

EVIDENTIARY HEARING
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:)
Application for Certification)
For The Calico Solar Project)
(Formerly SES Solar 1))
-----)

Docket No. 08-AFC-13

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Gary Thomas
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representing Patrick Jackson

ALSO PRESENT

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Bruce Garlinger

Steven Lamb
representing Burlington Northern Santa Fe(BNSF)

Fred Stearn

Jim Stobaugh
Bureau of Land Management

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1 possible.

2 Okay, we'll go ahead and do introductions, and
3 then get started. Let's see, let's start with the
4 applicant.

5 MS. GANNON: Ella Foley Gannon, counsel to the
6 applicant. On my right is Allan Thompson co-counsel for
7 the applicant. On my left is Felicia Bellows, vice
8 president of Tessera Solar, the applicant, as well as Sean
9 Gallagher, vice president at Tessera.

10 PRESIDING MEMBER EGGERT: Okay, welcome. Next
11 we'll do CEC staff. Go ahead Chris or Caryn.

12 PROJECT MANAGER MEYER: Christopher Meyer, Energy
13 Commission Project Manager. And here remotely at the
14 Energy Commission I also have staff counsel Caryn Holmes
15 and Steve Adams.

16 HEARING OFFICER KRAMER: Next is CURE.

17 MS. MILES: This is Loulena Miles representing
18 CURE.

19 STAFF COUNSEL HOLMES: I'm sorry, we can't hear
20 that.

21 MS. MILES: This is Loulena Miles representing
22 CURE.

23 HEARING OFFICER KRAMER: Is that better?

24 STAFF COUNSEL HOLMES: A little bit.

25 MR. MARCUS: And remotely this is David Marcus

1 consultant to CURE.

2 PRESIDING MEMBER EGGERT: Okay Defenders of
3 Wildlife.

4 MR. BASOFIN: This is Joshua Basofin on behalf of
5 Defenders of Wildlife.

6 PRESIDING MEMBER EGGERT: Okay, welcome. Basin
7 and Range Watch?

8 MS. CUNNINGHAM: Laura Cunningham, Basin and
9 Range Watch.

10 MR. EMMERICH: Kevin Emmerich, Basin and Range
11 Watch.

12 PRESIDING MEMBER EGGERT: Sierra Club?

13 MR. RITCHIE: This is Travis Ritchie with the
14 Sierra Club.

15 MS. SMITH: Gloria Smith, Sierra Club.

16 HEARING OFFICER KRAMER: Society for the
17 Conservation of Bighorn Sheep.

18 I think you can take that one down to --

19 MR. THOMAS: Gary Thomas, Society for the
20 Conservation of Bighorn Sheep, and Bob Burke --

21 STAFF COUNSEL HOLMES: I'm sorry, we're having
22 trouble hearing again.

23 PRESIDING MEMBER EGGERT: So speak straight into
24 the microphone just like karaoke.

25 MR. THOMAS: Gary Thomas, Society for the

1 Conservation of Bighorn Sheep. And Bob Burke Society for
2 the Conservation of Bighorn Sheep.

3 PRESIDING MEMBER EGGERT: I think can you take
4 that microphone down with you.

5 Okay, next is San Bernardino county.

6 MR. BRIZZEE: Bart Brizzee, Deputy County Counsel
7 for San Bernardino county.

8 PRESIDING MEMBER EGGERT: Okay. Newberry
9 Community Service District?

10 Anybody from Newberry?

11 Okay, and then BNSF Railroad?

12 MR. LAMB: Steve Lamb on behalf of BNSF.

13 PRESIDING MEMBER EGGERT: And Patrick Jackson?

14 Is Patrick here?

15 No.

16 Okay, anybody from the State agencies, Department
17 of Fish and Game?

18 How about the federal agencies, BLM?

19 MR. STOBAUGH: This is Jim Stobaugh with the
20 Bureau of Land Management. I'm the assigned project
21 manager for Calico Solar.

22 PRESIDING MEMBER EGGERT: Excellent. Welcome,
23 Jim. Thanks for joining.

24 And any other folks from the State or federal
25 agencies?

1 Okay do we have also anybody from the regional
2 water quality board, Richard Booth?

3 No.

4 Okay, and then I also want to introduce in the
5 very back there is Jennifer Jennings. She's our Public
6 Adviser. So for any of those of you here, who are
7 interested in providing public comment, we're going to
8 have a public comment period later today at 5:30 -- at 6
9 o'clock. So can you see Jennifer and make sure that you
10 get on the list and she can give you sort of more
11 instructions and details on how to participate and how the
12 get more information about the case.

13 So I think I'm now going to turn it over
14 to -- well, before I turn it over to the hearing officer,
15 I want to give Commissioner Byron a chance to say a few
16 words. Obviously, as you can see, we have a lot of
17 parties to this case. So, you know, again we're very
18 interested in hearing all of the evidence today. We want
19 to make sure that there's a healthy discussion. I think
20 in the prehearing conference, we did a good job of
21 identifying those issue areas, where we do need the hear
22 more evidence and want to hear more information from the
23 parties.

24 And we have a very ambitious schedule, but I
25 think we can get through it, if we sort of stick to the

1 facts and make sure that we're proceeding a long a path
2 that is efficient. And, again, I very much look forward
3 to the next couple of days and we'll be absorbing all of
4 this information as we prepare for our decision on the
5 case.

6 Commissioner Byron.

7 ASSOCIATE MEMBER BYRON: Thanks, Commissioner.
8 I'll be brief. I just thought I'd add some information
9 that I hope will help expedite us today a little bit.

10 Commissioner Eggert had to make a difficult call
11 on where we were to conduct this hearing. As you know,
12 the State is without a budget right now. That does affect
13 our staff and us and our ability to travel. And he had to
14 make this decision awhile ago. He elected to have it here
15 and staff is -- most of our staff is back in Sacramento.
16 So there's a bit of risk and difficulty associated with
17 that. We apologize. I think he's made the right call to
18 be here, so that we can engage the public, to the extent
19 their interested.

20 But we are taking a bit of a technological risk.
21 And therefore, I hope you'll bear with us. We'll need to
22 ask everybody to speak directly into the microphones, so
23 that you can be heard. And also in the interests of time,
24 we only have the two and a half days here. And I'd like
25 to ask all participants to please be cognizant of that and

1 the time of others. Our interest is to get through as
2 many of these uncontested -- I'm sorry all of the
3 uncontested of course and the contested issues as we can
4 during this hearing.

5 Commissioner Eggert, I will do what I can to help
6 things move along as well by being brief.

7 HEARING OFFICER KRAMER: Okay, let's get started
8 then. Couple housekeeping issues. As Commissioner Eggert
9 mentioned, we have set aside time at 6 p.m. this evening
10 for public comment. The idea being that those members of
11 the public who don't want to come and sit through a bunch
12 of hearing time and wait for the opportunity to comment,
13 can simply come at 6 and they know that's what we'll be
14 doing.

15 For those of us in the audience who may not be
16 aware of it, we have a several page spreadsheet that shows
17 which topics are going to be heard on which day. And it
18 lists the witnesses and time estimates. So if you're
19 trying to figure out -- if you want to come for just one
20 or two topics, I'll provide these copies to Ms. Jennings
21 and she can hand them out to you. That will help you
22 figure out when the different topics are going to be
23 arising.

24 I also will note that the topics of traffic and
25 transportation and that includes any issues related to

1 the, what they call, glare or glint light reflecting off
2 the project's mirrors into places where people might be
3 affected, those will be heard on August 18th. And
4 currently that's scheduled to be in Sacramento. But we
5 will have a call in arrangement similar to what we're
6 using today, so people can participate.

7 So with that, do any of the parties have any
8 housekeeping issues they want to raise before we begin our
9 first topic?

10 STAFF COUNSEL HOLMES: This is Caryn Holmes
11 representing staff, I wanted to let people know that
12 earlier today, we filed errata. We discovered that
13 several parts of the Supplemental Staff Assessment were
14 missing in the version that was published. So that's been
15 docketed, served, and I believe posted.

16 HEARING OFFICER KRAMER: Does any of that relate
17 to what we're going to be talking about to?

18 STAFF COUNSEL HOLMES: It certainly could.
19 Although, the soil and water resources and biological
20 appendix won't be addressed until later. One of the items
21 that was included was the description of the project
22 related future actions that related to transmission
23 upgrades. Each individual technical area contains an
24 assessment of the impacts associated with that, but the
25 description itself was missing. So to the extent that

1 anybody has any land use or visual resources or air
2 quality questions relating to those future upgrades, that
3 particular exhibit is an important one to get into the
4 record.

5 HEARING OFFICER KRAMER: Okay, well I guess we'll
6 all take a look here. Many of us are working on getting
7 our wireless up, I gather.

8 MS. MILES: Hearing Officer Kramer, we did have
9 some questions relating to that. And I wonder, should we
10 ask them today, or should we ask them at the cultural
11 resources hearing, when we've had some time to review
12 this?

13 STAFF COUNSEL HOLMES: To the extent that your
14 questions go to the analysis and the particular -- in each
15 particular technical area, that was included in the SSA.
16 What was not included was the underlying description
17 itself.

18 MS. MILES: Okay, so I guess probably the best
19 way to proceed would be to go ahead and ask the question
20 and if it ends up that you cannot answer it without
21 relying on the supplement, then you can let me know and we
22 can take it up again at the next hearing.

23 HEARING OFFICER KRAMER: Okay, or if it relates
24 to a topic that's later in the week, you know, arguably
25 you'd have time to take a look at it between now and then.

1 So, Ms. Holmes, do I have it correctly that what
2 was missing was not the analysis, but the detailed
3 description of downstream improvements?

4 STAFF COUNSEL HOLMES: That's correct.

5 HEARING OFFICER KRAMER: Okay, so it may be that
6 it won't add much to your -- but to the extent somebody
7 feels that they are prejudiced by receiving that only
8 today, certainly call it to our attention and we'll decide
9 if more time is necessary, in order to review it.

10 Okay, and I think what we can do is swear in our
11 witnesses and begin with our first topic

12 So anybody at the table here or in the audience
13 who the expecting to be a witness today, if you could
14 please stand to be sworn as a witness, at this time, we
15 will take care of that.

16 And staff, you of, of course, standing in your
17 room up in Sacramento?

18 You're on the honor system.

19 Our reporter informs me that I am to carry out
20 that obligation.

21 So would you all please raise you're right hand?

22 (Thereupon the witnesses were sworn, by the
23 Hearing Officer to tell the truth, the whole
24 truth and nothing but the truth.)

25 HEARING OFFICER KRAMER: Okay, thank you.

1 Down the road if somebody comes on and they
2 haven't been sworn, then they will swear them
3 individually.

4 Let's begin then with the topic of project
5 description and the applicant had two witnesses on that
6 topic.

7 MS. GANNON: Yes. We call Felicia Bellows and
8 Sean Gallagher.

9 HEARING OFFICER KRAMER: Are you intending to
10 establish their qualifications or --

11 MS. GANNON: Their resumes were submitted with
12 their written testimony. And so we will offer their
13 resumes that have been previously submitted. If anyone
14 would like to question them on their qualifications, we
15 would offer them available for that purpose now.

16 HEARING OFFICER KRAMER: Does anybody wish to
17 question the qualifications of Ms. Bellows or Mr.
18 Gallagher?

19 Hearing none, then question skip that step and go
20 right into the meat of the matter.

21 Whereupon,

22 FELICIA BELLOWS and SEAN GALLAGHER
23 were called as witnesses herein, and after first
24 having been duly sworn, were examined and
25 testified as follows:

1 DIRECT EXAMINATION

2 BY MS. GANNON:

3 Thank you, Hearing Officer Kramer.

4 Starting with you, Ms. Bellows. Are you the same
5 Felicia Bellows who gave written testimony in this
6 proceeding, which was previously marked as Exhibit 63 and
7 Exhibit 82, and that constitutes your opening testimony
8 and your rebuttal testimony, is that correct?

9 MS. BELLOWS: Yes, that's correct.

10 MS. GANNON: Can the parties on the phone hear
11 Ms. Bellows?

12 STAFF COUNSEL HOLMES: Louder would be better.

13 MS. BELLOWS: Okay.

14 MS. GANNON: And do you have any corrections to
15 make or additions to the testimony that you previously
16 submitted in these proceedings?

17 MS. BELLOWS: I do not.

18 MS. GANNON: And did you sponsor a number of
19 exhibits that were listed in the Exhibit 63 and Exhibit
20 82?

21 MS. BELLOWS: I did.

22 MS. GANNON: We will be offering the exhibits
23 that are listed in what we have marked as Exhibit 63 and
24 Exhibit 82 as evidence.

25 (Thereupon the above-referenced documents

1 were marked as Exhibits 63 and 82 for
2 identification.)

3 MS. GANNON: So Ms. Bellows, can you describe
4 briefly the project as it is proposed for approval?

5 MS. BELLOWS: I can. The project consists today
6 of 6,215 acres. It is located a approximately 37 miles
7 east of Barstow. My understanding is some of you went to
8 visit it today. It is located on I-40. And basically the
9 exit to get off there would be the Hector Road exit off of
10 I-40. We have the BNSF Railroad that runs through the
11 site. There's also a natural gas pipeline that runs
12 through the site as well.

13 On our eastern boundary is the Pisgah-Lugo
14 transmission line, which is the Pisgah Substation, which
15 is owned buy Southern California Edison.

16 MS. GANNON: And can you briefly describe the
17 components of the project?

18 MS. BELLOWS: The components of the project, in
19 terms of the project technology et cetera?

20 MS. GANNON: Yes.

21 MS. BELLOWS: Okay, so what -- we'll have two
22 phases of the project. We have a phase one, which is 275
23 megawatts. This will consist of 11,000 SunCatcher units.
24 And then we have phase 2 of the project, which will be 575
25 megawatts. And that in total will add up to 34,000

1 SunCatchers.

2 The phasing is built around the transmission. So
3 the Edison will be making a small upgrade to their
4 substation in order to accommodate the 275 megawatts that
5 will be available shortly. And then they will make a
6 larger upgrade, which will further come date the full 850
7 megawatts, as well as additional megawatts out in that
8 area.

9 MS. GANNON: And can you briefly describe the way
10 this site was selected for consideration of this project?

11 MS. BELLOWS: The site was selected some time ago
12 in the 2005 time period. Basically worked with BLM to try
13 and find a site that would -- that they thought would work
14 and that we thought would work. Obviously, one of the
15 major considerations was transmission capacity. As in
16 siting that you do today, that's one of the big criteria.
17 And --

18 STAFF COUNSEL HOLMES: Excuse me, we're having
19 trouble hearing. There's background noise and Ms. Bellows
20 is not coming through.

