY: I'm just asking if he's

1 seen it.

2 DR. PRIESTLEY: I don't know that I have  
3 seen it.

4 BY MR. SARVEY:

5 Q Well, I'll just summarize it for you.  
6 Essentially they describe the 1997 trails master  
7 plan for the East Bay Regional Park District. So  
8 in your statement that this doesn't impact any  
9 views for recreational users, did you consult the  
10 1997 trails master plan?

11 A East Bay Park trails master plan, I did  
12 not.

13 Q So concerning that how could you make a  
14 statement that this particular project won't  
15 impact views for recreational users?

16 A Yeah, I was unaware that there were any  
17 planned trails in the immediate vicinity of the  
18 project site. Are you aware of any?

19 Q I'll refer to Mr. Wheatland's common  
20 thing. --

21 MR. WHEATLAND: You can't --

22 MR. SARVEY: I'm asking the questions,  
23 you're answering.

24 (Laughter.)

25 DR. PRIESTLEY: Good try, huh?

1 MR. SARVEY: I thank you for that, Mr.  
2 Wheatland.

3 MR. WHEATLAND: You're learning, yes.  
4 (Laughter.)

5 COMMISSIONER PERNELL: Yeah, he is  
6 learning.

7 BY MR. SARVEY:

8 Q How tall are your tallest trees that you  
9 plan to implement in this project?

10 A Excuse me?

11 Q How tall are the tallest trees you plan  
12 on implementing in this project?

13 A Well, we'll have to take a look at our  
14 submission of April 3rd where we lay that out in  
15 considerable detail. But, -- so I don't know if  
16 you have this submission dated April 3rd. There's  
17 a table in there that's labeled table March 2-1,  
18 East Altamont Energy Center plant palette.

19 And in this table we list the various  
20 trees and indicate their height at various  
21 periods. So, like if you're looking 20 years out,  
22 the Lombardi poplar is going to be anywhere from  
23 60 to 79 feet high. The casuarinas could be  
24 anywhere between 48 and 58.

25 Q And you mentioned that your stacks were

1 175 feet, is that correct?

2 A That's correct.

3 Q You mentioned that the project site is  
4 currently a highly altered landscape, is that  
5 correct?

6 A That is correct.

7 Q Then you testified that the facility  
8 will be neat and orderly, is that correct?

9 A That is correct.

10 Q Does that indicate a change to you in  
11 the project description or altering of the  
12 landscape?

13 A Well, yeah, it will certainly alter what  
14 you see there on the site, yeah, that's true.

15 Q Will the project substantially alter the  
16 existing viewshed including any changes in natural  
17 terrain?

18 A In terms of the terrain I don't believe  
19 that there is any substantial grading that's going  
20 to take place on the site. Maybe some, but, you  
21 know, it won't substantially change the terrain on  
22 the site. It will certainly add something that  
23 isn't there right now.

24 Q So the current site is generally flat  
25 with no structures on it, correct?

1           A     The portion of the site that's going to  
2     be used for the power plant, yeah, it does not  
3     have any structures on it.

4           Q     So would you consider that a change in  
5     the natural terrain?

6           A     Again, it's certainly a change in what's  
7     there on the site, but if you're talking about  
8     terrain, you know, one thinks of, you know, the  
9     level, the ground on the site. So, again, I think  
10    that when you say terrain you think about, you  
11    know, grading and the like.

12          Q     And what colors did you say you were  
13    going to paint the project?

14          A     You know, at the moment what has been  
15    proposed is a palette of neutral gray colors for  
16    the major structures.

17          Q     Okay. Are those colors currently  
18    present at the project site?

19          A     Well, only to the extent that some of  
20    the nearby infrastructure, like transmission lines  
21    and Tracy substation have elements that are also  
22    neutral grays.

23          Q     You have a description of the project  
24    and I'm not going to go into great length, because  
25    we don't have the time, but you talked about 175

1 foot stacks and 100 foot long cooling towers, and  
2 structures that are fairly large, is that correct?

3 A Yeah, some of them are large.

4 Q Okay. Will the project deviate  
5 substantially from the form, line, color and  
6 texture of existing elements of the viewshed that  
7 contribute to visual quality?

8 A Yeah, not necessarily because you take a  
9 look at those photos, you can see that there are  
10 currently horizontal and vertical lines in the  
11 landscape that are our project echoes.

12 Q Earlier you described KOP-5. You said  
13 that it was moderate to high -- I forget the term  
14 you said -- viewer significance or -- I forget the  
15 exact term you used.

16 Can you take a look at figure 8.11-7B.

17 A Yeah, actually, you know, the figure  
18 that we might want to be looking at would be  
19 figure March 02-4A --

20 Q Once again, --

21 A Pardon?

22 Q Once again, I'm asking the questions.

23 A Pardon?

24 Q I'm asking the questions. Not to be  
25 rude, I just -- okay, looking at figure 8.11-7B,

1 do the towers in that figure, are they higher than  
2 the Mount Diablo and associated range there in  
3 that picture?

4 A In this picture from that particular  
5 point, yes.

6 Q And you said KOP-5 was really the only  
7 sensitive, in your opinion, moderate to high  
8 viewer whatever you call it, I --

9 A Okay, yeah, so --

10 Q -- apologize. Okay.

11 A -- specifically what I said about it is  
12 moderate to moderately high existing visual  
13 quality, which is different from viewer  
14 sensitivity.

15 Q Thank you, Mr. Priestley. Now, in your  
16 opinion, does the facility obscure Mount Diablo in  
17 that picture?

18 A You could say that it obscures a small  
19 portion of the side. And, again, from that  
20 particular view, but it does not obscure the peak  
21 of Mount Diablo.

22 Q Um-hum, just the side. Does it obscure  
23 any other part of the range there?

24 A In the area right behind the stacks,  
25 well, basically it appears to be, the ridgeline of

1       either Mount Diablo or some of the hills in  
2       between.

3           Q     Would you consider say a little bit  
4       further down Byron Bethany Road, let's say maybe  
5       500 to 1000 feet, is it possible that that  
6       facility will obscure the peak of Mount Diablo  
7       from that angle?

8           A     Yeah, it's quite true, kind of a, you  
9       know, law of physics as you're driving along, at  
10      some point you're going to reach a point where the  
11      power plant's going to align with the peak of  
12      Mount Diablo, but it's going to be pretty fleeting  
13      at the speeds that people travel along there.

14          Q     Did the applicant or anyone explain to  
15      you the location of the Mountain House community  
16      that's currently under construction?

17          A     Yeah. In fact, I have to say one of the  
18      first things I did in being assigned this project  
19      was to get a copy of the plans for the Mountain  
20      House project, kind of lay them out on a map along  
21      with the project so I could really understand what  
22      is the relationship between the Mountain House  
23      project and this project.

24          Q     Um-hum. And is the Mountain House  
25      project anywhere near KOP-5?

1           A     You know, not really, not the part that  
2     are going to be developed at any point in the near  
3     term future. The water tanks are somewhat close  
4     to KOP-5, but the residential development is  
5     actually going to be even off of the site  
6     landscape context figure.

7           Q     Are you aware that there's going to be  
8     homes built above those water tanks on the project  
9     site?

10          A     The plans that I have seen indicate that  
11     that area is zoned as an urban reserve, and I am  
12     not aware that that status has changed.

13          Q     So you're aware that they'll be built  
14     south of those tanks then, correct?

15          A     Yeah, way further south, and again off  
16     of this air photo that we have in front of us. At  
17     a distance something like, the closest ones that  
18     are in the works at all at the moment are  
19     something like 1.3 miles from the project site.  
20     The ones that are under construction now are over  
21     two miles from the project site.

22          Q     Um-hum. And is it your understanding  
23     that there will be homes built in this project  
24     that will be within one mile of this project site?

25          A     Again, the maps that I have show that

1 the closest homes would be about 1.3 miles.

2 Q I believe in the AFC it quotes it as one  
3 mile. But, I'll accept your figure there.

4 Earlier the staff was asking you a  
5 question about viewer concern. Do you live in  
6 this project area?

7 A I live in Alameda County, but not  
8 exactly in this project area.

9 Q Do you have a view of this facility in  
10 Alameda County?

11 A No, I do not.

12 Q Okay. So you haven't consulted with any  
13 of the local residents about their concerns and  
14 what they feel is important views for us who live  
15 in this project area, is that correct?

16 A Not extensively, no.

17 Q Okay. So your analysis includes only  
18 your views as to what is important views in the  
19 project area, is that correct?

20 A My professional judgment and also as  
21 informed by looking at local plans and policies.

22 Q So do you feel like the views of local  
23 residents are important in determining what is  
24 important views and what isn't?

25 A I do.

1 Q Or is it only your opinion?

2 A Well, I do think they're important.

3 Q Would you like my opinion on it?

4 A Certainly.

5 Q That would be testifying, --

6 COMMISSIONER PERNELL: Can we do that  
7 offline?

8 MR. SARVEY: -- so I won't do that.

9 BY MR. SARVEY:

10 Q You stated earlier that you felt that  
11 the -- or, excuse me, let me ask another question.

12 Did you evaluate any of the project  
13 linears for impacts on existing viewshed?

14 A Yes. The most obvious one, of course,  
15 is the transmission line link over to the Tracy  
16 substation. And we also looked at the gas and  
17 water lines.

18 Q And you feel that the Tracy substation  
19 impacts the views in that area, is that correct?

20 A Excuse me?

21 Q You feel that the Tracy substation  
22 impacts some KOP views in that area negatively?

23 A Well, let's say that it's an existing  
24 element of the landscape. And because of the  
25 presence of that substation I would say that we're

1 dealing with a landscape that is not a pristine  
2 rural landscape. It's something different.

3 Q In your analysis of the linears is it  
4 your understanding that the applicant is going to  
5 add to the infrastructure there at the existing  
6 substation?

7 A That was not something that I looked at  
8 explicitly in the visual analysis.

9 Q Didn't you just earlier testify that you  
10 examined the linears for impacts on views?

11 A Okay, yeah, we looked at the addition of  
12 the transmission line between the project and the  
13 project switching station down towards the  
14 existing MID line along Kelso Road.

15 Q So, okay, the answer -- you gave me the  
16 answer, thank you.

17 And will the switchyard -- I'm assuming  
18 you examined the switchyard -- will that be  
19 impacting any existing views?

20 A We did look at the switchyard. The  
21 switchyard is on the southern side of the power  
22 plant, so it's not visible from all areas. And  
23 because of the height of the facility which is  
24 lower than the facilities behind it will -- to  
25 some extent it will be visually absorbed into the

1 mass of the project.

2 And again, because of its lower height,  
3 the landscaping will be pretty effective into  
4 integrating it into the whole.

5 Q Are there any designated scenic highways  
6 in this area?

7 A Yes. You're probably familiar with --

8 MR. WHEATLAND: I'm going to -- I think  
9 that question has already been asked and answered.

10 HEARING OFFICER WILLIAMS: Overruled.

11 MR. WHEATLAND: Answer it.

12 DR. PRIESTLEY: Okay. You're probably  
13 familiar with, I think, about a 1966 vintage  
14 scenic routes element in Alameda County which  
15 designated Mountain House Road and Byron Bethany  
16 Road as scenic routes.

17 And you're probably also familiar with  
18 the testimony of the Alameda County Planning  
19 Director, that he sees no conflict between this  
20 project and those designations.

21 Q Is it your testimony that the current  
22 viewshed is dominated by energy infrastructure  
23 like the PG&E switchyard and the water pumping  
24 plant, is that correct?

25 A Well, it's actually the Tracy WAPA Tracy

1       substation and the Tracy pumping plant and a  
2       number of other facilities of that type.

3           Q     You stated earlier that you were unaware  
4       that the switchyard -- or the substation would be  
5       enlarged by Calpine, is that correct?

6           A     Yeah, I'm unaware of the specifics of  
7       that.

8           Q     And do you feel that the East Altamont  
9       Energy Center will add to that existing mix of  
10      what you classify, what you say is not sensitive  
11      viewshed, but appropriate or -- do you feel that  
12      this is going to add to the types of facilities  
13      like the switchyard and the substation and the  
14      water pumping plant, the East Altamont Energy  
15      Center?

16          A     Well, essentially we have -- as I  
17      pointed out, we essentially have a node of, you  
18      know, pretty large scale infrastructure here. And  
19      this will just be essentially be an extension of  
20      that node.

21          Q     So won't the East Altamont continue to  
22      degrade what you say is an impaired viewshed?

23          A     Excuse me?

24          Q     Won't the East Altamont Energy Center  
25      continue to degrade what you described as a

1 degraded viewshed?

2 A I did not use the term degraded.

3 Q Okay.

4 A I think it will be consistent with  
5 what's there, and will not substantially change  
6 the visual quality or the character of what's  
7 there right now.

8 Q Is there any facilities in the area of  
9 that magnitude, size, height that you're aware of?

10 A The --

11 Q 175-foot towers>

12 A Yeah, there is nothing with that is as  
13 tall, but certainly in magnitude the substation  
14 is, the 500 kV portion of the substation, in  
15 particular, that's pretty substantial.

16 Q Okay. And is the substation, this large  
17 substation in any of these important views that  
18 you put up here? I can't see it anywhere.  
19 Particularly with respect to the East Altamont  
20 Energy facility. Can you point out to me where  
21 that substation is in any of those pictures,  
22 because I cannot readily see it.

23 A Okay. As I pointed out before, in this  
24 view from KOP-1, going down Mountain House Road,  
25 it's visible on the right. In fact, as you're

1 actually driving down the road it would be more  
2 visible than it is in that photo. And certainly  
3 as you get closer to it, it's going to be a lot  
4 more visible.

5 From KOP-2, as you drive north on  
6 Mountain House Road, right at that point where I  
7 took the picture there are trees, but just a  
8 little bit beyond there when you get past the  
9 trees it's going to be right there, right next to  
10 the road.

11 In this view that we've been talking  
12 about from KOP-5 at Byron Bethany Road and  
13 Lindeman Road, if we had just turned the camera a  
14 little bit in taking that picture, the Tracy  
15 substation would have been, you know, very evident  
16 in the view.

17 And then from this view in KOP-6,  
18 looking down Kelso Road, you can certainly see the  
19 substation in the middle ground of the view.

20 Q I'm sorry, I don't see it in any of  
21 those pictures, but thank you for your testimony.

22 HEARING OFFICER WILLIAMS: Okay, any  
23 redirect?

24 COMMISSIONER PERNELL: Thank you.

25 MR. WHEATLAND: One moment off the

1 record, please.

2 HEARING OFFICER WILLIAMS: Off the  
3 record.

4 (Off the record.)

5 MR. WHEATLAND: I have just one question  
6 to ask this witness.

7 REDIRECT EXAMINATION

8 BY MR. WHEATLAND:

9 Q Ms. DeCarlo asked you a series of  
10 questions regarding in which she used the term  
11 substantial change, whether this would be a  
12 substantial change or that would be a substantial  
13 change.

14 The CEQA guidelines that you mentioned  
15 talk about a substantial degradation. When you  
16 answered the questions regarding substantial  
17 change were you meaning it to be meant in the same  
18 way as substantial degradation?

19 A No, I did not.

20 MR. WHEATLAND: Thank you, that's all  
21 the questions I have on redirect.

22 HEARING OFFICER WILLIAMS: Thank you.  
23 Staff, do you want to --

24 MS. DeCARLO: Present my witness? Yes.  
25 Staff's witness for visual resources is Michael

1 Clayton.

2 He needs to be sworn in.

3 Whereupon,

4 MICHAEL CLAYTON

5 was called as a witness herein, and after first  
6 having been duly sworn, was examined and testified  
7 as follows:

8 MS. DeCARLO: And are the parties  
9 willing to stipulate to his qualifications?

10 HEARING OFFICER WILLIAMS: Mr.  
11 Wheatland, are you willing to stipulate to his  
12 qualifications?

13 MR. WHEATLAND: Yes, I am.

14 COMMISSIONER PERNELL: Mr. Sarvey?

15 MR. SARVEY: Yes.

16 MS. SARVEY: Is it possible that I can  
17 do public comment so I can pick my kids up at  
18 2:50?

19 HEARING OFFICER WILLIAMS: Sure, why  
20 don't we take your public comment.

21 MR. WHEATLAND: Could we do the public  
22 comment after we do the staff's witnesses?

23 HEARING OFFICER WILLIAMS: She has a  
24 special request to pick up children.

25 MR. WHEATLAND: Well, she's been

1 speaking now for several days. And with all due  
2 deference to the Sarvey Family, I'd like at this  
3 point to be able to finish with these witnesses.

4 MS. DeCARLO: And as it is, staff has a  
5 very short amount of time to do their direct, and  
6 we'd like to have as much time as possible.

7 HEARING OFFICER WILLIAMS: No, go ahead  
8 and make your public comment.

9 MS. SARVEY: Susan Sarvey with Clean Air  
10 for Citizens and Legal Equality. If you want  
11 local input on the visual I think you should talk  
12 to the people who live on Von Sosten Road. I have  
13 a lot of friends who live there; they'll be  
14 looking right at it.

15 I can't imagine why the applicant did  
16 not submit a picture of the plumes since they  
17 didn't accept staff's picture. People are visual  
18 by nature. Could it be in reality when you saw  
19 the applicant's simulation it would be scarier  
20 than staff's?

21 I live east of the Biomass plant and  
22 Owens Brockway and agricultural burning. The  
23 plumes are regular and disgusting. You can even  
24 see them in the dark.

25 I submit you don't have a picture

1       because the picture would not support the words.  
2       Calpine made a conscious decision not to submit a  
3       visual. Now, Mr. Commissioners, we must all ask  
4       ourselves why.