21 MS. BELLOWS: Okay. There will people that will
22 tell you I know how to do that.

23 (Laughter.)

24 PRESIDING MEMBER EGGERT: And then I guess for
25 the other microphones, for those who are rustling papers

1 and such, should make sure to keep those either off or
2 away from the...

3 MS. BELLOWS: Okay. So going back to the siting,
4 we worked with the BLM to try to find a site that would
5 meet our conditions and our criteria. Obviously, what we
6 were looking for are -- were size in order to meet size in
7 order the meet a facility large enough to just -- you know
8 solar has particular criteria, in terms of sizing and
9 efficiencies that you need to deal with. So we were
10 looking for large acreage. We were looking for something
11 that was next to or near to transmission. And obviously
12 this is. It backs right -- basically is right next to the
13 Pisgah Substation.

14 And we were looking for a site that, you know,
15 would be reasonable in terms of resources and not have big
16 issues, that we would have to overcome. So working with
17 the BLM, we were able to locate the Calico Solar site.

18 MS. GANNON: And after identifying the site and
19 making the original application in the AFC, there have
20 been some changes that have been made to the project. Can
21 you describe the changes that have occurred?

22 MS. BELLOWS: I can. There have been -- I would
23 say that there are three primary changes. The first
24 change has to do with water. Let me go through sort of
25 the history on water on the site.

1 When we originally filed the AFC, the notion at
2 that point in time, our plan, was to use an on-site well
3 on the BLM land itself. What ended up transpiring is that
4 in conversations with the BLM, actually going out and
5 getting a permit and drilling on BLM land prior to having
6 a right-of-way grant, did not make a lot of sense, in
7 terms of timing and we were not going -- we were
8 uncomfortable with the timing associated with that, and
9 our ability to actually carry that out in a timely
10 fashion.

11 At that same point in time, we started talking to
12 the Mojave Water Agency. The project itself is not in the
13 Mojave Water Agency's district. However, it's very close
14 to it. So the thought was, and in talking to Mojave Water
15 Agency, they pointed out, well, you know, this would be
16 something very easy for you to -- for us to supply to you.
17 We can simply export the water to you and you can
18 compensate us. And we actually started working with the
19 Mojave Water Agency on a plan of compensation. Basically
20 what you do is you compensate them for water by
21 permanently setting aside water for the amount that we
22 would be taking over a period of time, since we would be
23 outside of their service territory or their jurisdiction.

24 So we won't down that path. At the same time in
25 conversations with the Commission, you know, it became

1 clear that your preference would be that we would use
2 greywater, reclaimed water. And snow in working with
3 Mojave Water Agency, that's the other thing that we began
4 looking at, exploring is that avenue as well.

5 We attended several meetings with the Mojave
6 Water Agency and their water board. And it became clear
7 in those meetings that the different sub-districts within
8 the Mojave Water Agency were not comfortable with the
9 notion of an export. So we sort of moved off of that.

10 At the same point in time, the Mojave Water
11 Agency said well, you know, we would still really like to
12 do this for you, so why don't we talk about using
13 reclaimed water from the Barstow facility. And, in fact,
14 BNSF is right there and can you talk to BNSF about using
15 their existing right to export from the Mojave Water
16 Agency and perhaps we can make it work in that fashion.

17 So that's the path we went down. We attended,
18 you know, another meeting and another one of their water
19 board meetings -- the Mojave Water Agency's water board
20 meetings. And even though it was reclaimed water and even
21 though we were going to go down the path of using existing
22 right to export water, the Mojave Water Agency and its
23 constituents just were not comfortable with that.

24 So sort of walking out of the building that
25 evening, BNSF says to us, well you know, we have water at

1 Cadiz. And we're like, you do?

2 So we started talking to BNSF about exporting
3 water or just not even exporting, because it's not the
4 same thing as Mojave Water Agency. It would have simply
5 been a purchase of water from their well in Cadiz and
6 reeling it down to our site from Cadiz.

7 So that is when we submitted our, I guess it's is
8 supplement -- supplement to the AFC on that particular
9 water use.

10 Now, at the same time, since we did not have that
11 completely closed, we began looking at the wells on site,
12 which we had been looking at, but had not seriously been
13 pursuing, because once again we thought that we are -- we
14 were going to be able to do something with Mojave Water
15 Agency, and again trying to work through some of the
16 reclaimed water.

17 So what we ended up doing therefore, is we did
18 find after drilling three wells, we found well number
19 three did have sufficient capacity for us. And we were
20 able to turn in an additional supplement to the AFC,
21 putting in place our current water use, which is well
22 number three.

23 MS. GANNON: So that's what you're currently
24 proposing is to rely on a groundwater well on a property
25 that's adjacent -- owned by you and adjacent to the

1 project site, is that correct?

2 MS. BELLOWS: That's correct.

3 MS. GANNON: And there was some questions about
4 the operation supply number, some inconsistencies in the
5 Supplemental Staff Assessment. Can you describe what is
6 the estimated usage during construction for the project of
7 water?

8 MS. BELLOWS: Yes. In the SSA, there are a
9 number of different numbers shown for construction water.
10 Just to bring clarity to that issue, on average,
11 the -- our water usage during construction will be 136
12 acre feet per year.

13 MS. GANNON: Thank you. You said there were two
14 other changes that were significant that have been made?

15 MS. BELLOWS: Yes. The other change is on
16 hydrogen. When we had filed our AFC, we filed for a
17 distributed system of hydrogen, which means that there
18 would be K-bottles on each SunCatcher. We later made a
19 change to that, so that we are -- because we were
20 analyzing after our experience at Maricopa using a
21 centralized system of hydrogen. So now we are -- we have
22 the option of either using distributed or centralized
23 hydrogen system.

24 In addition, we increased the starting amount of
25 hydrogen that we would have on site. This is simply from

1 the perspective of one of the things that we've learned
2 from our reference plant in Maricopa at Maricopa Solar is
3 that in order to maintain the life of the heater head, we
4 need to have a little bit more hydrogen on site.

5 MS. GANNON: And this water supply change and the
6 hydrogen distribution were both studied in the
7 Supplemental Staff Assessment; is that correct?

8 MS. BELLOWS: That is correct.

9 STAFF COUNSEL HOLMES: I'm sorry. Again, maybe
10 if you spoke a little bit more slowly, it would be easier
11 for us to follow remotely.

12 MS. BELLOWS: And they're telling me to talk
13 faster.

14 STAFF COUNSEL HOLMES: I'm sorry, it was counsel
15 that we were having trouble understanding.

16 MS. GANNON: I will try to speak slower. Thank
17 you.

18 The third change I believe relates to the project
19 boundary. Can you briefly describe the changes that have
20 been made?

21 MS. BELLOWS: Yes, the other change, and what I
22 view as the most significant change to the project is that
23 in response to working with the agencies and their
24 requests at looking at moving away from the Cady
25 Mountains, we have changed our acreage on the site from

1 8,230 acres to 6,215 acres. So we opened up a 4,000 foot
2 corridor along the Cady Mountains to the north of our site
3 to open up a wildlife corridor.

4 And one of things that we were able to do is that
5 fortunately in our case, we had filed for more acreage
6 than we ultimately ended up -- would need. We weren't
7 quite sure what we would need, in terms of what we would
8 come across on site. And in our sort of laying out plans
9 with our contractor, we were able to maintain our same
10 megawatts while reducing acreage. And we were able to do
11 that by taking away some of the facilities that we didn't
12 necessarily need and using some of the, I would say,
13 filling in some of the spaces that the contractor didn't
14 necessarily want to fill-in, from a, you know, a cost and
15 a management perspective.

16 MS. GANNON: Have there been other changes that
17 have been made since the publication of the staff
18 Supplemental Staff Assessment?

19 MS. BELLOWS: Yes, there have. One of the -- in
20 my rebuttal testimony, one of the things that -- I bring
21 up two -- a series of changes associated with BNSF at the
22 request of BNSF, and then I also bring to light a change
23 about the -- having to do with Southern California
24 Edison's supply of construction power.

25 We made a filing in 2009 on time for construction

1 power to be supplied by Edison to our site. We were told
2 by Edison recently that the earliest they could get us
3 construction power would be February of 2011, with a
4 possibility of being even later than the Pisgah upgrade
5 that we're counting on for the 275 megawatts.

6 So obviously that won't work for us, so what we
7 have filed is a request to be able to use two back-up
8 generators, a 500 kVA generator, 500 kW, and a 75 kilowatt
9 back-up generator to supply construction power.

10 MS. GANNON: And have the impacts associated with
11 using those back-up generators been analyzed?

12 MS. BELLOWS: They have. And, in fact, they'll
13 be addressed that expert testimony.

14 The other changes are at the request of BNSF.
15 The first one has to do with access. The original plan
16 had been to come off of I-40 on to Hector Road go north to
17 the continuation of Hector Road, which is unmaintained,
18 and use an at-grade crossing there and make a right
19 basically and go east to get onto our site temporarily
20 until our bridge was in place.

21 And then we would have our permanent access road
22 usage. BNSF has come back to us and said, well that's
23 fine, but what we'd really like is for you to go ahead and
24 use your permanent access road as soon as possible, so
25 we'll build you an at-grade crossing next to where your

1 bridge is going to be and you can use that as soon as we
2 can get that built.

3 So until that's built, you can use our right of
4 way at the existing crossing, but we will build you this
5 at-grade crossing as soon as possible and then you're
6 going to have to use that.

7 So again this is a road that we were going to use
8 anyway, in terms of impacts -- and we'll talk about this
9 when the expert witnesses get up. We don't see any
10 additional impacts from that and everything has been
11 surveyed on that.

12 The other change on access is that BN -- our
13 original plan was that there's a small outlying piece to
14 the west of our site, and we were going to use BNSF's
15 access road from the eastern side to the western side the
16 entire way. BNSF has requested that instead of doing
17 that, that when we get to phase two, we go out our main
18 access gate, we make a right on Hector -- on the
19 continuation of Hector Road, go along that north until we
20 get to their access road be throe railroad and then go
21 west on that.

22 So it's using less of their right of way, if you
23 will. So that's the access road issue that we have
24 included in our testimony.

25 Other this inning that BNSF has requested is they

1 were uncomfortable with the thought of a hydrogen line
2 going underneath their rail tracks regardless of how deep
3 we went. So what we have suggested to them and what we
4 have recommended here is that we have -- if we go with a
5 centralized hydrogen system, that we have a tank for
6 hydrogen both on the -- at the main surfaces complex, and
7 then south of the railroad, sort of halfway between the
8 railroad and I-40, in that section of the project.

9 MS. GANNON: Thank you. Have you had an
10 opportunity to review the Supplemental Staff Assessment?

11 MS. BELLOWS: Do you warrant me to address the
12 other change request.

13 MS. GANNON: Oh, I'm sorry. I thought you just
14 did the last change.

15 MS. BELLOWS: The other thing that we have
16 suggested at BNSF's requested, is they were uncomfortable
17 with where we have the trance -- the gen-tie, meaning the
18 transmission line from our substation over to the Pisgah
19 Substation. And they believe that it might conceivably
20 bring into being an induction issue.

21 So we don't believe that that's the case, but in
22 order to accommodate them, we have backed off from their
23 right of way and sited the gen-tie 300 feet north of their
24 right of way.

25 And then the last change has to do with the glint

1 and glare conditions, which I believe we're going to
2 address on the 18th.

3 MS. GANNON: Turning now to the Supplemental
4 Staff Assessment, have you had an opportunity to review
5 that document?

6 MS. BELLOWS: I have.

7 MS. GANNON: And can you provide just again just
8 as an overview comments of your response to that analysis?

9 MS. BELLOWS: I can. First of all, thank
10 you -- you know, thank you very much, staff. Even though
11 you're here, I can't really, you know, tell you
12 personally, but thank you very much for all the work. I'm
13 well aware of all the effort that went into this, and we
14 greatly appreciate that.

15 That said, there are a few areas that we disagree
16 on. And we're going to be going through some of the
17 compliance conditions. But before that, on the
18 cumulatively significant impacts, we disagree with the
19 statement that the Mojave Fringe-tailed Lizard is viewed
20 as a cumulatively significant impact, the project has on
21 that resource.

22 We also disagree on the cumulatively significant
23 impacts on land use. And this goes to the BLM's donated
24 land. We believe that the project is consistent with the
25 BLM's policy on the donated land, and that in fact given

1 that our properties, the properties that we have sort of
2 given back north of our site, the 2,000 plus acres that
3 we've given back in reworking our site would qualify for
4 our sort of those donated lands.

5 We do agree with the cumulatively significant
6 impact on the visual side. And we disagree on the worker
7 safety section, and we'll be getting into that in more
8 detail when we go over and talk about the compliance
9 condition specifically on fire.

10 MS. GANNON: Turning now to the compliance
11 conditions. Of the 154 conditions, can you comment on the
12 number that you agree with and the others that you are
13 wishing to propose changes?

14 MS. BELLOWS: We -- of the 154 compliance
15 conditions, we agree with 126 of those. We have made some
16 suggestions on those that we do not agree on and some much
17 those suggestions are minor and simply mark-ups of those
18 conditions. But we have a few today that we'd like to
19 work through and talk about in more detail.

20 MS. GANNON: And the applicant I believe has
21 submitted suggested revisions to a number of the
22 conditions with you're rebuttal testimony; is that
23 correct?

24 MS. BELLOWS: That is correct.

25 MS. GANNON: And that is marked as attachment A

1 to Exhibit 82. We also have a number of other
2 conditions -- three other conditions, which we would like
3 to distribute now and offer into evidence and distribute
4 to the parties as proposed revisions to three of the
5 biological conditions.

6 Should we distribute those to the parties now?

7 HEARING OFFICER KRAMER: Please.

8 STAFF COUNSEL HOLMES: Are those being Emailed as
9 well?

10 MS. GANNON: They're also -- they are present.
11 There is someone in the room with you who has these
12 conditions and will be able to distribute them to you now.
13 And they were docketed earlier today.

14 MR. RITCHIE: Hearing Officer Kramer, will we
15 have time to review and respond to these a little bit
16 later, if we are not able to do so now?

17 HEARING OFFICER KRAMER: Certainly. We'll to
18 have see what they are.

19 MS. GANNON: These are relating to biological
20 conditions. So our intent was to make sure they were
21 distributed today. And since we are taking the expert
22 testimony on biology tomorrow, it would be an appropriate
23 time for all the parties to discuss. We just intend to
24 have an overview of some of the suggestions with Ms.
25 Bellows.

1 MR. RITCHIE: Thank you.

2 HEARING OFFICER KRAMER: Okay, so this would be
3 Exhibit 92 if I count correctly.

4 MS. GANNON: Should we do them all as one
5 exhibit? There's three conditions. Should we just have
6 them as one exhibit or is it -- I think it's just one
7 exhibit is fine with us.