5                 I see no landscaping that screens the  
6       plants in any of the photos today. I could not  
7       imagine a power plant as a direct neighbor being a  
8       positive selling point for attracting homeowners  
9       to Mountain House. I feel homeowners would view  
10      it as a degradation.

11                I find it interesting that the applicant  
12      feels that due to existing transmission lines to  
13      the substation new homeowners would embrace the  
14      power plant as a desirable visual. My impression  
15      from the applicant's testimony is that they are  
16      unaware that Mountain House has broken ground in  
17      the past month, and they will be looking at this  
18      before the landscaping grows.

19                Applicant's stance that if you allow  
20      something one time for public benefit, it means  
21      that you are willing to have it again and again  
22      will make people reluctant to accept anything for  
23      public benefit for fear of the door that it opens  
24      in the future, i.e., the substation or  
25      transmission lines.

1           A small substation and transmission line  
2           may be ugly, but it is nothing compared to the  
3           monstrosity of a belching power plant. I don't  
4           think when those people accepted that, they were  
5           going, hey, bring us a power plant, we'd love to  
6           have it for a neighbor.

7           Thank you. Talk to the people on Von  
8           Sosten Road.

9           HEARING OFFICER WILLIAMS: Thank you,  
10          Ms. Sarvey. Applicant.

11          MS. SARVEY: Thank you for letting me  
12          speak.

13                                 DIRECT EXAMINATION

14          BY MS. DeCARLO:

15                 Q     Mr. Clayton, are you sponsoring the  
16                 testimony entitled visual resources contained in  
17                 the final staff assessment marked as exhibit 1 and  
18                 errata marked as exhibit 1A and 1C?

19                 A     Yes.

20                 Q     Can you please summarize your testimony?

21                 A     What I'm going to do is try and boil  
22                 this down to some very specific points to sort of  
23                 try and expedite our presentation here, given the  
24                 amount of time. So we're going to forego some of  
25                 our planned approach here.

1           Let me first just start off by sort of  
2           addressing this overall issue of impact, the  
3           significance that the project is going to have.

4           Suffice to say that I strongly disagree  
5           with the applicant's conclusions regarding what  
6           this project is going to result in in terms of  
7           visual impacts. This project is going to have a  
8           significant visual impact; is going to be  
9           substantial; it's going to occur from a lot of  
10          viewing directions.

11          The applicant's argument is primarily  
12          based on two points which really don't hold. The  
13          first of all, there's a lot of stuff out there, a  
14          lot of infrastructure, and that degrades the  
15          visual quality of the existing environment, and  
16          it's similar enough to propose a project such that  
17          adding this project is not going to make a  
18          substantial difference to the existing landscape.

19          That is clearly not the case. First of  
20          all, most of the infrastructure they cite, most of  
21          the projects they describe in their list you can't  
22          even see from these viewpoints. There are some  
23          that you can, and that is primarily the Tracy  
24          substation and also some of the transmission line  
25          infrastructure in and around the project site.

1           However, that infrastructure and those  
2 facilities bear absolutely no resemblance to the  
3 type of structures we're now talking about. The  
4 proposed project is going to consist of massive  
5 geometric forms, nothing like linear vertical  
6 transmission tower or even the structures within  
7 the Tracy substation, even though they do become  
8 quite congested with a number of structures that  
9 are there.

10           The wind turbines that are referenced  
11 are at a great distance and, you know, arguably  
12 are not that visible from these various viewing  
13 locations.

14           So we're going to be introducing  
15 structures that are substantially different into  
16 this environment. And there is absolutely nothing  
17 in this region that even closely approximates  
18 either the character of these facilities or the  
19 scale and magnitude of this facility.

20           Second of all, they conclude that the  
21 implementation of their landscaping plan is going  
22 to resolve any remaining impacts that this project  
23 might have. In fact, the landscaping is not going  
24 to be effective at all in any reasonable amount of  
25 time.

1           We take a look at the simulations  
2           provided by the applicant for KOP-5, if we can  
3           pull that up on the screen here, as an example.  
4           The simulation, I think the first one we're going  
5           to see here is the landscaping at ten years during  
6           the summertime. You know, basically this  
7           landscaping, the landscaping that we currently  
8           have, because of the wildlife issues, is not  
9           particularly effective at all in screening the  
10          majority of those components. I mean there is,  
11          most of that project you can see. This is the  
12          summertime.

13                 If we take a look at the wintertime,  
14          we'll see even less effective screening. The  
15          applicant referred to that as being only -- I  
16          think they referred today in their testimony as  
17          being a couple of months. I think what we're  
18          really talking about here is something longer than  
19          a couple of months. I believe it's probably more  
20          like maybe four months, possibly five months. But  
21          it's certainly longer than two months out of the  
22          year.

23                 This landscaping is at ten years. By  
24          any measure that clearly is a long-term visual  
25          impact. Staff uses, and I would add, I think it's

1 a generous criteria of five years. If you look at  
2 some of the methodologies used by other agencies,  
3 and I'm more than willing to agree that these were  
4 other types of projects, but there are other  
5 timeframes in the literature. The Forest Service  
6 uses timeframes for some of their VQO, visual  
7 quality objective timelines of one year, two  
8 years. I've seen three years, the BLM has used  
9 two years and three years.

10 Some of the local and state agencies,  
11 when they do vegetation/habitat management plans,  
12 oftentimes there is a two-year requirement,  
13 because that's the timeframe that oftentimes is  
14 required for let's say a wetlands mitigation, we  
15 encounter these kinds of timeframes, two years.

16 Staff has five years on their criteria  
17 beyond which is a significant visual impact, for a  
18 long term, I should say a long term visual impact.  
19 To suggest that ten years is reasonable, you know,  
20 we just can't agree with that.

21 And also the idea that somehow you tie  
22 the significance of the impact or the  
23 reasonableness of the mitigation timeframe to the  
24 economic lifespan of the project, I have not  
25 encountered that anywhere. So, you know, we do

1 not agree with that approach.

2 What I'd like to do real briefly is kind  
3 of run through the methodology that we do use.  
4 There has been a lot of comment in the applicant's  
5 written testimony regarding the methodology used  
6 here in terms of the lack of clarity, or in some  
7 cases, their reference to an elaborate  
8 methodology.

9 If we could have the lights back on?  
10 I'd like to refer the Committee to appendix BR-1,  
11 which is this table. I don't know if you have  
12 this in front of you. Counsel's going to provide  
13 you with at least one copy.

14 I'm going to use this exhibit, because I  
15 think it kind of clearly lays out exactly what  
16 we're doing, and how we're doing it. And I'm  
17 going to make this as quick as I can. I'm not  
18 going to spend as much time as I would like to  
19 spend on this.

20 But when we evaluate an impact, what do  
21 we do? First of all, we need to characterize the  
22 setting. What is currently happening out in this  
23 landscape. What is it that comprises the visual  
24 setting. And by almost any measure what are the  
25 things that are important? It's the existing

1 quality or landscape character.

2 And I would also like to point out that  
3 the heading on this table, which is visual  
4 quality, in the third column there, and also the  
5 heading which is in the text which also says  
6 visual quality, is really a combination of  
7 discussion of visual quality and landscape  
8 character. This is a heading of convenience to  
9 simplify the heading structure.

10 However, we look at the quality of the  
11 landscape. We want to know some -- get some idea  
12 as to, or make some judgment call as to what the  
13 existing viewer concern or viewer sensitivity  
14 might be. And we want to have an idea as to how  
15 visible the project is going to be, or to what  
16 extent viewers may be exposed to the project.  
17 That is what is going to characterize our existing  
18 setting. That's going to tell us how sensitive  
19 this existing condition is going to be to the  
20 introduction of any kind of project, no matter  
21 what it is.

22 So we evaluate those factors, and we  
23 look at them fairly equitably in terms of how  
24 they're rated, or weighted. They are given  
25 relatively equal weight.

1           For viewer exposure we have a number of  
2 factors that we look at in terms of visibility,  
3 distance, zone, number of viewers. These are all  
4 important factors in trying to gauge just how  
5 much, or to what extent viewers are going to be  
6 exposed to the project.

7           Once we have characterized this existing  
8 condition, we want to compare the proposed change  
9 to that. And that's where the visual change  
10 analysis comes in.

11           We look at three fundamental factors.  
12 We look at the visual contrast, which is basically  
13 comparing these structures and the form, line,  
14 color and texture of what's going to be placed in  
15 this environment with what is currently there.

16           We look at the size and the dominance of  
17 the structure, or the facility. And we looked at  
18 the extent to which it might block existing  
19 features in the landscape. There has been  
20 discussion and comment about viewer concern.

21           Let me back up for a minute. Viewer  
22 concern, you know, this is a judgment call that  
23 staff makes. It's based on professional  
24 experience. And it's based on, as we described in  
25 the text, a degree of what we consider to be, what

1 I consider to be viewer expectation.

2 What is viewer expectation? If you can  
3 see things in the landscape, if you are used to  
4 seeing things in that landscape, as you drive by  
5 every day, or if you live in the area, you have an  
6 expectation of seeing those things in the  
7 landscape. That's pretty common sense.

8 So, if you can no longer see those  
9 things in the landscape, that's a change. And we  
10 try and estimate or evaluate to what extent  
11 viewers might be sensitive to that degree of  
12 change.

13 In terms of making a judgment call on  
14 viewer concern, what is this based on? It's based  
15 on my own professional judgment in terms of my  
16 experience and exposure to a wide variety of  
17 public opportunities to engage with the public in  
18 terms of public workshops, hearings, project  
19 meetings on a variety of projects, not just the  
20 power plant projects I've worked on for CEC, but  
21 also other types of energy infrastructure  
22 projects.

23 And generally it is -- well, I won't say  
24 generally -- I mean I have never heard of a public  
25 comment where the public was not or did not place

1 higher value on existing natural landscape  
2 features relative to introduced industrial  
3 features. That's kind of a no-brainer in my book.  
4 That generally people are going to value higher  
5 the ability to see hills and other natural  
6 features rather than looking at a new industrial  
7 structure.

8 We take, going back to visual change,  
9 once we have made a determination, once I've made  
10 a determination of visual change, I look at that  
11 in the context of this overall visual sensitivity.

12 Now, overall visual sensitivity in the  
13 existing visual setting section is basically a  
14 function of visual quality, viewer concern and  
15 overall viewer exposure.

16 I rate those. I collate those, combine  
17 those into an assessment of overall visual  
18 sensitivity. I then compare the overall visual  
19 change to that visual sensitivity, and I arrive at  
20 visual change, as I said, by combining contrast,  
21 dominance and blockage.

22 Again, I rank those, I rate those, and I  
23 combine those ratings. Then I compare overall  
24 visual change to visual sensitivity.

25 Now, we relate that back to the CEQA

1       significance criteria in terms of to the extent of  
2       which -- to the extent to which visual quality is  
3       substantially degraded or not. Visual quality and  
4       landscape character, visual character are an  
5       inherent part of the overall rating for visual  
6       sensitivity. That's in there.

7                 But we look at other things besides  
8       that. I mean it is entirely possible to have a  
9       very substantial negative impact on visual  
10      quality, which you might think could equate to a  
11      significant visual impact, but the fact is if you  
12      don't take into account viewer exposure, in other  
13      words, if someone can't see that impact, you  
14      haven't got an impact.

15                So we have to look at other factors  
16      besides visual quality. But ultimately, when we  
17      make the final determination for impact  
18      significance, that degree, the extent to which  
19      visual quality is degraded, is factored directly  
20      into that conclusion.

21                Just a real brief summary as to how this  
22      actually gets applied, because there has been  
23      again some written testimony that really questions  
24      how this all works and references to numeric  
25      quantitative tables and matrices and so forth.

1           When I do an analysis, first of all I've  
2           been out in the field several times during the  
3           course of preparing to do the analysis; and we're  
4           doing data requests and so forth. Then I go out  
5           to do the field work to actually develop the staff  
6           assessment. I actually make each of these  
7           determinations out in the field doing the  
8           windshield surveys, driving around, walking  
9           around, getting out of the car, viewing this from  
10          all manner of viewpoints, in addition to not just  
11          the KOPs, but from other vantage points, as well.

12          Based on that I fill out or arrive at  
13          these various conclusions. I do that in the  
14          field. This thing comes back to the office. It  
15          is then written up in narrative format. In the  
16          process of writing this up in narrative format, it  
17          is then reviewed again.

18          And in some cases, and not all, but in  
19          some cases where there might be close calls in  
20          terms of how this might actually play out in terms  
21          of let's say a summation for a visual sensitivity,  
22          when I've got -- if I have a moderate visual  
23          quality and I've got a moderate viewer concern,  
24          I've got a moderate level of viewer exposure,  
25          well, because there are all given relatively equal

1 weights in most cases, but not all, that's going  
2 to tell me that I've got a pretty well moderate  
3 degree of visual sensitivity overall.

4 That's not particularly difficult to  
5 figure out. But in some cases these calls are a  
6 little bit close. And it's a judgment call; it's  
7 professional judgment. And in those cases where  
8 there is some degree of uncertainty, or it is very  
9 close, or I might have, in some cases, similar  
10 ratings between two different KOPs, but arrive at  
11 a different conclusion for some specific reason.

12 What I will also do is then subject it  
13 to a numerical rating system which is basically a  
14 sort of a fundamental consistency check. That  
15 gets done on occasion, not for all KOPs, but for  
16 some KOPs.

17 And there's also a matrix that I use  
18 that can provide additional guidance, and again  
19 it's a consistency check in terms of the overall  
20 impact significance determination.

21 Again, it's pretty much common sense  
22 that if we have high degrees of sensitivity and we  
23 have high degrees of visual change, we're probably  
24 looking at a high likelihood of a significant  
25 visual impact.

1           So, this methodology is very  
2 transparent; it's laid out here. It's very  
3 thorough. We take into consideration those  
4 significance criteria provided by CEQA. And we  
5 provide some additional information as well, to  
6 make sure the conclusions are, in fact, thorough,  
7 adequate and defensible.

8           So let me move on to a couple other  
9 points. There was a point made that this  
10 methodology has not been approved or reviewed by  
11 CEC Staff. The fact is this methodology has been  
12 essentially used -- I've used in on approximately  
13 12 projects for the CEC over the past two and a  
14 half years, almost heading towards three years.

15           Each time, each project this methodology  
16 is subjected to fairly detailed scrutiny and  
17 review by staff. So this is not a unknown or  
18 untested or unreviewed methodology.

19           There has been -- there were some  
20 comments about the significance criteria referred  
21 to in other projects, specifically with Metcalf  
22 and the -- another project, I forgot which one it  
23 was -- might have been Delta. And I do not use  
24 those significance criteria and none of the other  
25 projects, aside from those two projects, have used

1 those significance criteria.

2 I'm going to go through here real  
3 quickly and skip a few things in the interest of  
4 time.

5 There's an issue of the ability to see  
6 this project. This project is highly visible from  
7 essentially all directions. It is surrounded by  
8 viewing opportunities on all sides. That is one  
9 of the factors that makes this a very problematic  
10 location for a project of this nature, this high  
11 degree of visual access.

12 The fact is that there are very  
13 substantial portions of Byron Bethany Road that do  
14 provide foreground viewing access to the project  
15 within the primary cone of vision.

16 In addition to that, there are medium to  
17 background views of the project from Byron Bethany  
18 Road on approach from the south with this project  
19 area which will be visible in the primary cone of  
20 vision.

21 And in many of these cases the Tracy  
22 substation is not particularly visible, or  
23 noticeable in those views.

24 Gary, can we pull up that -- was it  
25 photo 9, I believe it was photo 9.

1           While we're waiting for that, there was  
2           an issue about whether or not we used the correct  
3           landscaping plan. The fact is that yes, we did  
4           use the current landscaping plan. When the FSA  
5           was produced the production folks simply did not  
6           take out the old figures from the PSA and replace  
7           them with the new figures for the FSA. So that  
8           was an inadvertent misstep during production.

9           You know, here's a view -- this is a  
10          view west from Byron Bethany Road, a little bit  
11          further north of Kelso Road. And this is fairly  
12          near KOP-5.

13          COMMISSIONER PERNELL: Is that road  
14          right there, is that Byron Bethany? A dirt road?

15          MR. CLAYTON: No, that is adjacent to  
16          Byron Bethany.

17          MR. WHEATLAND: What is this a picture  
18          of?

19          MR. CLAYTON: This is a -- this is a  
20          picture looking west from Byron Bethany Road just  
21          north of Kelso Road.

22          MR. WHEATLAND: Is this in the  
23          testimony?

24          MR. CLAYTON: This is --

25          MR. WHEATLAND: Is this photo in your

1 testimony?

2 MR. CLAYTON: This photo is not in my  
3 testimony.

4 MR. WHEATLAND: I'd object to its  
5 introduction.

6 MS. DeCARLO: We emailed photos to  
7 everyone, all the parties on the list, including  
8 the Commissioners and the Hearing Officer Major  
9 Williams. And we received no objection at that  
10 time.

11 MR. WHEATLAND: We received no email  
12 photo--

13 MS. DeCARLO: This was about a week and  
14 a half ago.

15 MR. WHEATLAND: We've received no email  
16 photos. We never received that photo. No one on  
17 this project team.

18 MR. SARVEY: I got them.

19 MS. DeCARLO: I emailed them to everyone  
20 including Bob Sarvey; and Bob Sarvey received his  
21 copy.

22 MR. SARVEY: I got them.

23 MR. WHEATLAND: And besides, an email is  
24 not an effective means of distributing a  
25 document --

1 HEARING OFFICER WILLIAMS: Off the  
2 record.

3 (Off the record.)

4 MR. CLAYTON: I was going to show  
5 another photograph. I think I'm just going to  
6 pass on that. The point being that -- two points  
7 actually. First of all, this site and this  
8 facility will be visible from quite substantial  
9 distances. Second of all, the existing substation  
10 does not present a substantial physical presence  
11 from many of these viewpoints from which to  
12 compare to the proposed project.

13 Let me move on in the interest of time  
14 here. There's another -- you know, this comment  
15 is justification in terms of the landscaping plan  
16 and how effective it is, and how it adds, it has  
17 inherent attractiveness, it helps to integrate the  
18 facility. And that's fine, I mean I have no  
19 problem with a nicely designed landscaping plan  
20 that has its own attractiveness.

21 The point is that the purposes that we  
22 require screening and look at screening and look  
23 at vegetation is for screening. That is the  
24 primary function of the vegetation. If we're not  
25 getting effective screening then it really doesn't

1 matter too much how terrific that landscape looks,  
2 that landscaping looks.

3 The fact of the matter is the primary  
4 function has to be sufficient screening of the  
5 structures to do the job, which is basically to  
6 hide this plant. I mean that's what it really  
7 comes down to in terms of mitigation, is how can  
8 we make this plant as invisible as possible.

9 You have a terrific landscape plan which  
10 does not do much with regards to screening the  
11 structures, I can assure you that when people see  
12 this facility, what are they going to see? Are  
13 they going to notice what a terrific landscaping  
14 plan that is? I don't think so. I think what  
15 they're really going to notice is how prominent  
16 and how obtrusive that facility is going to be.

17 I'm skipping over here, bear with me for  
18 a second. I'm trying to eliminate as many of  
19 these as possible.

20 The applicant states that the FSA  
21 contains many false statements and  
22 mischaracterizations, including that we're  
23 suggesting that -- or that I'm suggesting that the  
24 project structure would be visible in foreground  
25 views from residences.

1           And that the statement that the  
2 structures will be within foreground views of  
3 nearby roadways mischaracterizes the setting.

4           The fact is what the text says is that  
5 it will be visible from foreground, and middle  
6 ground views from residences and roadways. And  
7 that was a summation statement that wasn't  
8 specifically stating that it would be visible in  
9 the foreground views from residences.

10          The fact is that when you look at the  
11 text, you look at the summary table, you clearly  
12 see for which KOPs we're identifying distance  
13 zones of foreground and middle ground for. That's  
14 beside the point that there, in fact, are at least  
15 one or two residences that would be within the  
16 foreground views, which apparently the applicant  
17 has reached agreements with to have those  
18 residences removed.

19          But the point is that the text, when you  
20 look in detail, either the text, narrative  
21 descriptions, or in the summary tables, they very  
22 clearly identify the distance zones for the  
23 various uses that were evaluated.

24          HEARING OFFICER WILLIAMS: Let's take  
25 five minutes.

1 (Brief recess.)

2 HEARING OFFICER WILLIAMS: You may  
3 continue.

4 MR. CLAYTON: Just to continue on a  
5 minute here with views of the project site,  
6 because I want to make sure that it's clear about  
7 the foreground views.

8 The applicant's testimony has  
9 characterized views of the project from Byron  
10 Bethany as being essentially a glimpse. And, you  
11 know, I don't consider what we're going to be  
12 seeing here from Byron Bethany Road as a glimpse  
13 or a fleeting look.

14 Just to go back and review visibility of  
15 the project from Byron Bethany Road, the project  
16 will be in the primary cone of vision as you are  
17 approaching from the north. Before you get to  
18 Mountain House Road, as you hit Mountain House  
19 Road and carry on down to the southeast, it will  
20 be in the foreground view and within the primary  
21 cone of vision for approximately a half a mile.

22 It will be in the foreground views from  
23 Mountain House Road for its entire length between  
24 Byron Bethany and Kelso Road, though it would not  
25 be entirely in the primary cone of vision for that

1 entire length.

2 Over all the stretch, taking into  
3 consideration approaching from the north and the  
4 south, combined, it would be within the foreground  
5 views from Byron Bethany Road for approximately  
6 eight-tenths of a mile, of which, again, when I  
7 said approximately a half a mile when it's in the  
8 foreground view and within the primary cone of  
9 vision, that half mile is split between the two  
10 approaching directions northbound and southbound.

11 And as I said earlier, the project will  
12 be within the primary cone of vision from Byron  
13 Bethany Road as you approach from the south for a  
14 substantial amount of time, distance further to  
15 the south.

16 And also let's be clear on this, the  
17 Mountain House community development that's taking  
18 place out there. I mean the roads are in;  
19 utilities are in; the walls are going up. The  
20 structures, themselves, have not, as far as I can  
21 tell, have not been sited.

22 You drive into that development; you  
23 look to the project site; it's clearly visible.  
24 There are going to be a number of views of the  
25 project site from that residential area. That's a

1 future project. We haven't really evaluated that  
2 extensively at all in this analysis. But the  
3 point is that this project is going to be highly  
4 visible, and it's going to be visible to not only  
5 motorists, but to residents, as well, in the  
6 project region.

7 There are some comments in the  
8 applicant's testimony that are a bit troubling  
9 having to do with light, nighttime lighting. You  
10 know, the applicant contends on page 2.12-10 of  
11 their testimony that staff has provided no  
12 explanation as to why the project has the  
13 potential to create a new source of substantial  
14 light that would adversely affect nighttime views.

15 Well, first of all, let's be clear that  
16 the applicant has not provided a detailed lighting  
17 plan. So we are going on the basis of, you know,  
18 basically historical experience in the types of  
19 lighting that is provided for these structures.

20 Clearly there will be sufficient  
21 lighting at that facility such that if it is not  
22 effectively controlled it will add a significant  
23 amount of light to the project area. That site is  
24 currently devoid of all light.

25 However, I'll be the first to admit

1       there is a substantial amount of light associated  
2       with lights that are unshielded at Tracy  
3       substation.  But this project location, proposed  
4       project location is substantially more visible,  
5       would be substantially more visible to motorists  
6       on Byron Bethany Road simply because it is located  
7       much closer to Byron Bethany Road.  And it has the  
8       potential to create glare in views from that road  
9       if the controls are not adequately implemented.

10               Therefore, it is appropriate not only to  
11       identify the potential impact, because again we  
12       don't have a lighting plan so we can't say for  
13       certain exactly how the applicant is going to  
14       implement their control methodology or control  
15       technology.

16               And it is appropriate to identify  
17       conditions that require the effective  
18       implementation of lighting controls.  The  
19       compliance staff has a historical record of having  
20       some difficulty getting lighting controlled at  
21       these facilities.  It's not uncommon to have  
22       lighting plans submitted that are not responsive  
23       to conditions.  And it is not uncommon to have  
24       difficulty in actually implementing the lighting  
25       plan consistent with the required conditions.

1           Let me just back up for a minute again  
2 talking about significance criteria. We had a  
3 line of questioning that was addressing the use of  
4 what was perceived to be staff's significance  
5 criteria. I think we have pretty much covered the  
6 fact that is not staff's significance criteria.

7           The significance criteria that are  
8 presented in staff's assessment have been used on  
9 many of these projects. We are addressing the  
10 CEQA significance criteria. We're also addressing  
11 what is referred to as professional standards for  
12 significance criteria.

13           As I said before, I do not use that  
14 significance criteria, and that was referenced in  
15 the line of questioning.

16           And then also the use of the guidance or  
17 the consistency, numerical consistency methodology  
18 that I employ in some cases is not a determination  
19 of significance. It is not a guiding instrument  
20 in terms of in the determination of significance;  
21 however, that particular numerical methodology has  
22 been reviewed by staff in a number of projects.

23           MR. WHEATLAND: Could you say that last  
24 part again, please? What --

25           MR. CLAYTON: Which part?

1 MR. WHEATLAND: The numerical, just the  
2 last sentence about the numerical rating. What  
3 was that, again, please?

4 MR. CLAYTON: The numerical rating, the  
5 consistency methodology, which is a numerical  
6 rating approach, which is used in some cases on  
7 some KOPs, has been reviewed by staff on various  
8 projects.

9 MR. WHEATLAND: Thank you.

10 MR. CLAYTON: And I think in the  
11 interests of time -- let me just check one more  
12 page here -- that will conclude my testimony.

13 HEARING OFFICER WILLIAMS: Thank you,  
14 Mr. Clayton. Cross?

15 MR. WHEATLAND: Yes.

16 CROSS-EXAMINATION

17 BY MR. WHEATLAND:

18 Q Ms. DeCarlo in questioning Dr. Priestley  
19 referred several times to -- she said your own  
20 KOPs. With respect to the KOPs, isn't it true  
21 that these were selected by mutual agreement  
22 between the staff and the applicant?

23 A Yes.

24 Q And to the extent that a KOP was  
25 intended to depict a view, for example, from a

1 residence, if that view was obstructed didn't the  
2 staff and applicant agree mutually to change the  
3 viewpoint so that there would be a direct  
4 unobstructed view of the project?

5 A Actually I can't comment on the  
6 specifics of that, because I was not the  
7 individual involved in the selection of the KOPs.

8 Q Okay. What has been your experience  
9 with other projects? Has that been the practice?

10 A We try and select, I think as is true on  
11 most of these projects, we try and select KOPs  
12 that are representative of the impact that will be  
13 experienced by a particular viewing population.

14 So if we're trying to characterize a  
15 visual impact to a residence or residential area  
16 we try and gauge a reasonable representation of  
17 what that experience will be.

18 And there are times when we request  
19 adjustments on KOPs to more clearly reflect that  
20 viewing experience, whether it's residential or  
21 roadways.

22 Q And that's by mutual agreement, isn't  
23 that correct?

24 A Yes.

25 Q So, for example, KOP-3 which represents

1 the view to the north from the Mountain House  
2 School wasn't actually taken from the premises of  
3 the school, is that correct?

4 A I believe that KOP was taken, it might  
5 have been from just outside the driveway.

6 Q Right. And --

7 A So, I think that's --

8 Q All right, and why --

9 A -- about where it is.

10 Q -- why was it taken outside the driveway  
11 rather than from the school premises, itself?

12 A Again, I wasn't involved in the  
13 selection of the KOPs. I could make an assumption  
14 that if you were on the school property the view  
15 would be -- the primary view would be to the east,  
16 which would not see the -- at least from what I  
17 can recall from that location, would probably not  
18 see the project site.

19 Q So the KOP was selected to provide a  
20 direct unobstructed view of the project site, is  
21 that correct?

22 A Correct. Now, --

23 Q That's -- can we have the same courtesy  
24 of trying to --

25 A Sure.

1 Q -- keep the answers relatively short.  
2 And similarly, if a view is intended to represent,  
3 for example, the view from a roadway, on occasion  
4 that view will be angled not to reflect the  
5 direction of the driving, but to reflect a direct  
6 unobstructed view of the project, is that correct?

7 A That happens on occasion.

8 Q Okay.

9 A And sometimes it happens as a result of  
10 trying to encapsulate the, sort of the full range  
11 of the cone of, the viewing cone.

12 Q All right. Now, there are no KOPs west  
13 of the project, is that correct?

14 A Well, there are KOPs located on Mountain  
15 House Road, that's west of the project.

16 Q Well, all right.

17 MR. WHEATLAND: Can you bring up the  
18 map?

19 (Pause.)

20 BY MR. WHEATLAND:

21 Q Well, I'm not very good at directions,  
22 so is Mountain House running north and south, or  
23 is it running a different direction?

24 A North/south.

25 Q All right, well, to the west of Mountain

1 House Road there are no KOPs, is that correct?

2 A Correct.

3 Q And why is that?

4 A To the west of Mountain House Road is  
5 Tracy substation.

6 Q And why are there no KOPs to the west?

7 A There's no viewing population there.

8 Q There's no viewing population.

9 A You wouldn't establish a KOP where  
10 there's not a viewing population.

11 Q Now there are roads to the west of  
12 Mountain House Road, aren't there?

13 A Further to the west there's, I think  
14 it's Bruns Road is a road that runs north/south.

15 Q Is it also possible that there are no  
16 KOPs to the west of the project because the  
17 project is not visible from those locations?

18 A The project would be substantially  
19 screened from -- the lower portions of the project  
20 would be substantially screened, I believe, from  
21 someplace like Bruns Road. The upper portion of  
22 the project would likely be visible to some  
23 degree. That wasn't an area that we evaluated so  
24 I couldn't be too specific about that.

25 Q So is it fair to say that the project is

1 visible, or primarily visible to the east of  
2 Mountain House Road, but not to the west?

3 A I would say that in general, yes, it  
4 would be primarily visible to the east of Mountain  
5 House Road, and to the west of Mountain House Road  
6 on Byron Bethany Road.

7 Q Now, earlier in your direct testimony,  
8 you testified that the project was visible from  
9 all directions. How do you reconcile your  
10 previous testimony with the answer you just  
11 provided?

12 A Well, let's see. Byron Bethany runs  
13 along the, sort of the north and the east side of  
14 the project site. Kelso Road runs on the south  
15 side to the east side. So that takes care of  
16 that.

17 And Mountain House Road runs along the  
18 west side. So that pretty much wraps around the  
19 project site.

20 Q Now, to evaluate the significance of an  
21 impact from a KOP there are a number of factors  
22 which you consider, is that correct?

23 A Yes.

24 Q And those are the ones that you showed  
25 us in that chart, which I think is VR-1, is that

1 correct?

2 A Could you rephrase the question again,  
3 please?

4 Q Well, the factors that you consider are  
5 in VR-1, correct?

6 A The factors considered for?

7 Q In evaluating a KOP, impact from a KOP.

8 A Yes.

9 Q And if I understood your direct  
10 testimony, you begin by first looking at the  
11 factors on the left-hand side of that chart,  
12 existing visual setting; and then look at the  
13 factors on the right-hand side of the chart,  
14 visual change, is that right?

15 A That's correct.

16 Q Now, each of these points are reflected  
17 as high or medium or what-not. Is there a range  
18 of choices that you can choose from in giving  
19 these ratings for each of these factors?

20 A The range typically runs from low to  
21 high; and the range, sort of the primary rating  
22 breaks are low, low to moderate, moderate,  
23 moderate to high, and high, which really are in a  
24 sense an attempt to represent a continuum of  
25 possible outcomes from low to high. And may not

1 represent a specific point. But may represent an  
2 actual range within that subcategory.

3 Q And I think your testimony was that  
4 these factors are weighted equally in most cases,  
5 but not all, is that correct?

6 A That's correct.

7 Q Now, when you say most cases, do you  
8 mean for most projects, or for most KOPs? That is  
9 do you vary the weighting by KOP?

10 A The weighting, it generally is  
11 equitable. But there can be a situation where one  
12 factor outweighs the others.

13 Q Did you -- do you vary the weighting by  
14 KOP?

15 A Generally not.

16 Q But, well, sometimes do you vary the  
17 weighting by KOP?

18 A It's not by KOP, it's within a  
19 particular rating category.

20 Q Well, within a particular rating  
21 category do you weight -- I'm assuming that each  
22 of these factors has equal weight in combining to  
23 your ultimate conclusion.

24 A Correct.

25 Q All right. And so is the weight that

1 you give each factor the same for each KOP?

2 A Correct. Unless there's an extenuating  
3 circumstance.

4 Q Great. Now with respect to this  
5 project, and these KOPs, were there any  
6 extenuating circumstances?

7 A No.

8 Q Now you also told us that you rated and  
9 collated these factors. I'd like to understand  
10 how you collate. Given the variation of factors  
11 that you might have, you might have two lows, and  
12 three mediums and two highs, how do you collate to  
13 reach the conclusion of significance or not  
14 significant?

15 A Well, let's take an example I know,  
16 let's take KOP-5. Let's start with, let's assume  
17 that we have a rating on visual quality, we have a  
18 rating on viewer concern. Now let's look at  
19 viewer exposure.

20 In a situation like this, viewer  
21 exposure is comprised of actually four subfactors,  
22 visibility, distance, number of viewers, duration  
23 of view. In this particular case for this KOP,  
24 visibility is rated high. The distance zone is a  
25 middle ground. The -- is a middle ground view.

1 The number of viewers are rated high --

2 Q I understand. Let's assume you've done  
3 the ratings. Now you have the ratings and you  
4 have two high ratings and two medium ratings and  
5 two low ratings. How do you look at those to  
6 conclude significant or not significant?

7 A Well, I can take you through the KOP if  
8 you'd like, and that's what I'm trying to do,  
9 trying to answer your question.

10 Q Well, I don't want to know how you get  
11 to the conclusion. You have six primary --

12 A I thought that's what you asked me.

13 Q -- you have six primary factors here, is  
14 that correct?

15 A Six primary factors --

16 Q Visual quality, visual concern, --

17 A Um-hum.

18 Q -- overall visual sensitivity, contrast,  
19 dominance and blocking, is that right?

20 A That's correct.

21 Q And the ratings in these categories may  
22 range from low to high, is that right?

23 A That's correct.

24 Q All right. Once you've rated each of  
25 them and you have a conclusion that one factor is

1 high and another is low, how do you collate them  
2 to reach the conclusion of overall significance?

3 A The four factors in viewer exposure  
4 collate to an overall rating for viewer exposure.  
5 The overall viewer exposure rating collates with  
6 viewer concern and visual quality to arrive at the  
7 overall factor for overall visual sensitivity.

8 Q All right, and so you have --

9 A Overall visual change is a function of  
10 the three contributing factors to that. Those  
11 three are collated to arrive at overall visual  
12 change. And then just the two factors of overall  
13 visual sensitivity and overall visual change are  
14 what is calculated to arrive at impact  
15 significance.

16 The degree of visual change, of overall  
17 visual change, is compared to that degree of  
18 visual sensitivity to assess what the outcome  
19 would be for the project, --

20 Q All right, so --

21 A -- for the significance.

22 Q -- so if you have existing visual  
23 setting of being high, and visual change being  
24 high, will that always result in the conclusion  
25 that there's a significant adverse impact?