8 HEARING OFFICER KRAMER: I think so. It's one
9 document.

10 MS. GANNON: Yeah. So it's Exhibit 92.

11 HEARING OFFICER KRAMER: That consists of three
12 separately stapled proposals to modify conditions Bio 12,
13 Bio 13, and Bio 17; is that correct

14 MS. GANNON: That's correct.

15 HEARING OFFICER KRAMER: Okay, that will be
16 Exhibit 92.

17 (Thereupon the above-referenced document
18 was marked by the Hearing Officer as Exhibit 92
19 for identification.)

20 MS. GANNON: And if we can confirm, were these
21 distributed to the staff in Sacramento?

22 STAFF COUNSEL HOLMES: They were. Was that 92?
23 I had trouble hearing.

24 HEARING OFFICER KRAMER: 9-2, yes.

25 STAFF COUNSEL HOLMES: Thank you.

1 HEARING OFFICER KRAMER: You're voice is actually
2 pretty loud, Ms. Holmes. So you could back off a little
3 and we'd still hear you.

4 MS. GANNON: As we are distributing these, maybe
5 we can start discussing them with you, Ms. Bellows.
6 Turning first to Bio 12. Can you comment on -- and again
7 our experts will be testifying to the biological
8 provisions in these proposed conditions, but can you give
9 us an overview of the reasons for these changes --

10 STAFF COUNSEL HOLMES: Excuse me.

11 MS. GANNON: -- in the applicant's proposal?

12 STAFF COUNSEL HOLMES: I'm going to object at
13 this point, because we don't have the bio witnesses on.
14 We went through a similar exercise last week in the
15 Imperial hearing. And to the extent that there's
16 testimony about what the intent is or the concern is about
17 these conditions, I think it's appropriate that it not be
18 offered until the biological resources panel, which
19 consists of not only Energy Commission staff but expert
20 witnesses from the other agencies be present.

21 HEARING OFFICER KRAMER: Yeah, I will sustain the
22 objection. I think it would be better to hear it all in
23 the context of the discussion tomorrow.

24 MS. GANNON: Okay, we can re-offer Ms. Bellows at
25 the beginning of that testimony.

1 We did have two other conditions that we were
2 going to -- she was going to speak to. One was related to
3 Soils and Water 9, which is the water supply, and one was
4 the Worker Safety 7, which is related to the fire. Do you
5 want us to also defer discussion of those until we get to
6 those panels?

7 STAFF COUNSEL HOLMES: Again, I'm sorry. I'm
8 having trouble hearing you.

9 HEARING OFFICER KRAMER: I'll answer her
10 question. I think that would be more efficient.

11 MS. GANNON: Okay.

12 HEARING OFFICER KRAMER: The appropriate people
13 will be in the various rooms at that point in time.

14 HEARING OFFICER KRAMER: Okay, we can -- we will
15 defer the discussion of the proposed changes until the
16 expert panels.

17 STAFF COUNSEL HOLMES: Were these two other
18 proposed changes filed also this morning?

19 MS. GANNON: No. They were filed with our
20 rebuttal testimony, exhibit A to --

21 STAFF COUNSEL HOLMES: Okay, thank you. I just
22 wanted to make sure that there wasn't something -- if
23 there was something of available that was going to be
24 discussed tomorrow, I just wanted to make sure people had
25 a chance to take a peek.

1 MS. GANNON: These are all the changes that we
2 have proposed.

3 HEARING OFFICER KRAMER: That's 82 A correct?

4 MS. GANNON: 82 A, correct.

5 STAFF COUNSEL HOLMES: Okay. So is the changes
6 in Exhibit 92 are or are not included in Exhibit 82 A?

7 MS. GANNON: They are not included in the
8 rebuttal testimony. It referenced the fact that we would
9 be submitting proposed language for these particular
10 conditions, and we are just fulfilling what we anticipated
11 we would do.

12 STAFF COUNSEL HOLMES: Okay, thank you.

13 MS. MILES: So these proposed changes that were
14 just handed out, were they docketed -- or were they
15 submitted to the service list?

16 MS. GANNON: They were docketed this morning,
17 yes.

18 HEARING OFFICER KRAMER: Well that's actually two
19 different things or it can be. But were they circulated
20 via Email to all the parties, is that what you mean by
21 docketing or?

22 MS. GANNON: We docketed to the POS list.

23 HEARING OFFICER KRAMER: Okay.

24 MS. GANNON: So I believe everyone should have
25 received them this morning.

1 MS. MILES: I believe I did. Just to clarify,
2 applicant's submittal of requested changes to specific
3 biological resources conditions at 11 a.m.?

4 MS. GANNON: Correct.

5 MS. MILES: Thank you.

6 MS. GANNON: Thank you, Ms. Bellows. We will
7 discuss these conditions with you tomorrow and the next
8 day.

9 Turning now to Mr. Gallagher. Mr. Gallagher, are
10 you the same Sean Gallagher who offered written testimony
11 in these proceedings earlier, which has been marked as
12 Exhibit 65?

13 MR. GALLAGHER: Yes.

14 (Thereupon the above referenced document was
15 marked by the Hearing Officer as Exhibit 65
16 for identification.)

17 MS. GANNON: And you sponsored a number of
18 exhibits in that testimony. Are you still sponsoring
19 those exhibits?

20 MR. GALLAGHER: Yes.

21 MS. GANNON: Do you have anything to add or any
22 corrections to make to your written testimony?

23 MR. GALLAGHER: No.

24 MS. GANNON: What is the purpose of your
25 testimony in these proceedings, Mr. Gallagher?

1 MR. GALLAGHER: My testimony addresses the
2 factual and policy basis for the Committee and the
3 Commission to make the necessary findings for an override
4 that may be required as a result of any remaining
5 significant adverse impacts, as a result of constructing
6 and operating the project.

7 MS. GANNON: You just heard Ms. Bellows
8 referencing the fact that the applicant agreed that there
9 would be significant impacts to visual resources and is
10 that the staff has identified a number of other resources.
11 Do you believe that it would be appropriate and there are
12 bases for the Commission to override such impacts.

13 MR. GALLAGHER: Yes. While we've taken all steps
14 to avoid, minimize, and mitigate the environmental
15 consequences of this project, there may be some remaining
16 impacts that can't be reduced to less than significant
17 levels. Visual is one of them. There may be others that
18 we disagree with. The Commission makes a conclusion
19 remain significant. And for those items, we believe
20 there's an adequate factual and policy basis for the
21 Commission to make the override finding and that's what
22 we'll be requesting in this case, and are requesting.

23 MS. GANNON: And what is that basis or summary of
24 that basis?

25 MR. GALLAGHER: Well, the project delivers

1 significant public benefits that fit within the statutory
2 framework for issuing an override. And if I may, I'll
3 just outline some of those benefits.

4 There's a number of benefits at the local, State,
5 and national level. Some of the most important ones are
6 reduction of greenhouse gases. The project will reduce
7 the greenhouse gas emissions associated with the
8 generation of electricity for Southern California Edison
9 and for California. This is consistent with California's
10 Global Warming Solutions Act of 2006, and with the
11 Commission's own 2009 integrated energy policy report,
12 both of which identify greenhouse gas emissions as a major
13 concern to the State and the nation and the planet.

14 The project when operating will also display
15 significant amounts of fossil fuel generation. Thus
16 reducing emissions associated with generation of
17 electricity by fossil fuel power plants.

18 In addition, the project will make a significant
19 contribution to meeting the State's renewable portfolio
20 standard and to the ability of Southern California Edison
21 to meet its obligations under the RPS law. The project
22 will generate 850 megawatts when its on rating at full
23 capacity. And it will represent 11 percent of Edison's
24 RPS requirement when fully operational.

25 In addition, the project will help displace

1 generation from coastal power plants in California that
2 use once-through cooling. The Energy Commission's 2009
3 integrated energy policy report discussed the State Water
4 Board's policy to phase out once-through cooling power
5 plants. And that policy has since been adopted by the
6 State Water Resources Control Board. So this project will
7 contribute to the effort by providing power to Edison and
8 by being available to displace power that's currently
9 generated by power plants in Edison service territory that
10 use once-through cooling technology and that are likely to
11 be phased out over time.

12 In addition, this project uses a very -- has very
13 low water use. There will be testimony on that later. It
14 uses less water than any other solar thermal technology.

15 The project also has employment and economic
16 benefits that would support override -- a finding of an
17 override. The project will support approximately 640 jobs
18 per year during construction and will employ when it's
19 operational about 180 full-time employees. We have got a
20 commitment to hiring locally and we'll have an annual
21 payroll of over 10 million dollars.

22 In addition to the direct employment, the direct
23 employment will support additional jobs in the community.
24 And local unemployment rates are around 17 percent.

25 I'd note also that our primary contractor

1 Mortenson has been -- is now on board and we're expecting
2 the construction jobs in this project to be up to about 90
3 percent union jobs. So not only are we paying -- we'll be
4 creating good high paying jobs for local community, but
5 union jobs as well, which makes it all the more disturbing
6 with the participation of CURE.

7 The project will have significant benefits for
8 local community, construction income impacts of over \$9
9 million, and over \$30 million in sales.

10 MS. GANNON: So is it your view that these
11 environmental socioeconomic benefits would justify an
12 override for this project?

13 MR. GALLAGHER: I do. And I think it's
14 also -- this project is part of the overarching federal
15 policy goals to support renewable energy and a clean
16 energy economy to help us deal with energy security and
17 climate change, as represented by the policies that were
18 enacted in the stimulus package last year, such as the
19 treasury grant program and the loan guaranty program.

20 MS. GANNON: So is the applicant officially
21 requesting an override, should the Commission determine
22 that there are any unmittigable significant impacts
23 associated with the project?

24 MR. GALLAGHER: We are. As we noted earlier,
25 there's at least one item, visual resources that will

1 require an override. And we're requesting that the
2 Committee and the Commission issue a decision that grants
3 an override on that item and any other items for which the
4 Commission may conclude that significant impacts remain
5 after mitigation.

6 And I'll say, just to close, we spent a lot of
7 time identifying the site. We think it's a good site for
8 some of the reasons that Ms. Bellows mentioned before
9 proximity to transmission, the freeway, the railroad. In
10 addition this site was designated by the BLM as a solar
11 energy study area in its ongoing solar programmatic EIS.
12 And so it's preferred site to be studying for solar energy
13 generation.

14 MS. GANNON: And how are those sites identified,
15 just summarily?

16 MR. GALLAGHER: The BLM conducted an initial
17 study to identify sites that are -- that have both good
18 characteristics for generation of solar energy and pose
19 fewer resource conflicts than other potential sites. And
20 they're studying those sites more thoroughly in the PEIS.

21 MS. GANNON: Thank you. I would move that Ms.
22 Bellows and Mr. Gallagher's testimony be admitted into
23 evidence along with the exhibits referenced therein. This
24 is Exhibit 63, 64 and Exhibit 82.

25 HEARING OFFICER KRAMER: Okay Exhibit 63, 64, and

1 82. Any objection to admitting those into evidence?

2 MR. BASOFIN: Mr. Kramer, I'm not sure. I
3 believe part of Ms. Bellows' testimony relates to
4 alternatives. And I'm not sure if the exhibits they're
5 moving in right now include that.

6 HEARING OFFICER KRAMER: Well, we don't -- we
7 will, at the end of the proceeding, make sure that
8 everybody has everything they want the give.

9 MR. BASOFIN: Yeah, but I may have an objection
10 if.

11 HEARING OFFICER KRAMER: You're objecting that
12 they're not moving to admit a particular exhibit?

13 MR. BASOFIN: No, no. I just want to make sure
14 that the portion that includes alternatives is waiting
15 till the alternatives phase.

16 HEARING OFFICER KRAMER: And which exhibit are
17 you referring to?

18 MS. GANNON: Well, Ms. Bellows is the witness for
19 alternatives as well, so it is referenced in both Exhibit
20 62 and Exhibit 82, there is some discussion of the
21 alternatives issues.

22 HEARING OFFICER KRAMER: 62 or 63 did you say?

23 MS. GANNON: I'm sorry 63 and 82.

24 HEARING OFFICER KRAMER: And what's the nature of
25 your objection going to be, Mr. Basofin?

1 MR. BASOFIN: So I have an objection to that
2 portion of Ms. Bellows' testimony that relates to
3 alternatives, because it includes reference to the power
4 purchase agreement. A Power Purchase Agreement is not an
5 exhibit and is not in evidence. The parties haven't had
6 an opportunity to review it and I think it's unfair to
7 include testimony that relates to that document.

8 HEARING OFFICER KRAMER: Did you raise your
9 interest in reviewing the Power Purchase Agreement with
10 the applicant prior to just now?

11 MR. BASOFIN: No.

12 ASSOCIATE MEMBER BYRON: So the Power Purchase
13 Agreement is described in the Application for
14 Certification, I believe, for this project, so it goes
15 back a long way, Mr. Basofin.

16 HEARING OFFICER KRAMER: So we're going to
17 overrule that objection. What she has said in her
18 testimony if it's incomplete doesn't make it any less
19 valuable as factual testimony. You may simply say that
20 there should be more, but we don't have a whole loaf or
21 none of the loaf sort of stand or here generally.

22 So we will admit those three documents.

23 (Thereupon Exhibits 63, 64, and 82 were
24 received into evidence.)

25 MS. GANNON: And excuse me I forgot the reference

1 also moving in Exhibit 92 which is the three biological
2 conditions that were just distributed.

3 HEARING OFFICER KRAMER: Those just as a
4 discussion might as well wait till tomorrow.

5 MS. GANNON: Okay.

6 HEARING OFFICER KRAMER: But folks, we don't need
7 to be overly technical here about admitting exhibits. If
8 the parties are content, the Committee is content to wait
9 until the end of the hearings and deal with those motions
10 at that point in time, but of course, if you are going to
11 have an objection to a particular document's entry into
12 the record, it would be appropriate to voice that as soon
13 as you -- as soon as it comes up in the hearing, so that
14 the parties are on notice that you have that objection and
15 they can prepare to argue it.

16 But does anybody feel the need to admit documents
17 piecemeal or are they content to wait until the end of the
18 proceeding when we will -- we can discuss them in mass and
19 probably more efficiency.

20 MS. GANNON: I'm totally content to remember this
21 once.

22 HEARING OFFICER KRAMER: Okay, so that's what
23 we'll do. But we got started so we will admit 63, 64, and
24 82.

25 MS. GANNON: And I will offer these witnesses for

1 cross-examination.