1           A     Most likely.  If the overall visual  
2     sensitivity is high and the overall visual change  
3     is high, also, in most cases that will be a  
4     significant visual impact, yes.

5           Q     Now, is there any kind of published  
6     scale that reflects the combination of those two  
7     factors and how they relate to the finding of  
8     overall significance?

9           A     Not that I'm aware of.

10          Q     And you don't have one, yourself?

11          A     A published scale?

12          Q     Yeah.  Do you have a scale, not  
13     published scale, but do you have a written-down  
14     scale that reflects the combination of these  
15     factors?

16          A     I believe that staff has provided you  
17     with a numerical system previously.

18          Q     All right, but you told us that that was  
19     used only for checking for consistency, not for  
20     making your primary evaluation, is that right.

21          A     That's correct, that's correct.

22          Q     All right, so I'm not talking now about  
23     the check for consistency.  I'll get there in a  
24     minute.

25                     But just in terms of making your

1 evaluations, is there a written-down scale that  
2 shows how those factors combine?

3 A No.

4 Q All right, let's talk about the system  
5 of consistency. What I'm going to give you is an  
6 email that we received from the Commission Staff,  
7 March 15th, '02, from Dale Edwards. And there's  
8 first an email, and attached is visual resources  
9 methodology guidance tables.

10 MR. WHEATLAND: Could I have this  
11 marked, please, as the applicant's next in order.

12 HEARING OFFICER WILLIAMS: Okay, we'll  
13 mark it under visual resources next in order; it  
14 will be 4J-1.

15 BY MR. WHEATLAND:

16 Q Now, is this the visual resources  
17 methodology guidance tables that you used in  
18 checking for consistency of your analysis for this  
19 proceeding?

20 A Correct.

21 Q And the Commission Staff has reviewed  
22 this table, but not approved it, is that correct?

23 A Correct.

24 Q Now, you previously have testified that  
25 the staff has reviewed this for a number of

1 projects, is that correct?

2 A Correct.

3 Q Which projects have they reviewed it  
4 for?

5 A This methodology has been utilized on  
6 about 12 projects. I can give you names of  
7 projects if you'd like.

8 Q Sure, give me a few.

9 A Let's see, well, let's work backwards,  
10 besides this project there has been -- let's just  
11 be thorough about it -- Potrero, Palomar,  
12 Ocotillo, Mountainview, Morro Bay, Los Esteros,  
13 Inland Empire, this project, to a lesser degree on  
14 the Blythe project, another project which is  
15 currently -- two other projects which are  
16 currently underway.

17 Q Okay. Now, Dale, in his email message  
18 to us, states that, quote, "CEC Staff did not --"  
19 let's see, I'm sorry -- quote, "CEC Staff first  
20 received this material after Calpine requested it  
21 at the PSA workshop."

22 Do you see that testimony -- that  
23 statement?

24 A Yes, I do.

25 Q How do you reconcile his statement that

1 the staff first received it after we requested it  
2 at the workshop with your statement that they've  
3 reviewed it in previous proceedings?

4 A Well, I would say that the  
5 implementation of this methodology has been  
6 reviewed by senior staff, the technical seniors  
7 that I've worked with, during the course and  
8 conduct of individual projects.

9 It may not have been specifically  
10 provided to the management, and specifically to  
11 Dale Edwards, prior to that point in time. But it  
12 has been looked at in the context of individual  
13 specific projects.

14 Q All right.

15 A And, in fact, the methodology has been  
16 under review for over a year now. And it has  
17 involved not only staff, but staff consultants.

18 Q It's been in review for over a year --

19 A Methodology.

20 Q -- but not with the senior staff?

21 A Overall visual resources methodology,  
22 not specifically --

23 Q All right, but I'm talking --

24 A -- this.

25 Q -- just about this chart --

1 A Right.

2 Q -- that Mr. Edwards said he didn't see  
3 before we requested it. And he says here the CEC  
4 Staff. It's your testimony that, in fact, CEC  
5 Staff did have a copy of it, is that right, prior  
6 to this email?

7 A I won't say they had a -- specifically  
8 had a copy of it, but we have discussed it in  
9 terms of the combination of values, in terms of --

10 Q All right, well, if it wasn't Mr.  
11 Edwards, who specifically have you discussed it  
12 with?

13 A I've discussed it with Gary Walker; I've  
14 discussed it also with Eric Knight on a project.

15 Q Anyone else?

16 A Those are the only two technical seniors  
17 that I've worked with.

18 Q And as I understand your testimony, for  
19 each of these factors, you make a judgment on a  
20 scale of one to five, or one to three choices, is  
21 that correct?

22 A Correct.

23 Q Now, let's take a very simple example  
24 that I think we might all agree on. Let's take  
25 distance zone as an example.

1           What scale do you use to determine  
2 whether there is a foreground, middle ground, or  
3 background view?

4           A     Well, that is presented in the staff  
5 assessment, and it's identified as if it's less  
6 than a half mile, up to one-half mile is a  
7 foreground view. One-half mile to two miles is a  
8 middle ground view. And from two miles beyond is  
9 a background view.

10          Q     And even though it's on a scale of one  
11 to three, there are only three points, you give a  
12 weighting in your scale for consistency of one  
13 point, three points or five points, is that  
14 correct?

15          A     Correct.

16          Q     Is it correct to say that the more  
17 points that are received in this table the more  
18 adverse the rating?

19          A     The more points received in which table?

20          Q     This visual resources methodology  
21 guidance table.

22                   HEARING OFFICER WILLIAMS: 4J-1.

23                   MR. CLAYTON: 4J-1.

24                   HEARING OFFICER WILLIAMS: For  
25 identification.

1 MR. CLAYTON: You're referring to viewer  
2 exposure, correct?

3 BY MR. WHEATLAND:

4 Q What?

5 A You're referring to viewer exposure, is  
6 that correct?

7 Q No, actually I'm talking about for any  
8 of these ratings. In the scale that you use from  
9 one to five, five is more adverse and one is less  
10 adverse?

11 A Correct.

12 Q And so if I understand your testimony  
13 for distance zone, a project can receive a score  
14 of five, the most adverse rating, for the mere  
15 fact that the KOP happens to be a foreground view,  
16 is that correct?

17 A Correct.

18 Q How about the number of viewers? What  
19 scale do you use for the number of viewers?

20 A The number of viewers generally it's  
21 zero to 100 would be low; 100 to -- let's see,  
22 zero to 1000 is low; 1000 to 10,000 is moderate;  
23 over 10,000 is high.

24 Q And is that per day, per month, per  
25 year?

1           A     Well, those numbers, 10,000, I mean it's  
2     not a per timeframe, but generally when you're  
3     talking about 80T, traveling vehicles, we're  
4     having like on Byron Bethany Road we've got 13,000  
5     plus, almost 14,000 vehicle trips, or ADT, per  
6     day. So generally it's a per-day, I would qualify  
7     that as a per-day experience.

8           Q     Okay, now this scale you just gave us  
9     wasn't provided to us in the staff's data  
10    responses, is that correct?

11          A     I believe not.

12          Q     All right. Now, does the scale for the  
13    number of viewers vary from KOP to KOP?

14          A     Does the scale vary?

15          Q     Yes.

16          A     No.

17          Q     Okay. Does the scale vary from project  
18    to project?

19          A     No.

20          Q     So, for example, in the Russell City  
21    proceeding, if a KOP had 50 visitors per day and  
22    was rated high, that would be a mistake, is that  
23    right?

24          A     I can't comment on the Russell City.

25          Q     I see, okay. Well, I'm going to skip

1 Russell City today. How about the --

2 A And let me clarify for you that these  
3 numbers I provided you were primarily vehicle  
4 traffic. Now if we have a collection of  
5 residential viewers, a smaller number of  
6 residential viewers with more extended viewing  
7 opportunity, that might be taken into  
8 consideration as being, in terms of viewer  
9 exposure, could contribute to a higher viewer  
10 exposure.

11 Q Well, yeah, viewer exposure, but it  
12 wouldn't affect -- the degree of viewer exposure  
13 should not affect the number of viewers, should  
14 it?

15 A No.

16 Q All right, --

17 A No, but there's a difference between  
18 identifying what might be high viewership in terms  
19 of traffic vehicle versus what might be high  
20 viewership in terms of residential views.

21 I might consider, for example, a 100  
22 residential views as reflecting a potentially  
23 high, just hypothetically high viewership for  
24 residential views. One hundred vehicles per day I  
25 would not consider to be --

1 Q I don't want to be hypothetical here. I  
2 want to know how you actually did your analysis.  
3 So is it your testimony you have two different  
4 scales for number of viewers?

5 A No, I was giving you a hypothetical  
6 there in terms of comparing residential to  
7 automobiles.

8 But in this particular case, in this  
9 particular project, not being hypothetical, the  
10 primary viewership are vehicles, and that is those  
11 determinations of number of viewers, it was  
12 according to the scale I just gave you in terms of  
13 automobiles.

14 Q All right, how about duration of view?  
15 Do you have a scale for duration of view?

16 A That's a professional judgment.

17 Q Oh, I understand it's a judgment, but do  
18 you have any scale?

19 A No.

20 Q So, the duration of view can vary from  
21 KOP to KOP?

22 A No, I would not say it varies from KOP  
23 to KOP, but it certainly is -- it's a professional  
24 judgment call in terms of what would consider to  
25 be a relatively, in terms of what I would consider

1 to be a certain duration of view.

2 Q All right, so if you have a duration of  
3 view, for example, for an automobile that's  
4 passing at 60 miles an hour and the cone of vision  
5 is only the project's visible only for 12 seconds,  
6 what duration of view would you assign to that?

7 A Relative to a low duration of view I  
8 could assign that to be a moderate degree of  
9 moderate duration of view potentially.

10 Q All right, good. And what would you  
11 assign a one?

12 A A one what?

13 Q You have a scale of one to five. What  
14 would be low? If that's moderate, if a 12-second  
15 view is moderate, what would be a low duration of  
16 view?

17 A A low duration of view could be a couple  
18 of seconds, one second.

19 Q One second.

20 A A couple of seconds.

21 Q A couple seconds, okay. And how about  
22 viewer perception? Is there an objective scale  
23 for this criteria?

24 A Viewer perception.

25 Q I think that's the -- or viewer concern.

1 The terms have changed in the staff analysis over  
2 time.

3 A Um-hum.

4 Q How about viewer concern, is there an  
5 objective scale?

6 A No.

7 Q And am I correct in understanding you  
8 didn't base your testimony on actually talking to  
9 any viewers at any of the KOPs, is that correct?

10 A Correct.

11 Q Now, I think you say that the  
12 perception, you talk in here about a perception  
13 regarding the degree of change, is that right?

14 A Perception regarding the degree of  
15 change?

16 Q Yes, your testimony is permeated by the  
17 viewer's perception of the degree of change, is  
18 that right?

19 A Can you identify a specific reference?

20 Q Well, take for example, KOP-1 on this  
21 chart, VR-1, viewer concern?

22 A Um-hum.

23 Q You say any additional blockage of views  
24 of surrounding hills would be perceived as an  
25 adverse visual change, isn't that right?

1 A Correct.

2 Q Now, in order to know whether there's a  
3 perception of an adverse visual change, don't you  
4 first have to determine whether, in fact, there  
5 will be such a change?

6 A I think it's fair to say that if there  
7 is an adverse visual change, you would perceive --  
8 it would be perceived as such, and that's what  
9 that statement is.

10 Q All right. So, in effect then, you are  
11 taking this determination over here of visual  
12 change and evaluating it in terms of viewer  
13 concern, is that right?

14 A Yes, that's correct.

15 Q So, in effect, you're counting visual  
16 change on both sides of your equation, isn't that  
17 right?

18 A That is not correct.

19 Q Explain why.

20 A In the viewer concern category what I'm  
21 saying there is that in this case if a project,  
22 this project results in any additional blockage of  
23 the natural features that are visible, that that  
24 would be perceived as an adverse visual change.

25 So that is getting at to the extent of

1       how concerned would the viewer be; the point is  
2       being made, well, if there is an adverse visual  
3       change that's going to occur here, that they would  
4       be -- they would perceive that that we have a  
5       certain degree of concern regarding that. They  
6       would have a certain sensitivity to that change.

7               Q     So, first you make a determination as to  
8       whether there's an adverse visual change, and then  
9       you score it over here in terms of viewer  
10      perception, right?

11             A     No, that's not correct.

12             Q     So there's no correlation between the  
13      viewer concern and the degree of visual change?

14             A     That's correct. Viewer concern is a  
15      contributing factor to the overall visual  
16      sensitivity, which is then -- which is the context  
17      within which visual change is evaluated.

18                    I'm simply characterizing the viewers in  
19      this case.

20             Q     Now, here's what you say about KOP-6.  
21      You say: Residents in the vicinity of KOP-6 and  
22      westbound motorists on Kelso Road anticipate a  
23      foreground to middle ground rural, agricultural  
24      landscape and the presence of electric  
25      transmission lines. However, the introduction of

1 an additional energy infrastructure of industrial  
2 character, accompanied by additional view blockage  
3 would be perceived as an adverse visual change.  
4 Overall viewer concern is moderate." That's your  
5 testimony, correct?

6 A Could you read that again?

7 Q Okay. I can give you a page reference.  
8 That's on page 5.12-14. Oh, I'm sorry, that's  
9 KOP-4. Well, let's see, it should be under 6,  
10 also. Yeah, 5.12-16.

11 (Pause.)

12 MR. CLAYTON: And the question? Sorry.

13 BY MR. WHEATLAND:

14 Q So that I read correctly your testimony,  
15 right?

16 A Correct.

17 Q Now, if there was not the introduction  
18 of additional energy infrastructure that would  
19 block views, then would the viewer concern be the  
20 same?

21 A Yes.

22 Q Why then do you mention even the factor  
23 of the change that would occur if the viewer  
24 concern is the same regardless of the introduction  
25 of this view blockage?

1           A     The point that's being made here is in  
2     terms of describing the viewer sensitivity in  
3     this, from this general location, is to say that  
4     because of what they, in this case, what they are  
5     experiencing, what their view encompasses, what  
6     they are used to seeing, that they have certain  
7     sensitivity. And that certain sensitivity for  
8     KOP-6, let's say, is moderate.

9                     And the point of adding the degree of  
10    visual change is more informational only, and is  
11    not a determinate in the actual characterization  
12    of the viewer concern.

13                    However, it is important to remember  
14    that what the project is going to be is, in fact,  
15    is important in terms of evaluating viewer  
16    concern, because if a project is going to occur,  
17    let's say, or some project activity is going to  
18    occur, and a viewer is not going to be able to see  
19    it from a particular location, that there's  
20    absolutely no affect on their view, the question  
21    is are they going to be concerned about that.

22                    And in most cases, people will not be  
23    particularly concerned visually about something  
24    they're not going to see.

25                    So what this is doing is basically

1 characterizing what they would see in this  
2 particular circumstance from this location.

3 Q All right. Now do you have an objective  
4 scale for measuring view blockage?

5 A No.

6 Q Do you have an objective scale for  
7 measuring project dominance?

8 A No.

9 Q Do you have an objective scale for  
10 visual contrast?

11 A No.

12 Q Now, you testified that this chart is  
13 used for consistency. Did you use it for  
14 consistency, checking for consistency of any of  
15 the KOPs in this proceeding?

16 A I can't recall actually. I probably  
17 did, but I actually don't recall. Because I don't  
18 always use it, if I'm making a professional  
19 judgment in terms of a combination or collation of  
20 particular factors, and it's very clear to me what  
21 the outcome is, or if I, in the process of  
22 reevaluating that during the preparation of the  
23 narrative --

24 Q No is okay. I mean, you said no, right?  
25 Or you didn't recall. So, I'm happy to take that

1 answer.

2 A Okay.

3 Q For KOP-3, would you agree, subject to  
4 check, that the overall impact significance score  
5 that would have been assigned by this methodology  
6 is a seven?

7 A I would not make that statement.

8 Q Would you agree, subject to checking the  
9 numbers, that if you go through the calculations  
10 that's the number you would receive?

11 A I'm sorry, this is for which?

12 Q This is for KOP-3.

13 A KOP-3. And you're saying -- and what is  
14 the question, again? Collate what?

15 Q Well, you have your impact significance  
16 criteria, which is the combination of those two.  
17 Remember, you told me how these all added up, and  
18 you add up --

19 A Oh, right, --

20 Q -- existing visual --

21 A -- yes.

22 Q -- setting and visual change?

23 A Um-hum.

24 Q Then you add them together to get  
25 overall significance?

1           A     Um-hum.

2           Q     So would you agree that if we went  
3 through the painstaking effort of assigning the  
4 numerical ratings that, again subject to check,  
5 that the score would be a seven?

6           A     I'd need to look at the chart to see if  
7 it was a seven, just because I don't do an  
8 addition in the fashion I think you're suggesting,  
9 but in this case, the combination of the moderate  
10 to high with a moderate -- a moderate to high  
11 visual change in the context of the moderate  
12 overall visual sensitivity, based on my review of  
13 the project in the field, and assessment of the  
14 visual simulations, my conclusion was that the  
15 impact would be significant.

16          Q     All right, now I'm not talking about  
17 that. I'm talking about if you had checked for  
18 consistency, if you'd use this methodology for  
19 consistency, you don't recall whether you did --

20                   HEARING OFFICER WILLIAMS: Counsel, what  
21 are you holding when you say this?

22                   MR. WHEATLAND: This is the -- what's  
23 the number --

24                   COMMISSIONER PERNELL: 4J-1.

25                   MR. WHEATLAND: -- 4J-1. And it's the

1 last page that I want to look at. It's the impact  
2 significance. This is the document that the  
3 witness has stated that he sometimes uses to check  
4 for consistency.