2 HEARING OFFICER KRAMER: Okay. Does any March
3 tea wish to cross-examine these witnesses?

4 STAFF COUNSEL HOLMES: Staff has a couple of
5 questions.

6 MR. RITCHIE: Sierra Club does as well.

7 HEARING OFFICER KRAMER: Okay, staff, Ms. Holmes.

8 STAFF COUNSEL HOLMES: Thank you.

9 CROSS-EXAMINATION

10 BY STAFF COUNSEL HOLMES:

11 My first question is to Ms. Bellows with respect
12 to the changes that were proposed for the hydrogen system.
13 I thought I heard in your testimony earlier today, I
14 thought I heard you say that there would be two tanks one
15 north of the tracks and one south of the tracks. Did I
16 hear correctly?

17 MS. BELLOWS: You did. And that's included in my
18 rebuttal testimony. Again, that's in an effort to meet
19 BNSF's concern about having the hydrogen line going
20 underneath their track line. They'll be the same overall
21 amount of hydrogen. No change on that part. And our
22 expert will be talking about that in more detail. But
23 there will be two -- it will be separated into two pieces.

24 STAFF COUNSEL HOLMES: Do we have a schematic of
25 that?

1 MS. BELLOWS: We have not submitted a schematic
2 of that to date.

3 STAFF COUNSEL HOLMES: One moment please.

4 HEARING OFFICER KRAMER: Does that mean then that
5 the two tanks will be filled with separate filler systems,
6 so they won't be connected at all the two systems?

7 MS. BELLOWS: That's correct. They will not be
8 connected at all.

9 STAFF COUNSEL HOLMES: So there will be two
10 separate systems that are not connected at all or will
11 there be one system where the hydrogen is generated and
12 then a piping system?

13 MS. BELLOWS: No. There will be two separate
14 systems, one on the north side of the railroad and one on
15 the south side of the railroad.

16 STAFF COUNSEL HOLMES: So it's the generate
17 authors and the tanks now on both sides of the railroad
18 tracks?

19 MS. BELLOWS: You mean hydrogen production on the
20 north side and on the south side is that what you're
21 asking?

22 STAFF COUNSEL HOLMES: Yes, that's what I'm
23 asking.

24 MS. BELLOWS: That's correct.

25 STAFF COUNSEL HOLMES: But we don't know where

1 those facilities are located?

2 MS. BELLOWS: We do, and we could certainly
3 submit that if that's helpful for you.

4 STAFF COUNSEL HOLMES: Certainly.

5 MS. BELLOWS: Okay, we'll be happy to
6 accommodate.

7 STAFF COUNSEL HOLMES: Sooner would be better
8 than later, given the fact that we're doing hazardous
9 materials management and worker safety and fire protection
10 on Friday.

11 MS. BELLOWS: Okay, we can get that in relatively
12 quickly.

13 STAFF COUNSEL HOLMES: My second set of questions
14 relates to something that you mentioned when you were
15 discussing site selection. You talked about size of the
16 facility and the need for a large -- excuse me you talked
17 about a large amount of land. Can you explain to me why a
18 large amount of land is required for your project?

19 MS. BELLOWS: Unlike a technology -- a typical
20 dirty technology such as a coal plant, where you can site
21 on a relatively small piece of land, solar facilities
22 typically take somewhere between let's say six to 10,
23 sometimes six to 15 acres per megawatt.

24 So in our instance, if you have a perfect site,
25 meaning it's flat, it's all together, it's square, then

1 we're going to take seven acres per megawatt on average.

2 STAFF COUNSEL HOLMES: And is there -- was
3 there -- is there some sort of a minimum amount of
4 generation that was required in order for this project to
5 be feasible?

6 MS. BELLOWS: Yeah, well this particular project
7 is sized to meet the Edison PPA. So we have an 850
8 megawatt PPA and that's what the facility is sized to
9 meet.

10 STAFF COUNSEL HOLMES: So when you -- you said
11 you began the site selection process in 2005, did you have
12 a PPA at that time?

13 MS. BELLOWS: We did. I believe that we went
14 into the licitation process in 2004. That's prior to my
15 time, but if I recall, that the Edison PPA was signed in
16 2005.

17 STAFF COUNSEL HOLMES: And my recollection maybe
18 slightly different, so you can correct me if I'm wrong.
19 My understanding was that it was not for 850 megawatts,
20 but for 500 to 800 megawatts?

21 MS. BELLOWS: It was a 500 megawatt PPA with an
22 option at Edison's -- Edison's option to increase to 500
23 megawatts up to an additional 350 to 850 megawatts, that's
24 correct.

25 STAFF COUNSEL HOLMES: Okay. So were you

1 originally looking for a piece of land to make 500
2 megawatt PPA or were you already --

3 MS. BELLOWS: No. Sorry. The entire 850
4 megawatts. In fact, if you look at what we filed with
5 CAISO, in terms of feasibility study for transmission,
6 you'll find that it's for the entire 850 megawatt block of
7 power from the Calico Solar Project.

8 STAFF COUNSEL HOLMES: Do you have an opinion
9 about whether or not this technology would be feasible at
10 a smaller scale?

11 MS. BELLOWS: Yeah. What we typically say, if
12 we're just looking at -- if someone calls us up on the
13 phone, we say that we're not a distributed generation
14 technology. That's not what we are. And that, you know,
15 giving -- conditions, if we can site something close to
16 another facility, that we could go as low as 50 megawatts,
17 but that would mean that we would have to be next to
18 relatively close to another facility, where we could sort
19 of do our pooling of maintenance at someplace close by,
20 because there are -- one of the things about this
21 technology is, in fact, that you do have a lot of
22 economies of scale, in terms of -- and one of the things
23 we've talked about and you see in our phase one, phase
24 two.

25 Phase two is nothing more than SunCatchers. And

1 now it has to be a separate hydrogen tank. But you know,
2 our main services complex will be spent on -- the monies
3 associated with that will be spent in phase one already.
4 So there are definitely some economies of scale, which are
5 gained as you increase the size of the plant and those
6 have been taken into account in the pricing in the Edison
7 PPA.

8 STAFF COUNSEL HOLMES: Would it be fair to say
9 that the predominant economy of scale is associated with
10 the maintenance work?

11 MS. BELLOWS: That's part of it, but there's
12 also, you know, one of the things that we've got is our
13 technology is based on the automotive industry. And just
14 as in the manufacturing of cars, as you scale up for
15 production, costs come down. So, you know, both -- and
16 this goes to Imperial Valley as well. As you go up, the
17 costs come down and we have factored that into our PPA's
18 that we have negotiated with our clients.

19 STAFF COUNSEL HOLMES: One moment please.

20 I think those were all my questions.

21 HEARING OFFICER KRAMER: Sierra Club?

22 MR. RITCHIE: Yes, this Travis Ritchie for the
23 Sierra Club. I have a few questions. Just give me one
24 moment.

25 ASSOCIATE MEMBER BYRON: Mr. Ritchie, please

1 speak directly into it and loudly. Thank you.

2 CROSS-EXAMINATION

3 BY MR. RITCHIE:

4 I'd first like to ask again, we mentioned that
5 the project start date or the site location date was in
6 2005. Can we refine that a little bit, when exactly was
7 it determined that this particular location was going to
8 be the site?

9 MS. BELLOWS: I would have to go back and look at
10 the dates when the, I think it's called, the CACA was
11 filed with the BLM. But, you know, at that point in time,
12 the site has undergone some reconfiguration through the
13 process, but I believe it is a date back in 2005.

14 MR. RITCHIE: Do you recall if it was beginning
15 half or later half of 2005?

16 MS. BELLOWS: I do not. I can go back and look
17 at that though.

18 MR. RITCHIE: Okay, and I had one clarification
19 question. On one of the changes that you mentioned about
20 the access during phase two. You discussed an access road
21 that was changed, not the BNSF access, but the other
22 access. Is that the road that goes along the northern
23 boundary of the project?

24 MS. BELLOWS: No. Both of the changes in the
25 access road have to do -- were at the request of BNSF, and

1 they all have to do with using their access road. So the
2 second piece of it was the little western piece that we
3 have of our site stuck out to the side.

4 We have to go up and use their access road south
5 of the railroad and shoot across that west to get into
6 that one piece.

7 MR. RITCHIE: That's fine. Thank you.

8 I have no more questions. Thank you.

9 HEARING OFFICER KRAMER: Sorry. I have to wait
10 for the mike to come on.

11 Anyone else?

12 Mr. Basofin and then Ms. Miles.

13 MR. BASOFIN: Thank you. Joshua Basofin with
14 Defenders of Wildlife.

15 CROSS-EXAMINATION

16 BY MR. BASOFIN:

17 I have a question in a similar vein as Ms.
18 Holmes, but I think it's a little bit different. Did you
19 consider, at any time, proposing a facility with a smaller
20 generating capacity?

21 MS. BELLOWS: We did not. I mean it really was a
22 negotiation with Edison, and that is what we submitted in
23 their RFP process and that's what we negotiated with them.

24 MR. BASOFIN: So you didn't ever conduct a
25 feasibility analysis to determine if a smaller generating

1 facility would be feasible from a financial standpoint and
2 a technical standpoint?

3 MS. BELLOWS: I do not know. I do not think so.

4 MR. BASOFIN: Okay. Thank you.

5 HEARING OFFICER KRAMER: Ms. Miles?

6 CROSS-EXAMINATION

7 BY MS. MILES:

8 Ms. Bellows, in question 15 in your opening
9 testimony, when you testified that the applicant must be
10 in construction as determined by the federal government
11 before the end of December of 2010, were you aware that
12 there was a safe harbor provision that would allow you to
13 spend, I believe, five percent of the project costs in
14 lieu of beginning construction, when you submitted that
15 testimony?

16 MS. BELLOWS: Yeah, I'm going to let Sean take
17 this, Mr. Gallagher as he's more --

18 MS. MILES: I believe it was in your testimony,
19 Ms. Bellows.

20 MS. BELLOWS: That's correct, but he's more
21 familiar with policy. I can address it and maybe Sean can
22 help me out.

23 HEARING OFFICER KRAMER: Which exhibit were you
24 referring to?

25 MS. MILES: I was referring to the applicant's

1 opening testimony.

2 HEARING OFFICER KRAMER: Are we talking about 82
3 then or something --

4 MS. GANNON: Yeah, it's 63.

5 HEARING OFFICER KRAMER: Sixty-three, okay.
6 Go ahead and answer then.

7 MS. BELLOWS: We are aware of the safe harbor
8 provisions. But again in anymore detail about why we
9 prefer to go one -- not rely on that solely, Sean can
10 answer.

11 MS. MILES: Well, yeah, and that actually answers
12 my question, is were you aware of it when you submitted
13 your testimony?

14 MS. BELLOWS: We were.

15 MS. MILES: And if the project does not begin
16 construction by the end of December 2010, would you
17 attempt to take advantage of the safe harbor provision?

18 MS. BELLOWS: We would. We believe it's a less
19 likely scenario, but again we would.

20 MS. MILES: Okay.

21 MR. GALLAGHER: Hearing officer, if I may. The
22 safe harbor requires that five percent of the total
23 project funds be spent before the end of the year.
24 Without reaching financial close, it's very difficult to
25 spend the five percent of the total project costs. And

1 this project, like many others that are before you this
2 year, are in the federal loan guaranty program. That
3 program has been delayed, and I don't think there are many
4 projects that think they're going to get a federal loan
5 guaranty before the end of this year. We're still hopeful
6 that we will, but I don't think we're terribly confident.

7 And so the plans are to begin physical
8 construction before the end of the year, because the
9 ability to use the five percent safe harbor is in
10 question.

11 HEARING OFFICER KRAMER: So you think you can
12 achieve physical construction with way less than five
13 percent?

14 MR. GALLAGHER: Absolutely.

15 MS. MILES: Mr. Gallagher, have you taken any
16 actions to prepare to meet the five percent provision if
17 you're not granted a permit?

18 MR. GALLAGHER: Well, of course, we're developing
19 a plan as to how we would use that, if we were required
20 to. But I can tell you that it would be very difficult.

21 MS. MILES: Okay. Ms. Bellows, if were you
22 concerned about the timing of the BLM granting a permit
23 for drilling wells, so on to well drilling, did you
24 consider investigating the option for drilling the wells
25 while you simultaneously looked into the Mojave Water

1 Agency option?

2 MS. BELLOWS: We were getting some quotes in on
3 that, but we had had -- the conversations that we had had
4 with the Kirby Brill and the Mojave Water Agency and the
5 water board were so positive that we had sort of put that
6 on hold, while we were moving down that path, particularly
7 with the notion that we were going to conceivably be able
8 to use something that's not groundwater and use some
9 greywater.

10 MS. MILES: Right, I understand.

11 Do you have a well now that is fully permitted
12 for use for this project?

13 MS. BELLOWS: We have well number 3. Well number
14 3 is a permitted as a development well and is in the
15 process of being flipped into a -- I don't know the
16 technology -- project well.

17 MS. MILES: And can you define what permitted for
18 a development well means?

19 MS. BELLOWS: That means that -- and this is not
20 my area of expertise, and can you certainly ask this, I
21 think water is being addressed on Friday. But it does
22 allow us to be able to drill the well and test the results
23 and see if it meets the criteria that we needed for it to
24 do.

25 MS. MILES: Do you know if the physical -- what

1 exists right now the well you've drilled is going to be
2 the well that you would use for the project as is, or do
3 you anticipate that there's a potential for modification
4 that will be needed?

5 MS. BELLOWS: You're going to need to ask that on
6 Friday.

7 MS. MILES: Okay. Turning to the back-up
8 generators, for electricity for the project, when it
9 begins operation, have the impacts associated with noise
10 to wildlife been analyzed?

11 MS. BELLOWS: That -- we have covered that from
12 the perspective of emissions and the other technical areas
13 that are specific areas that will be impacted. And again
14 that's something that you should address the particular
15 expert on that.

16 MS. MILES: From your understanding, you are not
17 aware of any analysis of impacts to wildlife from noise
18 generated by the generators?

19 MS. BELLOWS: My understanding is there are no
20 additional impacts or we don't exceed any impact level by
21 having the generators on site.

22 MS. MILES: Related to air quality?

23 MS. BELLOWS: Related to any area.

24 MS. MILES: Okay. Can you tell me where on the
25 project site that you anticipate to locate the generators?

1 MS. BELLOWS: The generators will be located in
2 the main services complex area.

3 MS. MILES: Okay. You also testified about the
4 financing of mitigation and your concern that the DOE loan
5 guaranty is critical for this project's financing in your
6 rebuttal testimony. Can you tell me whether you feel
7 confident that you could finance the project without the
8 DOE loan guaranty?

9 MS. BELLOWS: Without the DOE loan guaranty, is
10 the project financeable?

11 What will happen -- if the DOE were to come back
12 this next year, what we would have to do is go back and
13 find a commercial lending alternative.