5 MR. CLAYTON: Correct, and that would  
6 be, and the answer to that is yes, seven.

7 BY MR. WHEATLAND:

8 Q Seven, all right. Now, isn't it true  
9 that seven is in the low range of the category  
10 adverse and potentially significant?

11 A Correct.

12 Q Well, if that is the determination of  
13 this document that is used for guidance, why did  
14 you raise your rating to find that the project was  
15 adverse and significant?

16 A In this particular case because of the,  
17 primarily because of the -- it was based on visual  
18 change. So primarily because of the high degree  
19 of visual contrast that was going to result from  
20 the project structures relative to existing  
21 structures and other landscape features, forms and  
22 lines, plus the predominant nature of it is what  
23 contributed to the, in this case, the conclusion  
24 of significant.

25 Because when I have a situation where I

1 consider it to be a borderline, I review the  
2 factors and then make a professional judgment as  
3 to whether or not the impact is deemed significant  
4 or not significant.

5 Q And did you consider this KOP to be  
6 borderline?

7 A Yes. KOP-3?

8 Q Yes.

9 A Yes.

10 Q Are there any other KOPs that were  
11 borderline?

12 A Three was borderline. Let's see -- KOP-  
13 4 -- KOP-4, I would say was borderline, also.

14 Q And any others?

15 A No, not really.

16 HEARING OFFICER WILLIAMS: Counsel, how  
17 much time are you going to need?

18 MR. WHEATLAND: About five minutes.

19 HEARING OFFICER WILLIAMS: Thank you.

20 Mr. Sarvey, how much time do you expect  
21 to need? Are you going to cross this witness?

22 MR. SARVEY: Yes.

23 HEARING OFFICER WILLIAMS: How much  
24 time?

25 MR. SARVEY: I would imagine about 15

1 minutes.

2 BY MR. WHEATLAND:

3 Q Now, is KOP-2 borderline?

4 A KOP-2?

5 Q Yes.

6 (Pause.)

7 MR. WHEATLAND: Five minutes, not

8 counting the breaks.

9 (Pause.)

10 MR. CLAYTON: KOP-2 was less borderline.

11 BY MR. WHEATLAND:

12 Q Less borderline, okay, I'll take that.

13 Now, regarding KOP-2 you've testified that the  
14 visual quality of the rural agricultural landscape  
15 is low to moderate, is that correct?

16 A Correct.

17 Q And with respect to KOP-2 you also  
18 testified that the proposed project structures  
19 would block from view a portion of the sky and a  
20 relatively small portion of the coast range hills,  
21 is that correct?

22 A And where is that testimony?

23 Q That's on page 5.12-19.

24 (Pause.)

25 MR. CLAYTON: From KOP-2 that does not

1 sound correct, because --

2 BY MR. WHEATLAND:

3 Q I'm reading from page 5.12-19 --

4 A I understand that.

5 Q -- first sentence.

6 A I understand that. The reason for that  
7 is because the coast range hills generally are to  
8 the west.

9 Q Yes.

10 A This is a northbound view, so --

11 Q That was my next question.

12 A -- so my feeling is this is probably not  
13 a correct statement; however, I do not have a  
14 photograph that can show me the sufficient  
15 background. But I would say that's probably not a  
16 correct characterization in the testimony, and  
17 that should be changed.

18 Q Absolutely. Now, so the only thing that  
19 is blocked by the power plant project at KOP-2 is  
20 the sky, correct?

21 A The sky and the horizon lines.

22 Q The sky and the horizon. So let me just  
23 see if I understand your testimony.

24 Notwithstanding the fact that the visual quality  
25 of KOP-2 is low to moderate, and notwithstanding

1 the fact that the only thing this project blocks  
2 is the sky and a portion of the horizon, it's your  
3 testimony that this project would constitute a  
4 significant adverse impact at KOP-2?

5 A That's correct.

6 Q Is that correct?

7 A That's correct.

8 Q Okay, just a couple more questions. You  
9 stated that landscaping is not effective at all in  
10 any reasonable period, amount of time for this  
11 project, is that correct?

12 A That's correct.

13 Q What is a reasonable amount of time for  
14 landscaping to be effective?

15 A Staff has established a five-year time  
16 period.

17 Q Five years from planting?

18 A No, five years from the end of  
19 construction, which could give you seven years.

20 Q And can you tell me where in your  
21 testimony you state that?

22 A I believe it's in the staff assessment  
23 in terms of what is considered a long-term impact.  
24 I have to check.

25 Page 5.12-4 under impact duration, the

1 paragraph reads: Visual analysis typically  
2 distinguishes three different impact durations.  
3 Temporary impacts typically last no longer than  
4 two years; short-term impacts generally last no  
5 longer than five years; and long-term impacts are  
6 impacts with a duration greater than five years."

7 Q All right.

8 A Our goal for mitigation is to avoid  
9 long-term visual impacts, so we try to develop  
10 mitigation that will eliminate or reduce the  
11 impact within that five-year timeframe.

12 Q All right. In your direct testimony you  
13 mention that you're basing this on many other  
14 agencies. Can you tell me any other agency that  
15 has stated that five years constitutes a  
16 reasonable period of time for landscaping to be  
17 effective?

18 A Actually I didn't say this is based on  
19 the timeframes established by other agencies. I  
20 simply referenced other agency timeframes that are  
21 used. This is not based on other agency  
22 timeframes. This is a determination that was  
23 arrived at by staff and consultants during  
24 methodology meetings.

25 Q Okay, good. Now, just a couple more and

1 we're done. You stated previously that you've  
2 used this methodology as set forth in VR-1 in  
3 other proceedings, is that correct?

4 A That's correct.

5 Q And in how many of those other  
6 proceedings have you recommended to the Commission  
7 that there is a significant adverse impact at one  
8 or more KOPs?

9 A Before mitigation or after mitigation?

10 Q After mitigation.

11 A After mitigation. Let's see, after  
12 mitigation there are only five KOPs. That's this  
13 project.

14 Q Only in this project?

15 A Only in this project. In all other  
16 projects we were able to achieve reasonable  
17 screening mitigation. This is the only project  
18 because of the biological wildlife issues we were  
19 not able to get effective screening.

20 Q Now if we'd had the screening that was  
21 originally proposed for this project, would have  
22 had the same recommendation?

23 A If we'd had the screening that was  
24 originally proposed and we were able to work out  
25 in consultations with your consultants the way to

1       achieve that within the five-year timeframe, we  
2       would not have found significant residual impacts  
3       after mitigation.

4               And that was where we were headed until  
5       the wildlife issue surfaced and we were unable to  
6       retain that screening.

7               Q     Okay, you had also mentioned, I think,  
8       in your testimony the fact that you used the wrong  
9       visual simulations in the FSA was merely, I think  
10      you said, clerical error, or something like that?

11              A     Actually what I said, I didn't say that  
12      I used those.  Those were produced in the FSA and  
13      that was a production error.  The folks that did  
14      the production simply did not replace the original  
15      graphics that were in the PSA with the new  
16      graphics for the FSA.

17              Q     And when did you discover this  
18      production error?

19              A     I discovered that when it was brought to  
20      my attention some time after production of the  
21      FSA.

22              Q     When?

23              A     I don't even recall.

24              Q     But it was prior to today?

25              A     Yes, prior to today.

1 Q And was there some reason why you didn't  
2 ask your project manager to include it in an  
3 errata?

4 A I don't recall exactly the circumstances  
5 around that, in terms of when exactly who notified  
6 the project manager or who determined that those  
7 had not been incorporated, --

8 Q All right, --

9 A -- so I can't --

10 Q -- that's fine.

11 A -- can't clarify that for you.

12 Q Thank you.

13 MR. WHEATLAND: That's all the questions  
14 I have. Thank you very much for the time.

15 COMMISSIONER PERNELL: Thank you.

16 HEARING OFFICER WILLIAMS: Is the  
17 document that's out there, the FSA that's out  
18 there, does it have the corrected pages in it?

19 MR. CLAYTON: I'm sorry, you're talking  
20 about the exhibits, the simulations?

21 HEARING OFFICER WILLIAMS: The same  
22 thing that counsel's talking about.

23 MR. CLAYTON: The FSA does not have  
24 those. The FSA has the PSA graphics in it; it  
25 does not have the FSA graphics in it.

1           Or the FSA does not have the appropriate  
2 graphics simulations in it.

3           HEARING OFFICER WILLIAMS: So I assume  
4 that staff will be sending out an errata to make  
5 the appropriate corrections?

6           MR. WHEATLAND: You know, I didn't get  
7 into this, but an errata would only be appropriate  
8 if it was what they actually relied on in  
9 preparing their testimony.

10           In other words, if they were using these  
11 older simulations to base their recommendations,  
12 then an errata wouldn't be appropriate.

13           MR. CLAYTON: The conclusions in the FSA  
14 were not based on the old simulations. They were  
15 based on your most recent submittal. That's what  
16 my analysis was based on.

17           I complete my analysis; we hand in the  
18 analysis for production. Along with that goes a  
19 graphic guidance sheet in terms of which graphics  
20 to insert into the FSA to replace the PSA  
21 graphics. And that just didn't happen.

22           HEARING OFFICER WILLIAMS: I thought  
23 that was his testimony, so we'll need an errata.

24           MS. DeCARLO: Yeah, we'll provide that.

25           HEARING OFFICER WILLIAMS: Okay, thank

1       you.

2                   MR. SARVEY:  Okay, I'm going to try to  
3       focus on the things that -- not on methodology,  
4       but what all the parties are agreeing on.  So  
5       we'll try to stay out of the minutiae here.

6                   HEARING OFFICER WILLIAMS:  Well, that  
7       should be less than 15 minutes.

8                   (Laughter.)

9                   MR. SARVEY:  That should help a little  
10      bit.

11                   HEARING OFFICER WILLIAMS:  Yeah, I'll  
12      say.

13                                   CROSS-EXAMINATION

14      BY MR. SARVEY:

15                   Q     Do you recall the applicant's testimony  
16      that KOP-5 is a moderate to high viewing point for  
17      visual quality?

18                   A     Yes.

19                   Q     And he stated that you agreed with that  
20      position.  Do you recall the applicant stating  
21      that Mount --

22                   A     But that is not my --

23                   Q     Okay.

24                   A     -- that is not my testimony.

25                   Q     Do you recall the applicant stating that

1 Mount Diablo is a significant viewshed?

2 A I do not specifically remember that  
3 piece of testimony.

4 Q Okay. Well, calling your attention to  
5 figure 8.11-7B, and I believe I gave you a copy of  
6 that. Trying to frame this in terms that  
7 everybody can understand.

8 In figure 8.11-7B do you feel that the  
9 facility is a significant unmitigated impact on  
10 that view of Mount Diablo from that KOP?

11 A It is not specifically an impact on  
12 Mount Diablo necessarily from this location, this  
13 KOP location. But it is a significant impact on  
14 that area of the coast range.

15 You know, the blocking of Mount Diablo  
16 is a transient effect. It occurs from numerous  
17 points along the roadway, but it is a significant  
18 visual impact.

19 Q Okay, thank you. In addition to having  
20 a significant unmitigated impact, this project is  
21 also inconsistent with Alameda County LORS, is  
22 that correct?

23 A That was my conclusion that the project  
24 was not consistent with seven Alameda County LORS  
25 and partially inconsistent with one. However,

1 Alameda County made a determination that the  
2 project was, in fact, consistent. And as a  
3 general policy, the Commission defers to the local  
4 jurisdictions for ultimate determinations.

5 Q But you're identifying seven in the --

6 A My conclusion --

7 Q Okay, thank you.

8 A -- my conclusion was that there was an  
9 inconsistency.

10 Q Okay. You evaluated this project for  
11 consistency with San Joaquin County LORS, but you  
12 only discussed the linears of the facility, not  
13 the project, itself, is that correct?

14 A Correct.

15 Q Doesn't the facility, itself, also  
16 impact residents of San Joaquin County?

17 A To a degree. But typically in the  
18 evaluation of LORS we look at project components  
19 that are within that particular local  
20 jurisdiction.

21 Q So if you had evaluated the facility,  
22 itself, with consistency with San Joaquin County  
23 LORS, do you anticipate there would also be some  
24 inconsistencies there, as well?

25 A I only evaluated in this case the

1 linears against the LORS, so I can't comment on  
2 the --

3 Q Thank you.

4 A -- structures.

5 Q You testified that the significant  
6 visual impact would be experienced by the minority  
7 population located north of Byron Bethany Road, is  
8 that correct?

9 A Correct.

10 Q What is the minority percentage in the  
11 census tract that that specific pocket is  
12 contained?

13 A I don't have that information available.

14 Q Don't environmental justice code  
15 guidelines from the EPA require you to compare  
16 census tracts, census box and the percentage of  
17 minorities in determining significant impacts  
18 under socioeconomics?

19 A I believe that's correct, but that line  
20 of questioning should be presented to the --  
21 someone else.

22 Q Okay.

23 MR. SARVEY: I don't have anything  
24 further, thank you.

25 HEARING OFFICER WILLIAMS: Thank you.

1 Is there any redirect?

2 MS. DeCARLO: Two questions.

3 REDIRECT EXAMINATION

4 BY MS. DeCARLO:

5 Q Can you please explain what the purpose  
6 of a KOP is.

7 A The purpose of a KOP is to establish the  
8 likely impacts, or to evaluate a specific viewing  
9 population. The KOP is to be representative of a  
10 viewing population. It is not necessarily meant  
11 to be specific to a single location. It can be,  
12 but oftentimes it is -- the goal is to capture a  
13 representative viewing area.

14 Q And can you please explain why your  
15 conclusion regarding KOP-2 does not change, even  
16 with the error noted?

17 A KOP-2, even though the blockage of the -  
18 - the statement that there was a blockage of the  
19 coast hills was in there, and should not have been  
20 in there, the fact remains that the view blockage  
21 is still substantial. The entire facility is  
22 skylined, and the degree of visual change is  
23 sufficiently substantial that it would not change  
24 the overall outcome of the conclusion.

25 MS. DeCARLO: That's all I have.

1 MR. WHEATLAND: No further cross-  
2 examination.

3 HEARING OFFICER WILLIAMS: Wonderful.  
4 (Laughter.)

5 HEARING OFFICER WILLIAMS: Okay, do you  
6 want to move your exhibits in, Mr. Wheatland?

7 MR. WHEATLAND: Yes, please, I would.

8 HEARING OFFICER WILLIAMS: Okay. I  
9 think what we have is, in the way of visual  
10 resources then, is 4, 4J, which is the testimony  
11 of Dr. Priestley, 4J-1, which was offered for  
12 identification, staff's visual resources  
13 methodology table. Is there any objection to  
14 this, staff?

15 MS. DeCARLO: No objection.

16 HEARING OFFICER WILLIAMS: Okay, then  
17 staff's (sic) exhibit J and J1 and corresponding  
18 exhibits relating to visual resources will be  
19 admitted.

20 Staff, do you want to move your  
21 documents?

22 MS. DeCARLO: Yes, please. The visual  
23 resources section of the final staff assessment  
24 and the visual resources section of the errata, 1A  
25 and 1C.

1 HEARING OFFICER WILLIAMS: Any  
2 objection?

3 MR. WHEATLAND: No objection.

4 HEARING OFFICER WILLIAMS: Okay, and I'm  
5 putting a placeholder for 10, which is the errata  
6 to the FSA visual resources section that staff  
7 will file and serve on all the parties. And I  
8 guess that if there is any further need to address  
9 that issue, we'll hear about it.

10 MR. WHEATLAND: Thank you.

11 HEARING OFFICER WILLIAMS: Okay, thank  
12 you, Mr. Clayton, you're done.

13 Okay, where are we on this whole visual  
14 thing?

15 MR. WHEATLAND: Can you stand some good  
16 news this late in the day?

17 HEARING OFFICER WILLIAMS: Yeah.

18 MR. WHEATLAND: All right.

19 COMMISSIONER PERNELL: Absolutely.

20 (Laughter.)

21 (Parties speaking simultaneously.)

22 HEARING OFFICER WILLIAMS: Did you look  
23 at your exhibits in the area of -- from last  
24 night?

25 MR. SARVEY: Okay, I'll take a look at

1       them.

2                   (Pause.)

3                   HEARING OFFICER WILLIAMS:  We can go off  
4       the record.

5                   (Off the record.)

6                   HEARING OFFICER WILLIAMS:  The Committee  
7       has been handed a proposal that has to do with  
8       visual plume issues.  It appears to be a modified  
9       condition; appears to be modifications to what  
10      staff offered earlier that we marked as 1L for  
11      identification, is that correct?

12                  MR. RUBENSTEIN:  Mr. Williams, yes, that  
13      is correct.  I believe both we and the staff would  
14      like to make a brief statement about our  
15      understandings regarding this.  And then if you'd  
16      like I could read it into the record and describe  
17      it very briefly.

18                  HEARING OFFICER WILLIAMS:  Okay.

19                  MR. RUBENSTEIN:  And then the staff is,  
20      I believe, going to provide a written copy  
21      tomorrow as an errata.

22                  HEARING OFFICER WILLIAMS:  Okay, sure.  
23      We'll mark this copy as a joint 5 -- we've got the  
24      joint exhibits under 5, so this will be exhibit  
25      5C.

1           MR. RUBENSTEIN: The applicant and the  
2 staff have worked together this afternoon. As I'm  
3 sure you've gathered from the testimony earlier  
4 today we were coming at this issue from completely  
5 different perspectives.

6           We have, however, reached agreement on  
7 this language. From the applicant's perspective  
8 we are taking quite seriously the staff's claim  
9 that they believe this project to be unique in  
10 many respects, warranting conditions like this,  
11 even though there are no significant impacts  
12 related to plume formation.

13           In terms of resolving the disagreements  
14 that you heard about earlier today, we have agreed  
15 with the staff on one key design parameter that  
16 they believe would be effective in terms of  
17 insuring that plume formation is not any greater  
18 with the final cooling tower design, as compared  
19 with what they analyzed.

20           And a second parameter that they believe  
21 will be effective in insuring that plume formation  
22 from the heat recovery steam generators will not  
23 be any greater.

24           The document that you've been handed  
25 does provide for approval by the CEC Staff of the

1 revised design, simply to insure that the key  
2 parameter that we've agreed with the staff is  
3 satisfied. And the numbers that are included to  
4 reflect the safety margin, or a design margin, if  
5 you will, that we discussed earlier.

6 So I believe all the major elements that  
7 we discussed previously are reflected in this  
8 language.

9 As I said, the document is handwritten  
10 at this point, but subject to confirmation by the  
11 staff, we are all in agreement. And it's my  
12 understanding the staff will file a clean copy of  
13 this with the Committee tomorrow.

14 COMMISSIONER PERNELL: Thank you.

15 MR. EDWARDS: Yeah, staff did meet with  
16 the applicant and as Mr. Rubenstein described, we  
17 reached agreement on the condition language. And  
18 staff is satisfied that the information that we  
19 will receive prior to ordering of the cooling  
20 towers, in particular, will allow us to verify  
21 that the cooling towers that are to be purchased  
22 will be, in fact, those that will meet the  
23 conditions that we analyzed during our analysis.

24 HEARING OFFICER WILLIAMS: Thank you.

25 Mr. Sarvey, did you have any questions on this?

1           MR. SARVEY: I didn't before, but I got  
2 a whole lot now. And I'd like a couple of minutes  
3 just to look this over. This is kind of a  
4 surprise to me. At least I can see what the  
5 conditions that are being -- give me a couple  
6 minutes to --

7           HEARING OFFICER WILLIAMS: Okay, while  
8 you're doing that --

9           MR. SARVEY: -- peek at it if that will  
10 be all right?

11          HEARING OFFICER WILLIAMS: Sure. While  
12 you're doing that, I think we already moved  
13 staff's -- excuse me, applicant's testimony on  
14 plume analysis in. And do we need to move your  
15 testimony in?

16          MS. DeCARLO: Yeah. So if you can move  
17 in the final staff assessment, visible plumes,  
18 both the impacts analysis and the modeling  
19 analysis.

20          HEARING OFFICER WILLIAMS: Okay.

21          MS. DeCARLO: Modeling results.

22          MR. HARRIS: Mr. Williams, I'm not sure,  
23 I thought Mr. Sarvey objected to moving in our  
24 documents into evidence. If he did, I'd move them  
25 in at this point, just in case.

1 HEARING OFFICER WILLIAMS: Okay. Why  
2 don't we take the public comment while Mr. -- sir,  
3 if you could identify yourself?

4 MR. LIVINGSTON: Good afternoon. My  
5 name is Wayne Livingston. I reside in Manteca,  
6 California. And I represent the Electricians  
7 Union and with you here most of the hours.

8 I'd just like to speak in favor of the  
9 project. I realize a lot of concerns from the  
10 people, but I believe our agencies here from the  
11 state will assure that that will be a clean  
12 operating plant; it's as clean as current  
13 technology will allow.

14 Obviously it will have impact, a visual  
15 impact. It will have a steam plume impact. But,  
16 again, I think people will accept it, the majority  
17 of the people because they use it. I mean there's  
18 some that they use. We're building a factory,  
19 they build widgets or something out there that  
20 they -- person, everybody will be using this  
21 thing, the power from it.

22 To clean the water, I live in Manteca;  
23 as much as Tracy, we're working on a project to  
24 bring us surface water from the -- Irrigation  
25 District to Manteca/Tracy/Ripon. It will take

1 power to convey that water; it will take power to  
2 clean that water.

3 It takes water to clean the sewage  
4 plant's discharge. It takes power to clean that.  
5 Everything we're doing takes more power.

6 And I feel that the visual impact, the  
7 thing out there will far exceed its use for the  
8 people will offset that. That's basically where  
9 I'm at with it.

10 I've done this now, worked in the  
11 electrical field for 39 years, and what we do, put  
12 traffic signals in, takes power. It takes power  
13 to light our neighborhoods to make them safe.  
14 Just everything we do is power generated. And  
15 that's what this facility does.

16 So, thank you.

17 HEARING OFFICER WILLIAMS: Thank you,  
18 sir.

19 COMMISSIONER PERNELL: Thank you, Mr.  
20 Livingston.

21 HEARING OFFICER WILLIAMS: Okay. As I  
22 recall Mr. Sarvey had an opportunity to cross-  
23 examine the applicant's witness on the visual  
24 plume. Mr. Wheatland, is that --

25 MR. WHEATLAND: Oh, --

1 HEARING OFFICER WILLIAMS: Do you  
2 recall?

3 MR. WHEATLAND: I think that's right.  
4 Yeah, --

5 MR. SARVEY: Yeah, I crossed the  
6 applicant, --

7 MR. WHEATLAND: -- I think that's right.

8 MR. SARVEY: -- but not the staff.

9 HEARING OFFICER WILLIAMS: Did you have  
10 any objection to applicant's documents, Mr.  
11 Sarvey? I thought --

12 MR. SARVEY: No, I don't have any  
13 objection. I just -- this is just a little bit of  
14 a surprise to me.

15 HEARING OFFICER WILLIAMS: Not that one.  
16 The --

17 MR. SARVEY: Right.

18 HEARING OFFICER WILLIAMS: -- plume  
19 testimony and --

20 MR. SARVEY: The plume testimony? No,  
21 that's okay.

22 HEARING OFFICER WILLIAMS: So that  
23 testimony is in. 4I, I-1 and I-2 has been  
24 admitted.

25 Did you have a chance to review this new

1 proposal?

2 MR. SARVEY: Probably take me about  
3 three days to understand it, Major. I did the  
4 best I could.

5 HEARING OFFICER WILLIAMS: Okay.

6 MR. SARVEY: I'm ready to go.

7 HEARING OFFICER WILLIAMS: All right.

8 Go right ahead.

9 MR. SARVEY: Did you understand it?

10 HEARING OFFICER WILLIAMS: No comment.

11 MR. SARVEY: Sorry, Major. Okay.

12 CROSS-EXAMINATION

13 BY MR. SARVEY:

14 Q Has the applicant provided you with a  
15 visual plume simulation?

16 MR. EDWARDS: No, I don't believe so.

17 MR. SARVEY: Have you requested a visual  
18 plume simulation from the applicant?

19 MR. EDWARDS: No, it wasn't necessary in  
20 our opinion because we do our own independent  
21 analysis and provide our own simulation.

22 MR. SARVEY: You're aware that the  
23 applicant has testified that your plume analysis  
24 is -- I think he termed it -- trying to search for  
25 the word -- it wasn't inappropriate, but you just

1 didn't agree that that was an effective simulation  
2 of the plume, is that correct?

3 MR. EDWARDS: Yes, that's correct.

4 MR. SARVEY: Okay. You testified that  
5 you don't have accurate meteorological data for  
6 the project area, is that correct?

7 MR. WALTERS: I believe my testimony was  
8 indicating we don't have meteorological data that  
9 had all of the parameters that we wanted to look  
10 for in the project area. The Tracy/Brentwood data  
11 didn't have present weather information, and did  
12 not have cloud cover information, both of which  
13 are used in our significance criteria.

14 So we went and found another data set  
15 that we considered very similar in terms of both  
16 temperature and relative humidity which would give  
17 similar plume frequency data.

18 MR. SARVEY: So you stated the  
19 applicant's meteorological data was not  
20 representative, is that correct?

21 MR. WALTERS: In our comparison of the  
22 meteorological data, the one year of data they  
23 used from Stockton was considerably less  
24 representative than ours.

25 MR. SARVEY: You also stated that you

1 used meteorological data from Sacramento, is that  
2 correct?

3 MR. WALTERS: That's correct, data from  
4 1990 through 1993.

5 MR. SARVEY: So essentially you don't  
6 have meteorological data at this plant site that  
7 is reliable?

8 MR. WALTERS: As I stated before, we do  
9 have data from Tracy and Brentwood mixed that we  
10 did do comparisons on to the extent we could,  
11 considering the fact that we couldn't identify  
12 cloud cover and fog and rain data from that data.

13 And it did show that the Sacramento data  
14 was a good proxy.

15 MR. SARVEY: How can the Committee, and  
16 myself, as an intervenor, accept the fact that  
17 there's no significant impacts from this plume  
18 under the circumstances that we have just  
19 described in the last, say, nine questions?

20 MR. EDWARDS: Well, speaking a little  
21 bit for Will here, as he just described, we're  
22 using the best meteorological data that is  
23 available to us to give us the broadest length of  
24 time to get the best annual view of what's going  
25 on in the weather in that area.

1           As well as looking at the reasonable  
2           worst case plume condition, which staff has  
3           intended to do by its visual simulation on clear  
4           weather conditions, which is, in our view, the  
5           highest contrast situation for plume visibility.  
6           And by applying our standard methodology to its  
7           analysis.

8           MR. SARVEY: But, again, we do not have  
9           accurate meteorological data here at the project  
10          site, correct?

11          MR. WALTERS: We have what we consider  
12          representative meteorological data.

13          MR. SARVEY: Okay. What would the worst  
14          case scenario, you said you modeled the -- you  
15          said this was not the worst case scenario. What  
16          would the worst case scenario look like in a  
17          visual simulation? Do you have anything that I  
18          can look at that would give me an idea whether  
19          this is actually a significant impact? Because  
20          there seems to be some disagreement about what you  
21          guys presented here.

22          MR. EDWARDS: We don't simulate the --  
23          if you're asking me what is the worst case  
24          simulation, or what is the worst case for plume  
25          generation, we do not make simulations of that.

1 But it would be something on the order of a 1  
2 percent plume, which is a very small amount of  
3 time over the year, or in our case, over the six-  
4 month period that we actually analyzed.

5 MR. SARVEY: Table 4, 5.11-A7, under the  
6 category of all hours -- I'll wait till you get  
7 there.

8 (Pause.)

9 MR. SARVEY: Okay, all hours. You  
10 predict the total available hours, the plume  
11 hours, and then you say 58 percent of the -- the  
12 way I'm interpreting this is the time that there's  
13 going to be a plume from this facility, is that  
14 correct?

15 MR. WALTERS: If assuming, and we're  
16 doing here is we're identifying the reasonable  
17 worst case, which is actually the limited duct  
18 firing, but we present the modeling we present  
19 both the duct firing case and the non duct firing  
20 case; and then combine them into the reasonable  
21 worst case. So just the last two columns.

22 For a duct fired case, if essentially  
23 the plant were to be running, you know, full force  
24 the entire year, we'd be looking at 58 percent of  
25 the time there would be some plume.

1           MR. SARVEY: Fifty-eight percent of the  
2 time. Okay. Is there any possibility that this  
3 plume could impact any people driving on any of  
4 these roads surrounding this project site, since  
5 the facility is surrounded by three roads that are  
6 fairly well used?

7           MS. DeCARLO: I'm going to object,  
8 that's outside the scope of his testimony. I  
9 believe that analysis was included in the traffic  
10 and transportation section.

11           HEARING OFFICER WILLIAMS: Overruled.

12           MR. WALTERS: Well, we do present  
13 findings in terms of fogging frequency. I'm not  
14 exactly prepared in terms of having that analysis  
15 in front of me, but I believe we had identified  
16 there could be some impacts to Byron Bethany Road  
17 from the facility. And did, at least in my  
18 analysis I indicated that it would probably be a  
19 good idea to have some warning signs up and down  
20 from the expected location where there could be  
21 fogging

22                     Now, when this fogging happens there  
23 could always be fog already in the area. But at  
24 other times there may not be.

25           MR. SARVEY: So there's circumstances

1 here where this facility could impact people  
2 driving on Byron Bethany Road, a pretty well  
3 traveled road, speed limit's about 55 miles an  
4 hour.

5 Now, assuming that this plume would  
6 cause an accident, would you determine that a  
7 significant impact?

8 MR. WALTERS: I didn't identify anything  
9 regarding accidents in terms of what was or what  
10 wasn't a significant impact. In fact, in terms of  
11 my testimony I don't even identify a significant  
12 impact. I just provide the numbers to the traffic  
13 and transportation person to evaluate.

14 MR. SARVEY: So your testimony is that  
15 if there was a fatality from this road -- on this  
16 road from the plume from this facility, that would  
17 not be a significant impact? Or that's outside  
18 the scope of your testimony, is that correct?

19 MR. WALTERS: It's outside of the scope  
20 of my testimony.

21 MR. SARVEY: Thank you. Could you take  
22 a look at visual plume figure 2, September 2002,  
23 KOP-1 visual simulation.

24 MR. EDWARDS: Yes.

25 MR. SARVEY: Looking at this plume, does

1 this plume obscure the view of Mount Diablo and  
2 the surrounding coastal range from this KOP?

3 MR. EDWARDS: The simulation does show  
4 Mount Diablo which is pretty much directly behind  
5 the plume as it's indicated or simulated, or it  
6 is -- Mount Diablo is directly behind. So, for  
7 this period of time, because this is a simulation  
8 taken from Byron Bethany Road we're basically  
9 showing the view of travelers for an instant in  
10 time.

11 MR. SARVEY: Okay. And it was also your  
12 testimony earlier that the worst case scenario is  
13 58 percent of the time that the plume can be  
14 present, is that correct?

15 MR. WALTERS: In absolute worst case,  
16 that's correct. That's not --

17 MR. SARVEY: Okay, thank you. Earlier  
18 in the visual testimony it seemed that all parties  
19 agreed that the facility obstructed the view of  
20 Mount Diablo, that would be a significant  
21 unmitigated impact.

22 So is it your testimony that that's not  
23 true?

24 MR. EDWARDS: You might restate that  
25 question. It's not clear.

1 MR. SARVEY: I think you've already  
2 answered me, so that's fine.

3 In your analysis do you identify  
4 viewsheds which are significant?

5 MR. EDWARDS: There's a portion of the  
6 analysis that discusses scenic vistas and views.  
7 In this particular area there are none identified  
8 as such.

9 MR. SARVEY: Nothing further.

10 HEARING OFFICER WILLIAMS: Thank you.  
11 Staff, do you want to move your exhibits?

12 MS. DeCARLO: Actually, if I could  
13 redirect very quickly?

14 HEARING OFFICER WILLIAMS: Oh,

15 REDIRECT EXAMINATION

16 BY MS. DeCARLO:

17 Q Is the 58 percent figure identified by  
18 Mr. Sarvey a reasonable situation, reasonable  
19 worst case?

20 MR. WALTERS: I don't think we would  
21 consider it a reasonable worst case if they could  
22 operate those megawatt throughout the day every  
23 day for 365 days.

24 Number one, you wouldn't consider the  
25 fact that duct burners would be operating when

1 demand is extremely low overnight very often, if  
2 at all.

3 And there certainly would be a lot of  
4 times when the plant, whether it be all turbines  
5 or one or two turbines would be down for  
6 maintenance, as well as just depending on sales,  
7 et cetera, and need, they wouldn't be operating at  
8 full capacity, full turbines and duct firing all  
9 at the same time.

10 So we evaluated what we considered the  
11 reasonable worst case, which included duct firing  
12 during the hours of 10:00 a.m. to 8:00 p.m., and  
13 no duct firing during the other hours with the  
14 turbine load always being at 100 percent. And  
15 when it was duct firing, the duct firing load  
16 always being at 100 percent.

17 MS. DeCARLO: Thank you. That's all.

18 HEARING OFFICER WILLIAMS: Anything  
19 further? Do you want to move your exhibits?

20 MS. DeCARLO: Yes, please.

21 HEARING OFFICER WILLIAMS: Okay. Then  
22 seeing no objections, staff's 1N -- 1L. We'll  
23 leave that one marked for identification since  
24 there's been a subsequent document, revising it.

25 Okay, and of course, staff's provisions

1 of the FSA having to do with visual plumes is also  
2 admitted.

3 So I take it that that admits the FSA in  
4 its entirety, except for Mr. Richins' testimony, I  
5 guess, in the area of override?

6 MS. DeCARLO: Right. Really quickly,  
7 Mr. Walker would like to just offer some comments  
8 on the visual simulations that staff will be  
9 providing in exhibit marked 10.

10 HEARING OFFICER WILLIAMS: The errata?

11 MS. DeCARLO: Yes.

12 MR. WALKER: The applicant did not  
13 provide staff with revised or updated simulations  
14 from KOPs 3 and 4, only from KOPs 1, 2 and 5,  
15 showing their landscape plan as it would look  
16 after 10 years or 20 years.

17 So, staff is not able to update those  
18 simulations in its testimony. We can do it for  
19 KOPs 1, 2 and 5, which they did provide.

20 So their testimony did not include  
21 updated simulations for KOPs 3 and 4. So ours  
22 can't, either. They didn't provide -- I don't  
23 know whether they did them or not, they didn't  
24 provide them as part of the testimony; and they  
25 didn't provide them to us. So we can't update

1 those.

2 HEARING OFFICER WILLIAMS: Applicant?

3 MR. WHEATLAND: That's correct, we --

4 HEARING OFFICER WILLIAMS: Okay.

5 MR. WHEATLAND: -- provided three  
6 updated simulations, and those we think are  
7 appropriate to include as an errata to the staff's  
8 testimony.

9 MS. DeCARLO: And we will include them.

10 HEARING OFFICER WILLIAMS: Okay, thank  
11 you. All right, so I guess Mr. Richins is on the  
12 issue of -- we're going to -- let me just state  
13 that there are several areas where we are  
14 intentionally leaving open because waiting for the  
15 receipt of exhibits or, you know, final versions  
16 of exhibits and what-have-you.