14 So what would transpire is that assuming the
15 markets continue on their road to recovery, which appears
16 they're doing right now, albeit at a very slow
17 level -- slow pace, we would go to the commercial markets
18 and try to tie down a commercial loan. It would take some
19 time, so the construction of the project would probably be
20 impacted, in terms of slowing down that a little bit, but
21 yes I do believe that we would be able to find financing
22 for the project.

23 MS. MILES: I have a question related to Exhibit
24 28, which was sponsored by you, Ms. Bellows. And it's
25 regarding the first two pages of the January 7th, 2010 SCE

1 document. This is CE -- this is to Sara's response to the
2 CEC memo on the transmission lineup grades. I'll give you
3 awe moment to look at that.

4 MS. BELLOWS: Okay, got it. What page?

5 MS. MILES: This is the first two pages. Is this
6 document -- does it contain an accurate and current
7 description of the proposed 500 and 220 kV substation for
8 the full 850 megawatt plant of service?

9 MS. BELLOWS: Give me one moment to make a look
10 at it and make sure.

11 MS. MILES: Sure. Take your time.

12 In the meantime, for the audio visual, could I
13 have the map put up on the screen. It was actually a
14 different map.

15 MS. BELLOWS: Are you ready for me to go ahead or
16 do you want me to wait?

17 MS. MILES: Yeah, go ahead.

18 MS. BELLOWS: Okay, so this document is actually
19 from Southern California Edison. So this should
20 accurately portray it. The only thing that I know of that
21 might be different than this is that they have made sort
22 of movements on moving forward on the work on each one of
23 the upgrades.

24 MS. MILES: Okay. So there's no more recent data
25 in the record. We can rely on this, because there's been

1 nothing else submitted by Tessera on behalf of Southern
2 California Edison in this proceeding?

3 MS. BELLOWS: That's correct.

4 MS. MILES: Okay. So with regard to the project
5 area map that's up on the screen, could you tell me where
6 the Pisgah Substation relocation would be sited?

7 HEARING OFFICER KRAMER: For the record, can you
8 tell us where this comes from, so we can find it later?

9 MS. MILES: Sure. This is act three overview map
10 that is linked to the CEC website for this project. So if
11 you go to, I think it's just the home page for the Calico
12 Solar Project. It says project overview map. And can you
13 click on this.

14 HEARING OFFICER KRAMER: So it is quite possible
15 that this is not a current exhibit. So if -- if you could
16 reduce this to a document and serve everyone, we will make
17 this exhibit -- give me a moment.

18 Can somebody -- the person on the phone with the
19 barking dog, if you could mute your line. Correct me if
20 I'm wrong but I think *6 does that job.

21 Okay. So this, when it comes, will be exhibit
22 437. And I'm just being the, you know, the nerd who runs
23 the official record, who has to some day perhaps present
24 this to some other body on paper. So I'll be occasionally
25 intruding to that effect.

1 (Thereupon the above-referenced document
2 was marked by the Hearing Officer as Exhibit 437
3 for identification.)

4 HEARING OFFICER KRAMER: Go ahead.

5 MS. MILES: Thank you. Go ahead, Ms. Bellows.

6 MS. BELLOWS: Can you remind me of the question
7 again, please.

8 MS. MILES: Sure. Let me just find it. So I
9 asked if you could please identify where the Pisgah
10 Substation relocation would be sited.

11 MS. BELLOWS: And this is for the 850 megawatt
12 build out, right?

13 MS. MILES: Yes.

14 STAFF COUNSEL HOLMES: Can you please describe it
15 so that the rest of us who are in Sacramento can see.

16 MS. MILES: I'm sorry, I thought this was going
17 through the WebEx?

18 HEARING OFFICER KRAMER: Are you seeing it on
19 your screen? It is being displayed on the WebEx.

20 STAFF COUNSEL HOLMES: We see it on the screen,
21 but I would like the description of what she's going to be
22 pointing to.

23 PROJECT MANAGER MEYER: This is Christopher
24 Meyer.

25 MS. BELLOWS: Not to worry, you won't have any

1 problem with that. This is Edison's decision. Edison, to
2 my knowledge, has not decided where -- what they're going
3 the do with Pisgah Substation, so they very well -- one of
4 the -- my understanding from Edison is that they are still
5 considering simply expanding Pisgah Substation where it is
6 located, but they're also looking at another location, and
7 that's their decision and not ours.

8 MS. MILES: Okay. I have a follow-up question.
9 In the Pisgah Substation is expanded rather than
10 relocated, then Tessera is planning to construct a two
11 mile long, 220 kV generation tie or gen-tie line from the
12 Calico site to the substation to deliver power; is that
13 correct?

14 MS. BELLOWS: That's correct.

15 MS. MILES: Thank you. Is it also correct that
16 if this Pisgah Substation is relocated rather than
17 expanded, that the two mile line 220 kV line, would have
18 to be up to actually six miles longer to reach to the
19 relocated substation?

20 MS. BELLOWS: I do not know where the relocation
21 would be but it would -- my understanding -- this is my
22 view on it is, that we would be running along their
23 existing right of way. Within the existing right of way,
24 once you're in Edison's right of way, they're going the
25 run with it, they don't like us to do the construction

1 ourselves. So they will run with it and run it down to
2 the location of their substation.

3 So in terms of additional lands impacted from our
4 perspective, we don't see any impact whatsoever.

5 MS. MILES: Has the applicant docketed any maps
6 showing the route of the gen-tie line in the event that
7 the Pisgah Substation is relocated?

8 MS. BELLOWS: We have not, because again we have
9 no knowledge of where Edison is thinking of locating.

10 MS. MILES: Thank you. To take advantage of the
11 informal process, and in the interests of time, I would
12 like to ask my expert witness David Marcus if me could
13 help me pose a couple questions that are technical and
14 that he has a better understanding of, but that are
15 directly related to the testimony of Ms. Bellows and Mr.
16 Gallagher?

17 HEARING OFFICER KRAMER: Go ahead.

18 MS. MILES: David, are you there?

19 MR. MARCUS: I am.

20 MS. MILES: Please proceed.

21 MR. MARCUS: My questions all have to do with
22 answer 13 of Ms. Bellows opening testimony, which I
23 believe is Exhibit 63.

24 The very last sentence of answer 13 refers to a
25 275 megawatt alternative quote, would likely preclude

1 California from meeting its RPS goals. Are you with me?

2 MS. BELLOWS: Yes.

3 MR. MARCUS: I want to explore that a little bit.
4 My understanding is that if you reduce the project size
5 from 850 megawatts to 275 megawatts, that would be a
6 reduction of 575 megawatts, and the associated energy
7 reduction would be about 1,360 gigawatt hours per year, is
8 that right?

9 MS. BELLOWS: I'd have to check on the megawatt
10 hours, but you're accurate in the megawatts, that's for
11 sure.

12 MR. MARCUS: Okay, well subject to check and you
13 can come back later if you've checked and you think it's
14 wrong. The RPS goals are expressed in energy terms not
15 megawatt terms, correct?

16 MS. BELLOWS: That's correct.

17 MR. MARCUS: So what your saying is that a 1,360
18 gigawatt hour per year reduction in output would likely
19 preclude from California from meeting its RPS goals?

20 MS. BELLOWS: That's correct, because you're now
21 counting on those megawatt hours in that calculation.

22 MR. MARCUS: And, I'm aware of two goals that the
23 State has one is 20 percent this year and the other is 33
24 percent in 2020, which one were you referring to when you
25 talk about California's RPS goals?

1 MS. BELLOWS: It would be when -- particularly
2 since we're talking about to the addition for the 575
3 megawatt, which would be phase two. Since that's meant to
4 come on line the period of time between 2014 and 2015,
5 you'd be talking about the larger goal there.

6 MR. MARCUS: Okay. And so if you look at the
7 adopted Energy Commission demand forecast, adopted last
8 December, then the California load in 2020 is about
9 300,000 gigawatt hours and 33 percent of that would be
10 just a tad under 100,000 gigawatt hours, correct?

11 MS. BELLOWS: That makes sense, yes.

12 MR. MARCUS: So aim correctly understanding your
13 testimony that for lack of 1,360 gigawatt hours, a goal of
14 100,000 will be unattainable?

15 MS. BELLOWS: Again, the numbers were put
16 together. If all things stay the same and we were to drop
17 out and California were counting on those requirements,
18 you know, Edison would have a problem, and the guidelines
19 would not be met.

20 MR. MARCUS: Well, your testimony doesn't have an
21 "if" in it. Your testimony just says California would --

22 MS. BELLOWS: Understood.

23 MR. MARCUS: -- likely preclude. So that's why
24 I'm asking, is that your testimony that for lack of 1,360,
25 California would likely be unable to attain a goal of

1 100,000.

2 MS. BELLOWS: That's my testimony, correct.

3 MR. MARCUS: Earlier in that same answer, 13,
4 that's I believe at the bottom of page 10 and the top of
5 page 11 at least in the version I have, you talk about how
6 the unit cost of SunCatchers would increase if there were
7 quote "only 11,000 built".

8 MS. BELLOWS: Correct.

9 MR. MARCUS: And then you talk about the amount
10 that under quote, "California's utility rate laws and
11 regulations," unquote there's an amount that Southern Cal
12 Edison is quoted "permitted to pay".

13 MS. BELLOWS: That's right.

14 MR. MARCUS: Is it you're testimony that there is
15 a dollar limit on it what Southern California Edison is
16 permitted to pay that's set by law and regulation?

17 MS. BELLOWS: No. There are guidelines
18 associated with pricing, but there certainly is pressure
19 to bring in PPA's under that price or at that limit.

20 MR. MARCUS: Well, now you just used the word
21 limit again. Is it your testimony that there is a limit?

22 MS. BELLOWS: No, I would not call it a limit.

23 HEARING OFFICER KRAMER: Excuse me for a moment.
24 Somebody on the telephone is having a conversation and
25 you're phone is not muted, so we're picking it up. If

1 queue either mute your phone or walk further way from it,
2 we'd appreciate it.

3 Go ahead, Mr. Marcus.

4 MR. MARCUS: Okay, so now do I understand you to
5 say that there is not a limit under California utility
6 rate laws and regulations on what Edison is permitted to
7 pay?

8 MS. BELLOWS: Yeah, let's clarify. You know, I
9 work -- I'm the vice president of development and I'm the
10 party that goes out and negotiates PPA's and what I gather
11 my information from is from Southern California Edison.
12 And so Southern California Edison definitely does have to
13 go to the CPUC and show contracts that come in at or below
14 these levels. They do have an amount that they can bring
15 in above those levels, but they much prefer to bring in
16 PPA's below that level. And any time they're above that
17 level, my understanding from Southern California Edison is
18 that they have to go in and make an argument for exceeding
19 those levels.

20 MR. MARCUS: And by those levels, what levels are
21 you talking about?

22 MS. BELLOWS: The limits on pricing. What is the
23 word?

24 ASSOCIATE MEMBER BYRON: Market price reference.

25 MR. MARCUS: There you use the word limit again.

1 ASSOCIATE MEMBER BYRON: You know, Mr. Kramer, I
2 think this is the third time we've gone down this line of
3 questioning with regard to meeting the RPS and whether or
4 not this project does. I think this Commission
5 understands sufficiently how procurement is done at the
6 Public Utilities Commission that may be beyond the scope
7 of this proceeding and the understanding of some of the
8 parties.

9 I'm inclined to suggest that we accept that a
10 single project, no matter what size it is, is not going
11 to meet the State's RPS requirement, whether it be the 20
12 percent RPS in 2010, which by the way the utilities have
13 not met, or the 33 percent in 2020, which is this
14 Commission's policy, and may become law soon.

15 But I think we've got the good sense of the line
16 of questioning. And my suggestion would be that we might
17 move on at this point.

18 HEARING OFFICER KRAMER: Mr. Marcus, do you have
19 anything --

20 MR. MARCUS: Well, I'm asking questions about
21 price. I wasn't -- I had moved on from the RPS goal
22 questions. I'm talking about now about --

23 HEARING OFFICER KRAMER: And okay what is
24 price --

25 MR. MARCUS: I've asked three times I believe

1 whether she agrees there's not a legal limit and then each
2 time she agrees then later on she starts using the word
3 "limit" again. And so I'm just trying to get this
4 straight. Is it her testimony that there is a limit quote
5 under quote California's utility rate laws and regulations
6 unquote.

7 MS. GANNON: Hearing officer.

8 MR. MARCUS: That's a yes or no question.

9 MS. MILES: We saw this as relevant to the
10 question of whether -- of project overview and overrides
11 in particular, and so we thought that this might be
12 useful, in terms of briefing the Commission regarding
13 project overrides of CEQA.

14 MS. GANNON: Hearing Officer Kramer, I believe
15 she's answered the question. In her view, she has
16 explained what she meant by the language. And I don't see
17 that it's going to add much to the discourse to continue
18 discussing this.

19 HEARING OFFICER KRAMER: I think we agree.

20 MR. MARCUS: Well, maybe we can --

21 HEARING OFFICER KRAMER: So can you move on, Mr.
22 Marcus?

23 MR. MARCUS: Can you -- Ms. Bellows, can you
24 quantify how much the unit costs of SunCatchers would
25 increase if there were only 11,000 built?

1 MS. BELLOWS: You know, that's -- Unfortunately
2 that's confident shall information, and we would have to
3 go back and recalculate that. And we're not comfortable
4 doing that, because that would -- number one, it's
5 a -- some of the figures are not -- cannot be pinned down
6 exactly. In other words we could have to go back and
7 enter into negotiation to determine if we're going to
8 knockdown supply of SunCatchers from 34,000 to 11,000 with
9 our suppliers. So we can make a guesstimate at that, but
10 we can't put a firm number out there. We're not very
11 comfortable putting a guesstimate out, but it would -- you
12 know, our estimates are that it would significantly impact
13 what we would need to have in terms of price from Southern
14 California Edison. And the price would be above what we
15 currently have negotiated in our PPA.

16 HEARING OFFICER KRAMER: Any further questions?

17 MR. MARCUS: Yeah, I think one more line, which
18 is the referring to the only 11,000, what you mean there
19 is only 11,000 at this site, correct?

20 MS. BELLOWS: That's correct.

21 MR. MARCUS: And is there an economy of scale
22 across sites, so that if you build 11,000 at this site and
23 11,000 at another site and 11,000 at a third site, you'll
24 get the same economy of scale as if you'd built 33,000 at
25 this site?

1 MS. BELLOWS: No. Only in that one aspect as
2 regards to supply of the SunCatcher. And these other
3 aspects that are listed here. For instance, the main
4 services complex, the bridge, the maintenance, all of
5 those items would certainly be lost on this project, and
6 the -- you would have an increase in cost weighted only on
7 that 275 megawatt facility.

8 MR. MARCUS: Okay. I guess I was unclear on my
9 question then. My question had been how much the unit
10 costs of SunCatchers would increase if there were only
11 11,000 built. You gave me an answer that said you
12 couldn't quantify it on the record. And my follow-up
13 question was then -- let me try rephrasing it.

14 How much would the unit cost of SunCatchers
15 increase if there were only 11,000 built for this project
16 but there were 23,000 built for other projects, so that
17 you were still building 34,000?

18 MS. BELLOWS: If we were to -- so --

19 MR. MARCUS: I'm trying to find out whether the
20 claim about unit cost is a function of how many are built
21 per project or how many are built total?

22 HEARING OFFICER KRAMER: And are you speaking of
23 unit costs only of the SunCatchers?

24 MR. MARCUS: Yes.

25 HEARING OFFICER KRAMER: So not the equipment

1 that's necessary to make them work in a facility or the
2 infrastructure?

3 MR. MARCUS: I'm referring to whatever Ms.
4 Bellows is referring to when she says the unit costs would
5 increase if there were only 11,000 built. And I'm trying
6 to find out whether her testimony is referring to only
7 11,000 built at this site or only 11,000 built total or
8 whether it depends.

9 MS. BELLOWS: The issue you have here is that we
10 have a PPA with Edison with a cost associated with those
11 SunCatchers inherent in the pricing in that PPA. And if
12 you take away 575 megawatts of that facility, then the
13 pricing phase one or the remainder 275 megawatts is not
14 the pricing that was negotiated with Southern California
15 Edison. And certainly part of it is the SunCatcher order
16 that we put in for all 34,000 of those SunCatchers.

17 MR. MARCUS: Okay. I guess I'm still not being
18 clear. Is it your testimony that whether or not you
19 build -- I'll phrase it a different way. Is your
20 testimony that whether or not you build the Imperial
21 Valley project has any effect on the unit cost of
22 SunCatchers that are supplied to this project or vice
23 versa?

24 MS. BELLOWS: Yeah, I'm not prepared to address
25 the Imperial Valley solar project. That's not my project

1 and certainly not what I would testify to in the
2 testimony.

3 MR. MARCUS: Okay. But the company has contracts
4 that are before the Energy Commission not for 11,000, not
5 for 34,000, but that would require something over 60,000
6 SunCatchers. And so I'm trying to understand this economy
7 of scale argument.

8 Is your argument that reducing from the 60,000
9 plus SunCatchers that are in the two contracts before the
10 Energy Commission would affect your economy of scale or
11 are you saying it doesn't matter what happens at Imperial
12 Valley, the price of SunCatchers for this project only
13 depends on the number of SunCatchers built at this
14 project, even if you're bidding tens of thousands of
15 SunCatchers for use somewhere else, that there is no
16 economy of scale when you build SunCatchers for use
17 somewhere else?

18 MS. BELLOWS: My testimony is specifically meant
19 to address the Calico Solar Project. So what it's meant
20 to address is the 34,000 SunCatchers on this site and the
21 fact that there will be an impact in the event that we
22 were to cancel 23,000 of them.

23 MR. MARCUS: And that impact would exist whether
24 or not you were had a contract somewhere else to build
25 23,000?

1 MS. BELLOWS: Again, that contract someplace else
2 has nothing to do with the contract that I have with
3 Southern California Edison and the pricing in that
4 contract.

5 MR. MARCUS: I'm not talking about the price.
6 I'm talking about the cost. The cost to you to build
7 them.

8 MS. BELLOWS: Right, but cost --

9 MR. MARCUS: Is the cost to you to build them a
10 function of the total number you're building or is it a
11 function only of the number you're building for Edison?

12 HEARING OFFICER KRAMER: Mr. Marcus, you're
13 pounding on a horse here and we're not --

14 MR. MARCUS: I mean I think I've asked the
15 question. I'm still waiting for an answer, but okay --

16 HEARING OFFICER KRAMER: But we are wondering, I
17 think I certainly am, if this is simply an academic
18 question at this point. It's commonly accepted that as
19 you build more units of anything, that the price per unit
20 is reduced. And nobody here has established that
21 SunCatchers live by any different rule in that regard. So
22 what -- how exactly is knowing in further detail the
23 answer to your question going to assist the Commission in
24 deciding whether or not to approve this project?

25 MR. MARCUS: Because it goes to the accuracy of

1 her claim and that the economics are depend on the size of
2 this project alone. If, for example a car company where
3 one factually supplies several states, if demand drops in
4 one State but increases in other, and the output of the
5 factory doesn't drop, then the fact that it dropped in one
6 state does not affect the cost of cars in that state.

7 If that's the analogy here, if the cost of
8 SunCatchers depends on the total volume and not just on
9 the volume at Newberry Springs, then her testimony that
10 changing the size of this project changes the unit cost
11 may not be accurate.

12 PRESIDING MEMBER EGGERT: Mr. Marcus, this is
13 Commissioner Eggert, I think -- I just want the maybe
14 follow-up to the comment that Commissioner Byron
15 mentioned. Both of us are engineers. I believe we both
16 had engineering economics. The per unit cost of
17 SunCatchers is obviously one important variable in the
18 overall project economics. There's lots of other
19 non-recurring costs, which are associated with things like
20 siting, for example, as being one project cost, but all of
21 the others that have been mentioned.

22 I think the main point, if I understand your line
23 of inquiry is, considering all of the costs, capital and
24 operating, you know, does reducing the size of the project
25 affect the economics? And I think, as I understood, the

1 answer was yes. And, you know, I think we don't
2 necessarily have the time to go into the specifics of
3 every piece of that analysis. And I don't even know if
4 it's part of the record, at least not that I'm aware of.

5 So is that your main question?

6 MR. MARCUS: Yes.

7 MS. MILES: Okay. There was one question that
8 Mr. Marcus had for Sean Gallagher. So would it be
9 appropriate for him to move on to that, at this point?

10 HEARING OFFICER KRAMER: I think so.

11 MS. MILES: Okay, thank you.

12 MR. MARCUS: Okay, Mr. Gallagher, my question for
13 you had to do with your answer six, and the quantification
14 of carbon emissions reductions associated with the Calico
15 project, where I believe the number you gave was 2.178
16 billion tons of carbon emissions per year. Do you see
17 that?

18 MR. GALLAGHER: I do.

19 MR. MARCUS: I tried to replicate that number and
20 when I look at EPA coefficients I indeed get the number of
21 2.178 billion, but it's pounds not tons. Did you do the
22 original calculation or are you in a position to check
23 that calculation?

24 MR. GALLAGHER: I'd have to check on that number.
25 Let's just say --

1 MR. MARCUS: That would be good.

2 MR. GALLAGHER: Let's just say it's a large
3 number.

4 MR. MARCUS: Well, it's factor of 2,000 different
5 between pounds and tons. So I don't think they're quite
6 the same number. I'll just represent that I think you
7 should -- well I don't know if I can ask that you check
8 that over a break and confirm for the record, but I would
9 assert that it's 2.178 billion pounds not tons.

10 On that same number, when you say carbon
11 emissions, did you mean carbon or did you mean carbon
12 dioxide?

13 MR. GALLAGHER: In that sentence?

14 MR. MARCUS: Yeah.

15 MR. GALLAGHER: I believe that we mean carbon
16 dioxide or carbon dioxide equivalent?

17 MR. MARCUS: Okay. And do you agree that the
18 people actually talk sometimes about carbon and sometimes
19 about carbon dioxide and if had you meant carbon literally
20 that that would be 12/44ths as large, because carbon
21 dioxide is only 12/44ths carbon by weight with the west
22 being oxygen?

23 MS. GANNON: Hearing Officer Kramer, you know,
24 we're at -- I think we're at about minute 50 of a 20
25 minute cross. And I mean we understand the time estimates

1 were difficult to make but we're having trouble following
2 that this is really moving these proceedings along in any
3 meaningful or significant way.

4 HEARING OFFICER KRAMER: Well --

5 MR. MARCUS: It was the very first item that he
6 gave as a reason for an override --

7 HEARING OFFICER KRAMER: There was a question --

8 MR. MARCUS: -- for the reduction.

9 HEARING OFFICER KRAMER: -- and the question
10 was, when you say carbon dioxide, should that be reduced
11 by 12/44ths to account for the oxygen in the carbon
12 dioxide. If you're calling that carbon?

13 MR. GALLAGHER: I'd have to go back and check
14 this figure.

15 MS. MILES: Would you be willing to do that
16 today?

17 MR. GALLAGHER: I would be willing to have that
18 done by the end of the hearing.

19 MS. MILES: Thank you. No further questions.

20 HEARING OFFICER KRAMER: Okay. Thank you. Let's
21 see I note that Defenders and Sierra Club did not use all
22 the time they asked for, which we appreciate.

23 MR. RITCHIE: Mr. Kramer, if I may, I have one
24 more quick addition. It shouldn't take all of our
25 allotted time.

1 HEARING OFFICER KRAMER: Go ahead.

2 RECROSS-EXAMINATION

3 BY MR. RITCHIE:

4 I wanted to go back briefly to the issue of the
5 contract that was approved before the CPUC, the PPA. If
6 we went back to a smaller project with a higher cost and
7 you were not able to meet the parameters of that contract,
8 would you anticipate working with Edison to return to this
9 CPUC to try and get another PPA approved?

10 MS. BELLOWS: I think it would be very difficult
11 to do. The -- I mean, renegotiating a PPA at a higher
12 price is very difficult and Edison would certainly have
13 the right to come back and say, no. And in fact, given
14 that, you know, our PPA has security associated with it.
15 So right out the door, I would lose about \$6 million for
16 having walked away from a piece of it.

17 And then I would have to go back and basically
18 beg nicely to be able to be allowed to renegotiate that,
19 and I would have no -- and they very well might ask me to
20 simply resubmit my offer to the next RFP that's coming up.
21 Just because remember that Edison is competitive process.

22 MR. RITCHIE: I understand. Is it your
23 understanding though that Edison is also under an
24 obligation to meet certain renewable standards, as you
25 talked about before?

1 MS. BELLOWS: That's correct.

2 MR. RITCHIE: And so you don't believe that they
3 would be interested in working out a project that could
4 provide 250 megawatts, which is still a rather large
5 renewable project?

6 MS. BELLOWS: Edison's responsibility, I mean, is
7 to their ratepayers. And you know, if we're coming back
8 with a higher price, then my guess is their response to me
9 is that well, you're going to have to come back and you're
10 going to have to be just as competitive as anyone else in
11 the market, so resubmit your project into the next RFP.

12 MR. RITCHIE: Is it fair to say then that you
13 would resubmit your project into the next RFP --

14 MS. BELLOWS: We would.

15 MR. RITCHIE: -- and attempt to get it approved
16 even at the smaller scale?

17 MS. BELLOWS: We would try to do that, yeah.

18 MR. RITCHIE: And would the same apply if there
19 was a time delay with this project, that you weren't
20 allowed -- that you didn't receive or if you didn't
21 receive or if you didn't receive the DOE funding, would
22 you return to Edison with a modified project?

23 MS. BELLOWS: I'm not sure I understand your
24 question.

25 MR. RITCHIE: I'll withdraw that final question.

1 MS. BELLOWS: Okay.

2 HEARING OFFICER KRAMER: Thank you. Staff, you
3 had two witnesses for 10 minutes?

4 MS. GANNON: I have one point of clarification
5 that the applicant would like to make on recross if that's
6 okay?

7 STAFF COUNSEL HOLMES: We're having trouble
8 hearing the last speaker.

9 REDIRECT EXAMINATION

10 BY MS. GANNON:

11 All right, there was a question that was raised,
12 Ms. Bellows, about whether we have created an exhibit that
13 shows where the hydrogen would be placed in this separated
14 system. I'd ask tow look at the testimony that will be
15 sponsored tomorrow by Tariq Hussain -- or I'm sorry on
16 Friday. It was preliminarily marked in our rebuttal
17 testimony as Exhibit 90 submitted, I think, July 29th.
18 And attached to that, if you can turn to the figure, which
19 is exhibit -- attachment A to Exhibit 90, does that figure
20 show the location of the proposed separated hydrogen
21 system?

22 MS. BELLOWS: Yes, it does. Again, it's halfway
23 between I-40 and the railroad.

24 MS. GANNON: And was this siting of the separated
25 system the basis for the studies that were done, conduct

1 to see if there would be any potential impacts associated
2 with this location?

3 MS. BELLOWS: Yes, it is. I had forgotten that
4 we had docketed this.

5 MS. GANNON: Thank you. I have no further
6 questions?

7 HEARING OFFICER KRAMER: Staff your witnesses.

8 STAFF COUNSEL HOLMES: On project description?

9 HEARING OFFICER KRAMER: Correct.

10 STAFF COUNSEL HOLMES: I thought we had only one
11 witness, Christopher Meyer.

12 HEARING OFFICER KRAMER: Well, I had listed Mr.
13 Meyer and Terry O'Brien. I suppose --

14 STAFF COUNSEL HOLMES: Mr. O'Brien is not
15 testifying at this hearing. That was going to be for
16 override testimony, which staff hasn't sponsored at this
17 time.

18 HEARING OFFICER KRAMER: Okay, are you intending
19 to sponsor it at some point or?

20 STAFF COUNSEL HOLMES: We haven't made a decision
21 yet.

22 HEARING OFFICER KRAMER: Okay. Mr. Meyer then go
23 ahead with him.

24 STAFF COUNSEL HOLMES: It's my understanding
25 that -- well, first of all, let me just say that the issue

1 of overrides will be addressed at the hearing on the 18th.
2 I didn't want to leave with the impression that we were
3 going to be saying anything about it at all. But at this
4 point, I think it would be appropriate to call Mr. Meyer,
5 who has been sworn.

6 HEARING OFFICER KRAMER: Okay, and did you wish
7 to present some testimony from him?

8 STAFF COUNSEL HOLMES: I do.

9 HEARING OFFICER KRAMER: Go ahead.

10 Whereupon,

11 CHRISTOPHER MEYER

12 was called as a witness herein, and after first
13 having been duly sworn, was examined and
14 testified as follows:

15 DIRECT EXAMINATION

16 BY STAFF COUNSEL HOLMES:

17 Mr. Meyer, did you prepare executive summary
18 introduction sections of the Staff
19 Assessment -- Supplemental Staff Assessment, which has
20 been identified as Exhibit 300?