17 But except for those areas where we're  
18 going to get updated or clean copies of exhibits,  
19 we will close out all the areas.

20 MS. DeCARLO: I do have an update on  
21 COM-9 --

22 HEARING OFFICER WILLIAMS: COM-9 --

23 MS. DeCARLO: -- not the condition,  
24 itself, but the clarification that we had offered  
25 previously.

1 HEARING OFFICER WILLIAMS: Yes.

2 MS. DeCARLO: I just -- me and the  
3 Project Manager discussed with the staff member,  
4 and we have agreed to two minor changes that the  
5 applicant had suggested. But we do not agree to  
6 include other changes. So I don't know how you  
7 want to proceed with that. If you want us to just  
8 issue the revised clarification with the changes  
9 that we agreed to, and just discuss the issue in  
10 briefs?

11 HEARING OFFICER WILLIAMS: Yes, why  
12 don't we do that.

13 MS. DeCARLO: Okay.

14 HEARING OFFICER WILLIAMS: Why don't we  
15 do that. And the Committee will make the decision  
16 ultimately.

17 MR. WHEATLAND: I have a couple of minor  
18 questions about exhibits. Is this the right time  
19 to take those up?

20 HEARING OFFICER WILLIAMS: Yes, let's do  
21 it now.

22 MR. WHEATLAND: First of all, with  
23 respect to the agreement between staff and  
24 applicant regarding plume mitigation, I believe  
25 Mr. Sarvey wanted to look at it before we moved it

1 into evidence. Can we move it into evidence at  
2 this time?

3 MR. SARVEY: Pardon me, Mr. Wheatland,  
4 I'm sorry. Could you repeat that?

5 MR. WHEATLAND: That's the agreement  
6 between staff and applicant on the plume.

7 MR. SARVEY: Oh, absolutely. I'm sorry.

8 HEARING OFFICER WILLIAMS: Okay, that's  
9 in.

10 MR. WHEATLAND: Second of all, we talked  
11 yesterday about the East Altamont/San Joaquin  
12 Valley Air Pollution Control District mitigation  
13 agreement, and we don't see an exhibit number  
14 identified for it, so we'd like to assign an  
15 exhibit number for that.

16 HEARING OFFICER WILLIAMS: Yeah, I  
17 thought Mr. Sarvey --

18 MR. SARVEY: Yeah, it's on my exhibit  
19 list.

20 MR. WHEATLAND: Oh, it's on yours? Can  
21 you tell me just which one, because I couldn't  
22 find it. I'm sorry about that.

23 MR. SARVEY: Well, I thought it was --

24 HEARING OFFICER WILLIAMS: Yeah, because  
25 I don't know if it's --

1 MR. SARVEY: If it's not, we'll get it  
2 in there.

3 MR. WHEATLAND: Oh, it is in? Okay,  
4 good. I'm sorry, I just don't see it. But --

5 HEARING OFFICER WILLIAMS: Do you see  
6 it, Mr. Sarvey? Is it there?

7 MR. SARVEY: No, I didn't see it, so I  
8 think we do need to get it in there definitely.

9 HEARING OFFICER WILLIAMS: Okay. So,  
10 applicant, you have a copy of it?

11 MR. WHEATLAND: Yes. Yes, that was the  
12 written copy we provided yesterday, that would  
13 have the signed copy.

14 HEARING OFFICER WILLIAMS: Mitigation  
15 agreement.

16 MR. WHEATLAND: Between the applicant  
17 and the San Joaquin Valley Air Pollution Control  
18 District.

19 MR. SARVEY: I'm not sure the Tesla  
20 agreement made it in there, either.

21 MR. WHEATLAND: We have another copy  
22 here for you if you'd like.

23 MR. SARVEY: I'm not sure the Tesla  
24 mitigation agreement made it in there, either.

25 MR. WHEATLAND: Yes, the Tesla -- Tracy

1 is in there.

2 MR. SARVEY: No, that was -- the Tesla,  
3 I provided the Tesla one as an exhibit, too. I  
4 don't think it make it in.

5 MR. WHEATLAND: I don't see it on your  
6 list.

7 MR. SARVEY: Probably have to find a  
8 spot for that one.

9 MR. SPEAKER: Major, do you want to go  
10 off the record?

11 HEARING OFFICER WILLIAMS: Yeah, let's  
12 go off the record.

13 (Off the record.)

14 MR. WHEATLAND: At this time I'd like to  
15 move into evidence exhibit 4G-3.

16 HEARING OFFICER WILLIAMS: 4G-3 is  
17 admitted, as well as Mr. Sarvey's next in order,  
18 which is 6T, which is the Tesla mitigation  
19 agreement between the Tesla applicant and the San  
20 Joaquin Unified Air Pollution Control District.

21 And during the break the parties agreed  
22 that we won't close the record until we finalize  
23 the exhibit list. But that the documents on the  
24 exhibit list are presumed to be admitted, or  
25 identified as set forth in our exhibit list. And

1 if some objection crops up later, we'll deal with  
2 it at that point.

3 The parties have also agreed that the  
4 first round of briefs on phase one and phase two  
5 topics will be combined. And those briefs will be  
6 due on October 30th, on phase one and phase two  
7 topics, combined.

8 And that phase three and phase four  
9 topics will be briefed seven days after the  
10 transcripts are posted on the website.

11 Okay, so with that, did I catch  
12 everything?

13 MR. WHEATLAND: Yes.

14 HEARING OFFICER WILLIAMS: Okay, good.

15 MS. DeCARLO: Actually I'm just  
16 recalling something. I had included Mr. Richins'  
17 declaration and r,sum, and some additional r,sum,s  
18 in the addendum to staff's prehearing conference.

19 HEARING OFFICER WILLIAMS: Right.

20 MS. DeCARLO: And I notice that's not  
21 included on one of the exhibits. So if we could  
22 just move those items into the record?

23 HEARING OFFICER WILLIAMS: Any  
24 objection?

25 MR. WHEATLAND: None.

1 HEARING OFFICER WILLIAMS: Okay, those  
2 will be admitted --

3 MS. DeCARLO: Okay, great, thank you.

4 HEARING OFFICER WILLIAMS: -- next in  
5 order.

6 Are we ready to swear Mr. Richins?

7 MS. DeCARLO: Yes.

8 Whereupon,

9 PAUL RICHINS

10 was called as a witness herein, and after first  
11 having been duly sworn, was examined and testified  
12 as follows:

13 DIRECT EXAMINATION

14 BY MS. DeCARLO:

15 Q Can you please state your name for the  
16 record?

17 A Paul Richins.

18 Q Was a statement of your qualifications  
19 attached to your testimony?

20 A Yes, they were.

21 Q And what is your job title?

22 A I'm the Energy Facilities Program  
23 Manager for the Energy Commission.

24 Q And did you assist in preparing the  
25 testimony entitled executive summary in the final

1 staff assessment marked as exhibit 1?

2 A Yes, I did.

3 Q And do the opinions contained in your  
4 testimony represent your best professional  
5 judgment?

6 A Yes.

7 Q Can you please summarize your testimony?

8 A Yeah, I want to make this short. As you  
9 just heard there was quite a bit of discussion on  
10 visual resources, and the applicant's position is  
11 that there are no significant adverse impacts  
12 related to visual resources.

13 On the contrary, the Energy Commission  
14 Staff has concluded that there are significant  
15 adverse impacts.

16 If the Commission and the Committee  
17 agrees with the conclusions of staff that there  
18 are adverse significant impacts, then the  
19 Commission would need to make overriding findings  
20 of that significant impact.

21 So my testimony is to provide additional  
22 information to the Commissioners to make findings  
23 of overriding consideration, if those are  
24 necessary.

25 I want to make two points, and that is

1 staff has conducted a significant amount of work  
2 as it relates to looking at feasible mitigation  
3 for minimizing the impacts as relates to visual  
4 resources.

5 And we have also done an alternative  
6 sites analysis. And in both instances concluded  
7 that they were infeasible.

8 And the second point that I'd like to  
9 make is that the benefits of this project, i.e.,  
10 the price stability and system reliability  
11 benefits of the project outweigh the impacts  
12 associated with the visual resources.

13 To expand a little bit, talk a little  
14 bit about what we did on visual resources, staff,  
15 Department of Fish and Game, U.S. Fish and  
16 Wildlife Service met, along with the applicant on  
17 numerous occasions to try to resolve the issue  
18 between biological impacts to the kit fox, as well  
19 as try to come up with mitigation measures and  
20 landscape plans that would reduce impacts to less  
21 than significant.

22 They were, after many hours of work,  
23 many different plans, landscape plans, many  
24 different approaches, were unsuccessful in being  
25 able to do that.

1           As I reviewed the staff document I asked  
2           staff to try one more time. And so they went back  
3           through the whole cycle again. Meeting with U.S.  
4           Fish and Wildlife Service, Fish and Game,  
5           applicant and gathering as much information as we  
6           could to try to come up with concepts and methods  
7           to minimize both the impacts and also not create  
8           impacts to the kit fox.

9           We were unsuccessful at doing that. And  
10          so are left with the result of impacts, visual  
11          impacts, as we selected. We didn't want to have  
12          impacts to the kit fox, because they're a listed  
13          species.

14          As it relates to the benefits of this  
15          project, we believe that the benefits of this  
16          project outweigh the impacts associated with  
17          visual resources. And I'd like to expand on that  
18          a little bit.

19          The Energy Commission's 2002 report to  
20          2012, the outlook report of February of this year  
21          indicates that the electric supply for the next  
22          couple of years looks pretty good.

23          Beyond 2005 and 2006 there's quite a bit  
24          of uncertainty. And there's potential for price  
25          volatility, tight supplies, which could lead to

1 future consumer dissatisfaction.

2 To prevent this, the State of California  
3 has entered into a four-pronged approach to try to  
4 attack the problem. This is a program that's been  
5 in place for a couple of years now.

6 One is modifying the existing market so  
7 that there are price signals to developers so that  
8 they don't take just a short-term look, but  
9 there's a long-term look at the market, and moving  
10 forward with new power plants to meet the  
11 increased demand.

12 The state and the federal government,  
13 Western Area Power Administration, is looking at  
14 upgrading transmission systems, specifically Path  
15 15. The state is also prompting energy  
16 efficiency, energy conservation in several  
17 programs. The 20/20 program that many of you are  
18 familiar with, as well as "Flex Your Power"  
19 program.

20 And then fourthly, the state has entered  
21 into a series of long-term contracts to help  
22 mitigate price volatility and provide stable  
23 supplies out over a period of years.

24 In this particular case, Calpine has a  
25 contract for this project. I would classify it as

1 kind of has two major portions to it. It's a  
2 systemwide, or a Calpine-system contract, as well  
3 as project-specific. So it has two purposes.

4 In conclusion, the project, this project  
5 is a small, but important, element in the overall  
6 strategy that the state has embarked on to insure  
7 in the future years, 2005, 2006, that we eliminate  
8 or reduce some of the uncertainty in prices and  
9 disruptions, and improve the electric supply  
10 reliability.

11 So, in conclusion, we believe that the  
12 benefits of this project outweigh the impacts  
13 associated with the visual resources, as discussed  
14 here previously.

15 Thank you.

16 COMMISSIONER PERNELL: Thank you.

17 MS. DeCARLO: The witness is available  
18 for cross.

19 MR. WHEATLAND: I have just one  
20 clarifying question.

21 HEARING OFFICER WILLIAMS: Yes.

22 CROSS-EXAMINATION

23 BY MR. WHEATLAND:

24 Q Mr. Richins, you described the extensive  
25 efforts by the parties to try to reach agreement

1 on the landscaping plan, to have a plan that would  
2 both screen the project to the maximum extent  
3 feasible, and at the same time address the  
4 biological concerns.

5 And you also testified, I believe, that  
6 the parties were unsuccessful in resolving that,  
7 to find a plan that would satisfy everyone.

8 Just for clarification, I believe it's  
9 your testimony that the landscaping plan that was  
10 developed was deemed to be adequate by the  
11 California Department of Fish and Game and U.S.  
12 Fish and Wildlife Service, is that right? But  
13 didn't satisfy the visual resource staff, isn't  
14 that right?

15 That's on page 1-11 of your testimony.

16 A Well, I'm not quite sure if I understand  
17 your question. What we tried to do was come up  
18 with something that would satisfy both --

19 Q Right, and unfortunately --

20 A -- the visual community and the  
21 biological community. We could not do that.

22 Q Right, and that's exactly right. We  
23 couldn't. But the plan that we have does satisfy  
24 the biological community, doesn't it?

25 A Oh, that's correct, yes.

1           Q     And does that include the Commission  
2 Staff's biologists?

3           A     That's correct.

4           MR. WHEATLAND:   That's all I had, thank  
5 you very much.

6           HEARING OFFICER WILLIAMS:   Thank you,  
7 Mr. Wheatland.   Mr. Sarvey.

8                               CROSS-EXAMINATION

9           BY MR. SARVEY:

10          Q     Can you describe the two types of  
11 override that the CEC is allowed to exert,  
12 briefly?

13          A     My testimony is limited to the override  
14 as it relates to environmental impacts.   And in  
15 that situation I think -- if you'll look at page  
16 1-13, the first paragraph under conclusions and  
17 recommendations.   The override provisions are  
18 described there in California Code of Regulations,  
19 Title 20, section 1755D.

20                       And that was strictly what my testimony  
21 is, is to identify that the project benefits  
22 exceed those, or outweigh those impacts that might  
23 occur as a result of the project.

24          Q     So the override you're recommending is a  
25 CEQA override, is that correct?

1 A That's correct.

2 Q And in order to exercise a CEQA  
3 override, what things must the Energy Commission  
4 prove?

5 A I believe that there are not any  
6 feasible alternatives, and that the benefits of  
7 the project outweigh the disbenefits.

8 Q And how does that differ from a LORS  
9 override?

10 MS. DeCARLO: Objection, beyond the  
11 scope of his testimony.

12 HEARING OFFICER WILLIAMS: Sustained.

13 MR. SARVEY: -- let me get one more  
14 question in there beyond the scope.

15 BY MR. SARVEY:

16 Q It's been testified in the record that  
17 staff has found inconsistencies with several  
18 visual LORS. If these LORS are found out to be --  
19 are found by the Committee to have been violated,  
20 will you also recommend an override for LORS?

21 HEARING OFFICER WILLIAMS: Mr. Sarvey, I  
22 think the testimony was that staff deferred to  
23 Alameda County's judgment that the project was in  
24 compliance with their own LORS.

25 MR. SARVEY: Okay, well, let's assume --

1 HEARING OFFICER WILLIAMS: And quite  
2 frankly, I think the Committee is --

3 MR. SARVEY: -- that Intervenor Sarvey  
4 has --

5 HEARING OFFICER WILLIAMS: -- probably  
6 not --

7 MR. SARVEY: -- can prove to the  
8 Committee that LORS have been violated. Will you  
9 also be --

10 HEARING OFFICER WILLIAMS: I didn't hear  
11 you.

12 MR. SARVEY: Let's assume that  
13 Intervenor Sarvey will prove on the record that  
14 there are LORS violations, will you also recommend  
15 a LORS override, as well?

16 HEARING OFFICER WILLIAMS: But what I'm  
17 trying to say is the record, as it stands now,  
18 indicates that Alameda County has found that the  
19 project is in compliance with its LORS.

20 MR. SARVEY: But I've disputed that.  
21 And I think I've disputed it successfully, so.

22 (Laughter.)

23 HEARING OFFICER WILLIAMS: Unless, you  
24 know, -- I don't quite frankly know how you can  
25 dispute that. I mean that's already the evidence,

1 overwhelming evidence in --

2 MR. SARVEY: And I provided evidence  
3 that measure D had been violated. So, that is a  
4 LORS violation, and I don't think this is  
5 hypothetical. I think I've proved it on the  
6 record.

7 HEARING OFFICER WILLIAMS: Right, --

8 MR. SARVEY: But, of course, that hasn't  
9 been determined by the Committee yet.

10 HEARING OFFICER WILLIAMS: Yeah. In  
11 terms of measure D, there is some testimony that  
12 the County might be misapplying measure D.

13 Now, if the Committee were to find that  
14 that, indeed, is the case, then we would all have  
15 to come back here and talk about it some more.

16 MR. SARVEY: So, if there's a LORS  
17 override, I'll --

18 HEARING OFFICER WILLIAMS: It wouldn't  
19 be a LORS override. If the Committee issues a  
20 proposed decision that finds that the project is  
21 not in compliance with all applicable LORS, then  
22 we'll have to reconvene, essentially, to figure  
23 out what to do next.

24 MR. SARVEY: Will I be able to haul Mr.  
25 Richins in here again and interrogate him?

1 HEARING OFFICER WILLIAMS: Yes. Yes.

2 MR. SARVEY: Okay, I'm satisfied, thank  
3 you.

4 (Laughter.)

5 BY MR. SARVEY:

6 Q So, basically we're dealing with a CEQA  
7 override here, and the two things that the  
8 Commission must show is that there are not  
9 feasible alternatives, and that the project  
10 benefits outweigh the CEQA impacts? I just want  
11 to make sure I don't go where I'm not supposed to  
12 go. That's correct, right?

13 A Yes, that's correct.

14 Q Thank you. Okay, so if alternative  
15 energy could be provided at a cheaper price per  
16 megawatt, wouldn't that be a better alternative?

17 A Not necessarily.

18 Q Why would it not be a better  
19 alternative?

20 A Well, there's many things to take into  
21 consideration. And depending on the location of  
22 the facility, it would have its own set of impacts  
23 that would need to be analyzed. And that isn't  
24 before us, and so I couldn't speculate on some  
25 type of additional alternative energy source,

1       whatever it happens to be, from coal to biomass to  
2       wind power. All of those technologies have  
3       associated impacts.