21 PROJECT MANAGER MEYER: Yes, I did.

22 STAFF COUNSEL HOLMES: And was a statement of
23 your qualifications included in the Supplemental Staff
24 Assessment?

25 PROJECT MANAGER MEYER: Yes, it was.

1 STAFF COUNSEL HOLMES: Are the facts contained in
2 your testimony true and correct to the best of your
3 knowledge?

4 PROJECT MANAGER MEYER: Yes, they are.

5 STAFF COUNSEL HOLMES: And do the opinions
6 contained in your testimony represent your best
7 professional judgment?

8 PROJECT MANAGER MEYER: Yes, they do.

9 STAFF COUNSEL HOLMES: With that, the witness is
10 available for cross-examination?

11 HEARING OFFICER KRAMER: Okay, did any party wish
12 to cross-examine Mr. Meyer?

13 MS. GANNON: The applicant has just one question.

14 HEARING OFFICER KRAMER: Go ahead.

15 CROSS-EXAMINATION

16 BY MS. GANNON:

17 Mr. Meyer, do you intend to recommend approval of
18 the project?

19 PROJECT MANAGER MEYER: That will be determined
20 on the hearing on the 18th when override is included.

21 MS. GANNON: No further questions.

22 HEARING OFFICER KRAMER: Let me ask staff,
23 because I thought I had -- I had included
24 overrides -- well it's even mentioned in the schedule.

25 STAFF COUNSEL HOLMES: I can perhaps clarify

1 that, Hearing Officer Kramer. We had filed override
2 testimony. We had planned a filing override testimony,
3 but we decided that given that we are putting over two
4 additional topics and now actually it was three additional
5 topics, traffic and transportation, glint and glare and
6 cultural resources to testimony that would be filed in the
7 future, that it would be premature to make a conclusion at
8 this time.

9 HEARING OFFICER KRAMER: Okay, well then we will
10 have to leave this subject of overrides at least open
11 until the 18th then.

12 Anyone else have any questions for -- either on
13 the telephone or in the room here for Mr. Meyer?

14 MS. MILES: I have one question.

15 CROSS EXAMINATION

16 BY MS. MILES:

17 Mr. Meyer, this is Loulena Miles with CURE. I
18 just want to -- I'm not sure if you heard my questioning
19 earlier of Ms. Bellows regarding the transmission upgrade
20 needed, in terms of the Pisgah Substation relocation that
21 might be required. Did you hear that discussion?

22 PROJECT MANAGER MEYER: Yes I did.

23 MS. MILES: Do you have any additional
24 information to offer regarding the potential location of a
25 Pisgah Substation relocation?

1 PROJECT MANAGER MEYER: No, I do not.

2 MS. MILES: Thank you. No further questions.

3 HEARING OFFICER KRAMER: Okay. That will
4 conclude -- it sounds as if we have exhausted redirect, is
5 that correct?

6 MS. GANNON: That's correct.

7 STAFF COUNSEL HOLMES: Yes.

8 HEARING OFFICER KRAMER: I'm sorry Commissioner
9 Eggert has one question.

10 PRESIDING MEMBER EGGERT: So actually this is a
11 question for Mr. Gallagher, I think relative to your
12 testimony. You had mentioned the previous work done by
13 BLM to identify potential project areas for solar. Do you
14 have a reference for that?

15 MR. GALLAGHER: I was referring to the BLM's
16 solar Programmatic Environmental Impact Statement that
17 they're working now. There's a website that gives lots of
18 information on that project.

19 PRESIDING MEMBER EGGERT: Okay. And I think I
20 may have found it, but --

21 MR. GALLAGHER: I'm happy to provide the --

22 PRESIDING MEMBER EGGERT: Is this the BLM solar
23 energy study areas broken out by state?

24 MR. GALLAGHER: Correct. And it's on the Argonne
25 National Lab's website is where that's hosted.

1 PRESIDING MEMBER EGGERT: Okay, I did find it.
2 Thanks.

3 HEARING OFFICER KRAMER: Okay, then to catalogue
4 the homework, if you will, Mr. Gallagher was going the
5 check that one calculation. And Ms. Miles was there one
6 other item?

7 MS. MILES: I'm going to be submitting an exhibit
8 to the proof of service list.

9 HEARING OFFICER KRAMER: Correct, of the map,
10 just to make sure that the map was on -- that was on the
11 screen that we spoke about is in the record.

12 MS. GANNON: And there was a clarification that
13 the map showing the hydrogen systems will be
14 submitted -- it was docketed with our rebuttal testimony
15 and will be sponsored tomorrow, or Friday.

16 HEARING OFFICER KRAMER: Okay, yeah. I
17 think -- we have one more question from Commissioner
18 Byron. As far as the exhibits go, yes, we can simply
19 refer to them by number when we're making that sort of
20 reference. And we will of course resolve whether they
21 ultimately come in. But given that it was referred to, it
22 would certainly come in at least for the purpose of
23 illustrating the discussion that was had.

24 Commissioner Byron.

25 ASSOCIATE MEMBER BYRON: Thank you, Mr. Kramer.

1 Ms. Holmes or Mr. Meyer, could you please tell me
2 having evidence not available for evidentiary hearing at
3 the last minute is sometimes just as bad as receiving it
4 late. Could you tell me why we're not going to hear staff
5 with regard to recommendation on overrides today?

6 STAFF COUNSEL HOLMES: Yes. It's because all of
7 the staff analysis is not yet complete. And the
8 Commission staff believes it's appropriate to make
9 override recommendations only when it has completed its
10 analysis.

11 ASSOCIATE MEMBER BYRON: And when will that be?
12 Not until August 18th?

13 STAFF COUNSEL HOLMES: The testimony will be
14 filed next Monday. The hearing is on the 18th.

15 ASSOCIATE MEMBER BYRON: Thank you very much.

16 HEARING OFFICER KRAMER: Okay. We've been going
17 for an hour and a half. People can drift in and out if
18 you need to use the facilities.

19 Our next topic is visual resources. And again
20 manages Bellows and Angela Leiba --

21 MS. GANNON: Hearing Officer Kramer, I believe
22 there was a request from staff that we would move air up
23 to next -- the next -- our witness is also on the
24 telephone and it would behoove us to do it sooner, and I
25 believe that the staff had expressed an interest in doing

1 air earlier, because there may be someone from the air
2 board who is -- air district who is on the line and can
3 only be present in the earlier part of the proceedings.

4 HEARING OFFICER KRAMER: Okay. I wasn't aware of
5 that. Any objection to moving air quality to the next
6 item?

7 STAFF COUNSEL HOLMES: Let's make sure that the
8 district witness is on the line, please.

9 MR. OKTAY: Yeah. My name is Sam Oktay. I am on
10 the line at this time. And I'm willing and ready to talk
11 about the final determination document when you're ready.

12 MS. MITCHELL: And this is Julie Mitchell with
13 URS, the air quality consultant.

14 HEARING OFFICER KRAMER: Mr. Walters, are you
15 there?

16 MR. WALTERS: Yes, I'm her as well.

17 HEARING OFFICER KRAMER: Okay so Mr. Mochtay, was
18 it, could you --

19 MR. OKTAY: It's Oktay, O-k-t-a-y.

20 HEARING OFFICER KRAMER: O-k-t-a-y. And your
21 first name was?

22 MR. OKTAY: Samuel.

23 HEARING OFFICER KRAMER: Samuel. Thank you.

24 Okay we have the spelling of Ms. Mitchell's name
25 and Mr. Walters name already.

1 Were all of you here to be sworn as witnesses?

2 MR. OKTAY: I have not yet been sworn in.

3 MS. MITCHELL: I have within

4 HEARING OFFICER KRAMER: You have, Ms. Mitchell?

5 MS. MITCHELL: Yes.

6 HEARING OFFICER KRAMER: Mr. Walters.

7 MR. WALTERS: Yes, I was sworn in earlier.

8 HEARING OFFICER KRAMER: Okay. So, Mr. Oktay, if
9 you could raise your right hand.

10 (Thereupon MR. SAMUEL OKTAY was sworn, by the
11 Hearing Officer to tell the truth, the whole
12 truth and nothing but the truth.)

13 Whereupon,

14 JULIE MITCHELL

15 were called as witnesses herein, and after first
16 having been duly sworn, were examined and
17 testified as follows:

18 HEARING OFFICER KRAMER: Thank you. Let's begin
19 with the applicant then. Did you have direct testimony?

20 MR. THOMPSON: Yes. Thank you very much. This
21 is Allan Thompson. I'll try and keep this pretty short.

22 DIRECT EXAMINATION

23 BY MR. THOMPSON

24 Ms. Mitchell, can you hear me?

25 MS. MITCHELL: Yes. Thank you.

1 MR. THOMPSON: Are you the same Julie Mitchell
2 that has submitted testimony now currently marked as
3 Exhibit 72 and 83 in this proceeding?

4 MS. MITCHELL: Yes.

5 MR. THOMPSON: If I were to ask you the questions
6 contained in those exhibits, would your answers today
7 under oath be the same?

8 MS. MITCHELL: Yes.

9 MR. THOMPSON: Let me take a couple points and
10 have you very briefly describe your findings and
11 conclusions. You were asked, I believe, to look at the
12 construction power diesel generators and the impact upon
13 air quality and complying with all local and regional and
14 State air quality regulations for those diesel generators;
15 is that correct?

16 MS. MITCHELL: That is correct.

17 MR. THOMPSON: And what were your findings?

18 MS. MITCHELL: My findings were that the addition
19 of the diesel generators for the initial portion of the
20 construction of the project will -- the emissions will
21 still comply with local and federal regulations. They
22 will be underneath the federal conformity threshold
23 standard and will not change the impact from air quality
24 during construction. So it will still be less than a
25 significant impact from an air quality standpoint.

1 MR. THOMPSON: And did you discuss this
2 evaluation process and findings with the local air
3 district?

4 MS. MITCHELL: Yes.

5 MR. THOMPSON: Point two, Ms. Mitchell. Did you
6 do an analysis of the compliance of the project with the
7 federal NO₂ one-hour standard?

8 MS. MITCHELL: No. Through conversations with
9 EPA and CEC staff, it was determined that because
10 construction is a short-term event and not
11 something -- that the new federal NO₂ one-hour standard is
12 based on a statistical average of three years. And the
13 construction phase will last significantly -- well will
14 last a approximately that timeframe. And through
15 discussions with EPA and CEC, it was determined that it
16 was not necessary to do an analysis of that type.

17 MR. THOMPSON: Fine. Previously I believe in
18 your written testimony, you requested that Conditions of
19 Certification AQ1 and AQ9, which specified specific
20 equipment and a 60-day time limit be changed, I believe,
21 to exclude the reference to specific vendor equipment, and
22 30-day requirements. Do you still have those requests in
23 front of this commission?

24 MS. MITCHELL: Those requests have been
25 incorporate into the final Staff Assessment.

1 MR. THOMPSON: So in summary, is it your opinion
2 and belief that the Calico project will meet all
3 applicable air quality standards and regulations?

4 MS. MITCHELL: Yes.

5 MR. THOMPSON: Thank you very much. Ms. Mitchell
6 is tendered for cross-examination.

7 HEARING OFFICER KRAMER: First Ms. White had a
8 question.

9 MS. WHITE: Just a point of clarification.
10 According to your display in the back, construction is to
11 start fourth quarter 2010, phase one and phase two is not
12 supposed to be completed until 2015, is that less than
13 three years?

14 MS. MITCHELL: No that's why I kind of -- I
15 changed my -- I changed my statement to say it's not less
16 than three years. But it is about that timeframe.

17 MS. WHITE: By my calculations that's four years.
18 Would that have made a difference?

19 MS. MITCHELL: I don't think it would actually.

20 MS. WHITE: Okay.

21 HEARING OFFICER KRAMER: Okay, any other
22 questions for --

23 STAFF COUNSEL HOLMES: Staff has questions.

24 HEARING OFFICER KRAMER: Go ahead.

25 STAFF COUNSEL HOLMES: Thank you.

1 CROSS-EXAMINATION

2 BY STAFF COUNSEL HOLMES:

3 Ms. Mitchell, on page two much Exhibit 83, answer
4 five, you tender a statement that says that the total
5 emissions are expected to be 12.6 tons per year for NO₂,
6 and less than 1 ton for PM₁₀. Do you see that?

7 MS. MITCHELL: Yes, I do.

8 STAFF COUNSEL HOLMES: Where in your testimony is
9 the analysis supporting that conclusion?

10 MS. MITCHELL: An Excel spreadsheet, which did
11 the calculations, was provided, and I -- and was docketed
12 with the CEC. I'm not sure what the actual docket number
13 is, but that outlined the complete calculations of all
14 construction related emissions with one portion of it
15 being the emissions associated with the generators.

16 STAFF COUNSEL HOLMES: I'm sorry, when was this
17 docketed?

18 MS. MITCHELL: I'll have to defer the Sara on
19 that.

20 STAFF COUNSEL HOLMES: Well, it was my
21 understanding that we heard about the generators for the
22 first time in your rebuttal testimony, and that's why I'm
23 asking the question. But it sounds as though you can't
24 answer the question.

25 MS. MITCHELL: I can't -- yeah, I provided the

1 data and I was under the understanding it was being
2 docketed either last week or had this week.

3 STAFF COUNSEL HOLMES: So did you conduct the
4 analysis that led to the conclusion that there would be
5 12.6 tons per year of NO₂?

6 MS. MITCHELL: Yes.

7 STAFF COUNSEL HOLMES: Thank you. Are you
8 familiar with the staff testimony?

9 MS. MITCHELL: The Staff Assessment, yes.

10 STAFF COUNSEL HOLMES: Would you take a look
11 please at table 7 on page C.1-17 of Exhibit 300.

12 MS. MITCHELL: Okay, so which table again please?

13 STAFF COUNSEL HOLMES: Air Quality Table 7.

14 MS. MITCHELL: Okay. Certainly.

15 STAFF COUNSEL HOLMES: Does that table indicate
16 that the annual construction NO_x emissions are about 95.55
17 tons per year?

18 MS. MITCHELL: Correct.

19 STAFF COUNSEL HOLMES: And are you familiar with
20 EPA's general conformity thresholds for this project

21 MS. MITCHELL: I am.

22 STAFF COUNSEL HOLMES: And are they 100 tons per
23 year for NO_x?

24 MS. MITCHELL: Yes. And if you look in my
25 rebuttal, which is I think, Item 83, that there are

1 essentially three portions of the revised construction
2 analysis that were examined to determine the impacts from
3 construction. And one would be addition of the
4 generators. Two, was the removal of transportation needed
5 for water to come from the Cadiz water source. And three
6 is an emission factor of refinement for vehicles traveling
7 off site. Vehicles that travel off site would be expected
8 to travel approximately 50 miles per hour as opposed to
9 vehicles on site, would be traveling much slower, more
10 like 10 miles per hour.

11 So the incorporation of those three --

12 STAFF COUNSEL HOLMES: I'm sorry. I had
13 troubling hearing you. Could you repeat the last portion
14 again. You talked about the trucking in of water. What's
15 the next one?