4               And depending on location, those impacts  
5       could be exaggerated or they could be very  
6       minimal.

7               Q     Considering that this project is  
8       backdropped by windmills, is it conceivable to you  
9       that if we could provide alternative energy at a  
10      cheaper price than this project, there would be a  
11      better alternative than this project?

12              A     We conducted an alternatives analysis  
13      and did not find that there were anything that  
14      would be, any project site or location that would  
15      be better than this particular site.

16              Each of the sites that we looked at had  
17      its advantages; also had some of its  
18      disadvantages. And in each case I believe we  
19      found that there were potential for impacts.

20              Q     You indicated earlier in your testimony  
21      that the price of the electricity was an important  
22      factor in your override considerations, is that  
23      correct?

24              A     No, that's not.

25              Q     So the price of this electricity and the

1 price to the consumer has no relationship to your  
2 override as a project benefit?

3 A No. What I said is that the State of  
4 California has entered into long-term contracts to  
5 provide price stability. I didn't say at what  
6 price. And I didn't make a value judgment on  
7 whether those contracts were a low price, high  
8 price. It's immaterial.

9 What I did state is that without  
10 contracts, and without a reliable source of power,  
11 you can have large swings in price and have large  
12 price volatility, which we experienced several  
13 years ago.

14 Q Um-hum. And didn't you also state that  
15 the consumer would be unsatisfied if the price was  
16 too high?

17 A I said if there were large swings in  
18 price and there was large price volatility like we  
19 experienced a couple of years ago, that that could  
20 lead to consumer dissatisfaction, as we did  
21 experience.

22 Q Do you know what the average spot price  
23 per megawatt has been this year?

24 A No, I don't.

25 Q Would you be surprised if I told you it

1 was \$30.87 a megawatt?

2 A That sounds -- I don't have an opinion.

3 MR. SARVEY: This is the Department of  
4 Water Resources scheduling division, energy costs  
5 for 2001/2002, the average for 2002 is \$30.87.

6 I wouldn't mind putting that in the  
7 record, if it's possible.

8 HEARING OFFICER WILLIAMS: Do you have  
9 copies?

10 MR. SARVEY: No, but I'll definitely get  
11 some.

12 BY MR. SARVEY:

13 Q So, you say you have seen the  
14 applicant's master power purchase agreement, or  
15 you're at least aware of it?

16 A I am aware of it.

17 Q Would you like me to provide you a copy?

18 A Well, I'm not an expert on the contract,  
19 and so I'm not going to be able to answer  
20 questions on specific terms of the contract  
21 because I'm not qualified.

22 Q I'll just ask you to read just one  
23 number, okay? You won't have to make anything.  
24 Under contract price, what's the price of this  
25 facility, or this contract, per megawatt?

1           A     Well, all I will do is read what it says  
2     on page 2 under contract price.  And then it goes  
3     on to say energy price, product 1, \$58.60 per  
4     megawatt hour.

5           Q     Do you consider a price swing from \$30  
6     to \$58.60 a megawatt a substantial price swing?

7           MR. WHEATLAND:  Objection.

8           HEARING OFFICER WILLIAMS:  Sustained.

9           MR. SARVEY:  What's the objection based  
10    on?

11          MR. WHEATLAND:  Well, it's beyond the  
12    scope.  It's not relevant.  It assumes facts not  
13    in evidence, --

14          MR. SARVEY:  Well, this has --

15          MR. WHEATLAND:  -- to start.

16          MR. SARVEY:  -- already been docketed,  
17    so it is in evidence.  But that's okay.

18          MR. WHEATLAND:  Well, I don't see how  
19    one number compared to another number constitutes  
20    a swing.

21          MR. SARVEY:  You don't see how \$58.60 a  
22    megawatt is not twice as much as \$30 a megawatt?

23          MR. WHEATLAND:  Well, you can ask him to  
24    do the math.  I object to the characterization --

25          MR. SARVEY:  Oh, I'm sorry, Mr.

1 Wheatland, I'll rephrase the question.

2 BY MR. SARVEY:

3 Q Is \$58.60 a megawatt approximately twice  
4 the spot price that I have -- on the information  
5 that I just gave you as \$30.67 a megawatt?

6 A I do not know. You gave me this sheet  
7 of paper, and I don't know where you get \$30.

8 Q I did it by summarizing all the costs  
9 and then dividing, but that's okay.

10 A Well, I don't know if it's accurate or  
11 not.

12 Q Okay. Well, assuming it's accurate?

13 A Well, assuming it's accurate, 30 plus 30  
14 is 60. So that is approximately twice -- well, 30  
15 plus 30 is 60 which is nearly 58.

16 Q On page 8 of the master power purchase  
17 and sale agreement it describes a situation if  
18 Calpine doesn't get its license by a certain time,  
19 the state will be taking over the -- may take the  
20 project over. Does that demonstrate any sort of  
21 precommitment to you?

22 A I don't understand the question, but I  
23 don't think so.

24 MS. DeCARLO: I've got to object to  
25 this. The witness has already testified that he's

1 not familiar with the specifics of the contract,  
2 and cannot testify to the provisions contained  
3 therein.

4 HEARING OFFICER WILLIAMS: Sustained.

5 MR. SARVEY: Okay.

6 BY MR. SARVEY:

7 Q In terms of market volatility that you  
8 referred to earlier in consumer prices, is there  
9 any evidence of market manipulation which has  
10 caused the energy crisis?

11 A I can't answer that question. I'm not  
12 involved in those investigations, so I can't  
13 answer it.

14 Q Are you familiar with El Paso Gas and  
15 the FERC's ruling that they have manipulated the  
16 gas market?

17 MR. WHEATLAND: Objection, El Paso is  
18 not applying for a license.

19 HEARING OFFICER WILLIAMS: Sustained.

20 Mr. Sarvey, really the limited scope of  
21 his testimony has to do with the single issue of  
22 CEQA override.

23 MR. SARVEY: I believe all these are  
24 interrelated, but I understand that you're in  
25 charge of the hearing, so I'm not going to argue

1 with you, Mr. Williams.

2 BY MR. SARVEY:

3 Q Is all the staff in agreement with you  
4 that this override should be provided?

5 MS. DeCARLO: Objection, relevance.

6 MR. SARVEY: Well, it states that the  
7 staff is recommending the override. And all I  
8 have here is one witness saying that -- I want to  
9 know if the entire staff is in concurrence with  
10 this.

11 HEARING OFFICER WILLIAMS: The witness  
12 is --

13 MR. SARVEY: Has said yes?

14 HEARING OFFICER WILLIAMS: -- the  
15 manager, the staff manager.

16 MR. SARVEY: So they better be. All  
17 right.

18 MR. RICHINS: I can answer the question  
19 if you want me to.

20 HEARING OFFICER WILLIAMS: No.

21 MR. SARVEY: No?

22 HEARING OFFICER WILLIAMS: No.

23 MR. SARVEY: He's voluntarily going to  
24 answer, come on, Major.

25 (Laughter.)

1 MR. SARVEY: Okay, I understand.

2 BY MR. SARVEY:

3 Q Is one of the overriding concerns for  
4 this project that there's a shortage of  
5 electricity on Path 15 that you're anticipating in  
6 the year 2005? I believe you alluded to that in  
7 your testimony.

8 A Yes, and the Energy Commission's report  
9 that was published in February of this year, it's  
10 called the 2002-2012 electricity outlook report,  
11 and in that report there is concern. Staff has  
12 concluded that there are concerns regarding  
13 uncertainty of supplies into the future,  
14 predominately beginning around 2005, 2006.

15 Q And have you identified the number of  
16 megawatts in that report that you'll be short?

17 A I'm not aware of a specific number.

18 Q So you're not aware of how many  
19 megawatts that are short here on Path 15 that  
20 would cause this override to be exercised?

21 A I think you're confusing something on  
22 Path 15. Path 15 allows transfers to occur  
23 between the north and the south part of the state.  
24 And so one of the things that is occurring is  
25 action to upgrade Path 15. But that's only one

1 solution. And if that solution is not executed,  
2 and is delayed, then there'll be increased  
3 concerns in 2005 and 2006.

4 So power plants located north of Path  
5 15, such as this plant, are very valuable to the  
6 system.

7 Q How many projects has the Energy -- or  
8 how many megawatts has the Energy Commission  
9 recently licensed, say in the last two years?

10 A I don't have that number. But I do know  
11 that we have licensed quite a few power plants.  
12 There is some concern on our part that those power  
13 plants that were licensed, because of the rules of  
14 the market and the price signals, many of the  
15 power plants that the Energy Commission has  
16 licensed are not moving rapidly forward in  
17 construction. And so that is causing us some  
18 concern.

19 We also have observed those projects  
20 that have contracts are moving forward faster than  
21 those that do not.

22 Q Have you done an analysis to compare the  
23 number of plants that you have licensed to provide  
24 energy to Path 15 as compared to your expected  
25 demand that you're short for that time period,

1 2005 and beyond?

2 A Some of that information I think that  
3 you're looking for would be contained in the  
4 outlook report that I alluded to. But I don't  
5 have the specifics.

6 HEARING OFFICER WILLIAMS: Are those  
7 public documents?

8 MR. RICHINS: Yes, it's on the Energy  
9 Commission's website. And I have a copy right  
10 here I could provide to Mr. Sarvey.

11 MR. SARVEY: I'd love to have it. Thank  
12 you.

13 BY MR. SARVEY:

14 Q So that the analysis in this report  
15 takes into consideration all the recently licensed  
16 projects and the expected demand, is that correct?

17 A Yes. The Energy Commission has a very  
18 sophisticated model for forecasting. They take a  
19 look at future demand, and it's a very complicated  
20 process that can run on for a number of years.  
21 But we have economists that take a look at price  
22 of natural gas, price of electricity. They take a  
23 look at economic growth. They include sector-by-  
24 sector analysis to project demand for electricity  
25 out over, I believe, 20 years. In this report it

1 was over ten years.

2 And then they also, on the other side,  
3 take a look at the supply, and take a look at the  
4 power plants, how they're operating; take a look  
5 at contracts; exchanges with the Southwest,  
6 exchanges with the Pacific Northwest. Take a look  
7 at what projects are starting to age.

8 If you take a look at the system, over  
9 10,000 megawatts in the system -- well, I think  
10 it's maybe 30,000 megawatts -- no, I think it's  
11 more like about 10,000 megawatts are over 30 years  
12 of age. And so those power plants are becoming  
13 less and less reliable. And so that is also part  
14 of the concern, because of the aging  
15 infrastructure.

16 Q Other than price and reliability, do you  
17 have any other reasons to override this project?

18 A Those are pretty big items, and those  
19 are the things that we think are most important.

20 Q But you haven't done an analysis or  
21 there is no analysis in this book specifically to  
22 this project, relating to the number of megawatts  
23 that have been licensed and are under  
24 construction, and the expected demand, is that  
25 correct?

1           A     All of that is taken into consideration.  
2     The Energy Commission Staff that worked on that  
3     report worked with the siting division staff, and  
4     have included the most recent information as it  
5     relates to projects that are licensed, and also  
6     projects that are expected to be licensed by the  
7     time, over that ten-year horizon.

8           So, all of that has been included and  
9     incorporated in that report.  So, projects that we  
10    have licensed, we would be, unless we learned some  
11    new information, they would be projects that we  
12    are counting on.

13           And like I said, projects that are being  
14    delayed in construction would cause us to  
15    intensify our concern about uncertainty in the  
16    years 2005, 2006 and out through 2012.

17           Q     The Energy Commission takes an override  
18    pretty serious, don't they?

19           A     I believe so.

20           Q     And yet you testified that you haven't  
21    done a specific analysis related to the demand and  
22    supply of this project, is that correct?

23           A     No, that's not correct.

24           Q     You have done a specific analysis  
25    related to East Altamont Energy and the current

1 projects that are being licensed as related to  
2 your --

3 A I said that it was --

4 Q -- expected demand?

5 A -- contained -- that it's contained in  
6 the report that you have in your hand, the 2012  
7 report.

8 Q There's a specific analysis for the East  
9 Altamont Energy Center in this report?

10 A You'll have to explain to me what you  
11 mean, a specific analysis.

12 Q Well, what --

13 A As I tried to explain, the Energy  
14 Commission Staff takes an inventory of every plant  
15 in California, every contract in California, every  
16 exchange in California and outside the state. And  
17 that goes into their inventory to determine what  
18 supplies are available, what supplies will not be  
19 available, and what supplies will be coming  
20 online.

21 And all that goes into the analysis. So  
22 I would say that there's been a very thorough  
23 analysis done of whether we have a problem in  
24 future years. And that's what my testimony is,  
25 that there is great uncertainty in future years

1 about adequate supply, price volatility and  
2 potential disruptions of electricity supply.

3 Q To your knowledge did we experience any  
4 blackouts this year?

5 A No, and that's what the report says,  
6 that we're in pretty good shape this year, next  
7 year, the next couple of years. But beyond that,  
8 we're not.

9 Q As of this morning are you aware that  
10 the Energy Commission has 13,047 megawatts either  
11 under construction or recently approved?

12 A That could be a ballpark number.

13 Q Okay.

14 A And those projects that you just alluded  
15 to are included in that report.

16 Q Okay. Does the price of natural gas  
17 affect the price of the electricity?

18 A Price to who?

19 Q The price to the electrical generator,  
20 anybody who buys natural gas.

21 A Well, it affects the cost to Calpine and  
22 anybody else that has a power plant that runs on  
23 natural gas. So the price of natural gas will  
24 cause increased costs or decreased costs,  
25 depending on the swings in natural gas.

1 Q Will the increased demand for natural  
2 gas affect the price of gas?

3 A Depends on supply.

4 Q Have you identified any facilities that  
5 will be retired due to this project's licensing?

6 A I don't think that's quite how it  
7 happens. As projects age they become less and  
8 less reliable. Also, as they age, they are run  
9 less because they're less efficient.

10 As they age, they are less competitive  
11 in the market, and so are not chosen as power  
12 plants to be dispatched.

13 And so, over time, as new power plants  
14 come on line, old power plants are slowly phased  
15 out of existence.

16 Q Does the 2002/2012 report say that it's  
17 unlikely that any power plants will be retired  
18 from the years 2000-2004?

19 A I can't answer that question.

20 Q Okay. Is California, the demand for  
21 electricity in California, is it influenced by  
22 economic conditions?

23 A Is the what -- is the electric --

24 Q Is the demand for electricity in the  
25 State of California influenced by economic

1 conditions?

2 A I think that's fair, I think that's a  
3 fair statement.

4 Q Are we currently in an economic  
5 downturn?

6 A Well, the stock market sure is.

7 Q That's for sure.

8 A I would say that we're kind of in a  
9 situation right now where the economy is kind of  
10 in a flat situation.

11 Q Thank you, Mr. Richins.

12 A But let me just clarify that --

13 HEARING OFFICER WILLIAMS: Mr.

14 Richins, --

15 MR. RICHINS: Oh.

16 HEARING OFFICER WILLIAMS: -- it's over.

17 (Laughter.)

18 MR. SARVEY: Mr. Williams would like you  
19 to be quiet.

20 (Laughter.)

21 MR. SARVEY: Before you stick your foot  
22 in the Energy Commission's mouth.

23 (Laughter.)

24 MS. SARVEY: Are we going to have public  
25 comment?

1 HEARING OFFICER WILLIAMS: You've had  
2 your public comment.

3 (Laughter.)

4 MR. SARVEY: You've had your public  
5 comment.

6 MR. SPEAKER: Not with you.

7 MS. SARVEY: Susan Sarvey. My comments,  
8 from everything I've been reading, it is very hard  
9 right now to get a contract with the Department of  
10 Water Resources because there is not a lot of room  
11 left on the ISO.

12 So I find it kind of contradictory and  
13 troubling that we need all these new power plants  
14 when we have people who are more than willing to  
15 generate electricity in a lot of different ways  
16 right now. And they're crying that they cannot  
17 sell their power, get anyone to buy it because  
18 there's no room on the ISO.

19 So, do we need a bigger ISO? Or are we  
20 doing something with the electricity that I don't  
21 know about? So that it doesn't go through the  
22 ISO?

23 I don't know why we need more power  
24 plants when the ISO can't handle everything they  
25 have already. And I think someone should look

1 into what is on the grid now; what the grid can  
2 handle. And why are we making more electricity  
3 than the grid needs.

4 Thank you.

5 COMMISSIONER PERNELL: Thank you.

6 HEARING OFFICER WILLIAMS: Okay.

7 COMMISSIONER PERNELL: I'd like to thank  
8 everyone for participating, applicant, staff and  
9 intervenors, particularly Mr. Sarvey. I also want  
10 to thank our hosts, who, I think everyone will  
11 agree, was a great host. He cleans up well, so if  
12 you --

13 (Laughter.)

14 COMMISSIONER PERNELL: -- if you leave  
15 your plate, it's gone.

16 (Laughter.)

17 COMMISSIONER PERNELL: But I do want to  
18 thank you. Also, let me just say that the  
19 Presiding Member is not here; he had to leave.  
20 But he will be putting out a report. Our Hearing  
21 Officer, Mr. Williams, has given you instructions  
22 in terms of turning in your briefs.

23 So we would expect that from this time  
24 forward that everything will stay on schedule.  
25 And we would certainly hope so, so we would ask

1 that everyone be timely in your submittals. And  
2 we will get this to the business meeting as soon  
3 as possible.

4 If there's nothing else to come before  
5 this Committee, this Committee is adjourned.

6 Thank you.

7 (Whereupon, at 5:30 p.m., the hearing  
8 was adjourned.)

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## CERTIFICATE OF REPORTER

I, VALORIE PHILLIPS, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Hearing; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said hearing, nor in any way interested in outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this 29th day of October, 2002.

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