16 MS. MITCHELL: And the third portion is an
17 emission factor refinement. The emission factors for the
18 off-site vehicle travel were refined to be based upon a
19 travel speed of 50 miles per hour as opposed to previous
20 analyses were based on a slower more conservative 10 miles
21 per hour, which we do not expect the vehicles off site to
22 be traveling that slowly.

23 STAFF COUNSEL HOLMES: And again, is this
24 analysis, do you know whether or not this was docketed?

25 MS. MITCHELL: It was my assumption that it was

1 docketed, but I can't say for certain that it was.

2 STAFF COUNSEL HOLMES: Okay. Thank you very
3 much. Those are all my questions.

4 HEARING OFFICER KRAMER: Okay, does the applicant
5 have an answer to whether or not this information has been
6 provided.

7 MR. THOMPSON: We are talking over here. We're
8 trying the figure out if this spreadsheet has been
9 docketed. We can take a few minutes.

10 HEARING OFFICER KRAMER: Okay. It has not been.

11 MS. GANNON: It has not been docketed.

12 MR. THOMPSON: It has not been docketed, but we
13 can docket it, seeing as how it has been the subject of
14 some cross-examination.

15 STAFF COUNSEL HOLMES: Can we then leave the
16 record open, in order for staff to have an opportunity to
17 look at it?

18 MS. GANNON: I mean the results that are
19 reflected in that spreadsheet are described in her
20 rebuttal testimony. The actual spreadsheet that shows
21 those numbers is not -- has not been docketed.

22 HEARING OFFICER KRAMER: But the spreadsheet
23 shows how she came to a conclusion. And staff may want to
24 look at that in order to decide if they agree with her
25 conclusion. And given that, staff has not had any time to

1 analyze this. I think that the best avenue would be for
2 staff to have a chance to review those calculations and
3 see if they agree, rather than to have to make their own.

4 MR. THOMPSON: We will get those filed as soon as
5 we can.

6 HEARING OFFICER KRAMER: Okay. Could that be
7 today?

8 MR. THOMPSON: Yes.

9 HEARING OFFICER KRAMER: Okay, so then we'll be
10 leaving air quality open on -- can we fairly describe this
11 as the NO₂ issue or is there more to it than that?

12 MR. THOMPSON: Julie --

13 STAFF COUNSEL HOLMES: Construction -- go ahead.

14 MR. THOMPSON: Julie, would you describe what is
15 in this spreadsheet?

16 MS. MITCHELL: Yeah. Let me give you a quick
17 overview of what's in the spreadsheet. The items that I
18 talked about were changed or incorporated into the
19 spreadsheet. And the total -- probably the most important
20 information is the total emissions and tons per year of
21 the peak year of construction for NO₂ was calculated to be
22 79.5 tons a year. And the PM₁₀ emissions were calculated
23 to be 78.3 tons per year. And that's the total for
24 on-site and off-site emissions.

25 And so that's incorporating the new generators,

1 removing the water delivery, and modifying the emission
2 factors used for off-site vehicle travel.

3 Those all are summarized in here. And as you see
4 the emissions they are below the 100 ton conformity
5 threshold, which I think is of concern to people there.
6 And the other thing I did want to note is that to do my
7 emission calculations, I've based the -- I continued to
8 base the equipment schedule on a 41 month schedule, which
9 would be a more condensed schedule than the potential 59
10 month construction schedule.

11 And so that's said then emissions are probably
12 even higher than if the -- on an annual basis, than if the
13 construction schedule gets stretched out a little further.

14 HEARING OFFICER KRAMER: Okay. Thank you. So we
15 will keep the record open on that point. If the --

16 STAFF COUNSEL HOLMES: May I ask just one quick
17 question before we move on? I know this will become
18 apparent at some point, but it might help the air quality
19 people get started.

20 HEARING OFFICER KRAMER: Go ahead.

21 STAFF COUNSEL HOLMES: What emission factors did
22 you use for the diesel generators?

23 HEARING OFFICER KRAMER: Let me ask. Are
24 those --

25 MS. MITCHELL: The diesel generators were based

1 upon EPA Tier 3 engines for the appropriate size engine.
2 So there are two generators that are being proposed.

3 STAFF COUNSEL HOLMES: Right.

4 MS. MITCHELL: One is a 75 kilowatt generator and
5 one is a 500 kilowatt generator. And the emission factors
6 are based upon Tier 3 for those sizings of engines.

7 STAFF COUNSEL HOLMES: Thank you.

8 HEARING OFFICER KRAMER: Okay. Any
9 other -- let's see CURE was the only other party that
10 asked to cross-examine. Did you have any questions for
11 this witness?

12 MS. MILES: We do not.

13 HEARING OFFICER KRAMER: Thank you. Staff your
14 witnesses, I assume you're sponsoring Mr. Oktay along with
15 Mr. Walters; is that correct?

16 STAFF COUNSEL HOLMES: I think that would be
17 appropriate. I think what I will do is start with Mr.
18 Oktay and then move to Mr. Walters.

19 Whereupon,

20 SAMUEL OKTAY and WILLIAM WALTERS
21 were called as witnesses herein, and after first
22 having been duly sworn, were examined and
23 testified as follows:

24 DIRECT EXAMINATION

25 BY STAFF COUNSEL HOLMES:

1 Mr. Oktay, can you please briefly describe what
2 your responsibilities are at the Mojave Desert Air Quality
3 Management District?

4 MR. OKTAY: Well, I'm an air quality engineer
5 here. I do the review and permitting of air emission
6 sources. Anything from gas stations all the way up to and
7 including power plants.

8 STAFF COUNSEL HOLMES: Did you prepare the
9 Determination of Compliance for Calico facility or was it
10 prepared under your direction?

11 MR. OKTAY: No. I prepared that one.

12 STAFF COUNSEL HOLMES: Can you briefly summarize
13 what your conclusions are?

14 MR. OKTAY: Well, I concluded that that
15 particular project was not going to have any significant
16 impacts on air quality. And if it weren't for the fact
17 that it was a large power plant, we would have already
18 permitted the equipment that was referenced. I am,
19 however, finding that there's some additional generators
20 that have shown up since I worked on it, and it might be
21 possible that we would have to revise the FDOC as well as
22 receive some additional applications for those permits,
23 unless they're just construction temporary permits under
24 portable equipment registrations or something of that
25 nature.

1 But if they're permits of the type that should be
2 permitted from us, then we would need some additional
3 applications.

4 I believe that at the time, that the application
5 was submitted, there was a gasoline -- above ground
6 gasoline tank and one diesel fire generator that we would
7 directly permit. And it appears that there a some
8 additional generators that are now showing up.

9 STAFF COUNSEL HOLMES: Are you referring to the
10 generators that have been the subject of the discussion
11 for if last 10 to 15 minutes?

12 MR. OKTAY: Okay, but they were in the part of
13 the original application.

14 STAFF COUNSEL HOLMES: Right. I just wanted to
15 clarify that those are the generators that you're
16 referring to?

17 Thank you, those are the questions that I have.
18 So are we moving everything in at the end, Hearing Officer
19 Kramer, or should I move Exhibit 301?

20 HEARING OFFICER KRAMER: We were talking about
21 moving all the exhibits in at the end of the hearing.

22 STAFF COUNSEL HOLMES: Okay, that's fine. Then
23 I'd like to move on to Mr. Walters.

24 Mr. Walters, are you there?

25 MR. WALTERS: Yes, I am.

1 STAFF COUNSEL HOLMES: And did you prepare the
2 air quality section of Exhibit 300?

3 MR. WALTERS: Yes, I did.

4 STAFF COUNSEL HOLMES: And was a statement of
5 your qualifications included?

6 MR. WALTERS: Yes, they were.

7 STAFF COUNSEL HOLMES: And are the facts true and
8 correct to the best of your knowledge?

9 MR. WALTERS: Yes, they are, with the limitation
10 of this late information from the applicant.

11 STAFF COUNSEL HOLMES: Right. I'll ask you a
12 question about that in a second. In fact, why don't we
13 move on to that.

14 You've heard both -- you've read in the rebuttal
15 testimony and you heard orally earlier today some
16 additional information about the diesel generators. Do
17 you have a reaction to that new information?

18 MR. WALTERS: Well, there are a few items.
19 Number one, I haven't seen any of the calculations at this
20 point obviously, since they weren't docketed.

21 Number two, in terms of the emission factors
22 used, one of the things that I did is I actually went to
23 information supplied by the applicant in regards to
24 specific generator sets and used emission factors for full
25 prime use for the larger generator. They didn't have

1 specific emission factors for the lower generator. So I
2 did basically the same thing that Ms. Mitchell did, in
3 terms of that emission factor.

4 Unfortunately, for the larger generator, the
5 emission factor under prime use is quite a bit higher than
6 the EPA engine standard with the knowledge that the engine
7 standard isn't necessarily the same thing as the emission
8 factor. The engine standard is based on a specific set of
9 engine testing requirements.

10 And while this engine a apparently does meet the
11 Tier 3 standards, the emission factors under full prime
12 use are higher than that specific number.

13 When I revised the calculations using the same
14 basis that was presented in the testimony, specifically
15 the 16 hours per day, the 26 days per month and potential
16 of up to 12 months, I came up with a number that was quite
17 a bit higher than the applicant's, and was essentially
18 about 20.7 tons of NOx as potential emissions for those
19 two engines.

20 And my issues with that number are two fold.
21 Number one as we talked about before -- or as was talked
22 about before the general conformity issues and staff's
23 desire to keep the emissions below that conformity
24 threshold, so that a conforming analysis and the specific
25 30-day notice period, et cetera, would not be necessary.

1 Although, staff does believe that positive conformity
2 determination, you know, can be made for the project, even
3 if the emissions were over 100 tons, there would be a
4 rather significant schedule hit.

5 The other issue, which wasn't discussed yet, was
6 the on-site impacts for the State one-hour NO₂ standard.
7 There were, to my knowledge, no remodeling efforts on that
8 standard. And so staff would like to see that the on-site
9 emissions annual and hourly do not increase significantly
10 from that which was analyzed.

11 For that analysis, what I did is I went back and
12 took a look at the on-site emissions and tried to figure
13 out a balance. And if we have a 20.7 increase, I wasn't
14 able to figure out a way we could get the on-site
15 emissions to reduce, even given conservative assumptions
16 in some of the emission calculations, so that there wasn't
17 an increase on the on-site emissions that would impact
18 that one-hour NO₂ analysis.

19 Did your recalculation include all of the
20 generators? The reason I ask that is that I thought I
21 heard you say earlier that you found emission factors for
22 the larger generators, but you had difficulty finding them
23 nor the smaller generators?

24 MR. WALTERS: The applicant supplied some
25 specific information on the two generators that they were

1 looking at. One that's a 500 kV, one that's a 75 kV, and
2 converting that over to horsepower under prime use,
3 essentially, you know, full-time power generation use, the
4 larger one would be 668 horsepower based on the data they
5 supplied. The smaller one would be 91.

6 In the data they supplied for the larger
7 generator set, it had emission factors for various types
8 of operations, the quarter standby, half standby,
9 three-quarters standby, full standby, and full prime. I
10 used the full prime emission factors that I considered
11 appropriate for the use, which is a prime use electrical
12 generation use for 16 hours per day at the site. And that
13 emission factor is 5.15 gram per brake horsepower, which
14 is quite a bit higher than the EPA standard value for Tier
15 3, which is 3.0. And that's the basic difference in the
16 calculations.

17 STAFF COUNSEL HOLMES: So did your revised
18 calculation take into account the smaller -- the 75
19 generator -- the smaller generator?

20 MR. WALTERS: I included the smaller generator,
21 but without any correction from the EPA Tier 3 emission
22 factor. There probably will be some small correction, but
23 that is -- it is such a smaller generator that its impact
24 would be probably less than a ton per year.

25 STAFF COUNSEL HOLMES: So is it your testimony

1 today that you cannot conclude that the project would
2 comply with the State NO₂ standard based on the
3 information you have?

4 MR. WALTERS: Correct.

5 STAFF COUNSEL HOLMES: And is it your testimony
6 today that you cannot conclude that the project would
7 comply with the new federal -- with the federal NO₂
8 conformity standard?

9 MR. WALTERS: It is my testimony that without the
10 additional calculations that the applicant has identified,
11 I cannot conclude that the emissions would be below the
12 applicability threshold for a general conformity analysis
13 requirement of 100 tons per year.

14 HEARING OFFICER KRAMER: Well, given that, are we
15 better off in the interests of time sending the respective
16 experts back to their calculators to further investigate
17 and report to us on Friday?

18 STAFF COUNSEL HOLMES: Well, I think that that
19 would be appropriate, given that again, this is
20 information that we didn't have that has the potential to
21 change the conclusions that we reached in the air quality
22 section of the Supplemental Staff Assessment.

23 MS. MITCHELL: Excuse me, this is Julie Mitchell.
24 I was just curious if I can have a moment to maybe help
25 clarify things?

1 HEARING OFFICER KRAMER: In what sense. Mr.
2 Walters is going to need to look at you're calculations.

3 MS. MITCHELL: Well, I concur. I wanted to
4 clarify one thing for Mr. Oktay is that the generators
5 that are discussed are going to fall under the PERP
6 Program for the Portable Equipment Registry Program, as
7 explained by my colleague Sam Wayne. So those generators
8 are registered through State under that program, and so
9 separate permits for those would not be required, assuming
10 that they are used for less than 12 months of operation.

11 Secondly, from Mr. Walters comment about the
12 emissions from the larger generator, he is correct that
13 the information that was provided by the applicant for a
14 specific generator showed a more like a Tier 2 level
15 emission factor as opposed to a Tier 3. The applicant has
16 stated that they would be -- they would obtain Tier 3
17 engines so that they could have lower emissions and be
18 more -- so that the project has less potential for impact.

19 That stated, if Tier 2 engines for the larger
20 engine were used, the emission increase is approximately a
21 little less than 10 tons. But as shown, the emission
22 calculation for total NOx was -- is about 80 tons. So
23 plus another 10 tons you're looking at about 90 tons,
24 still less than the federal conformity threshold of 100
25 tons.

1 And then lastly, the State NO₂ one-hour standard
2 was previously modeled. And the impacts were well be
3 throe standard. So even if -- even if all of the on-site
4 emissions were doubled, your -- the impact would still be
5 less than the State standard. And this increase of
6 generators on site during construction will not double
7 those emissions.

8 So I just wanted to state that we think that the
9 impacts will still remain less than significant, relative
10 to the California ambient air quality standard.

11 Thank you.

12 HEARING OFFICER KRAMER: Thank you. Mr. Oktay, I
13 want to ask you -- well do the parties have any other
14 questions by way of cross-examination?

15 Staff, did you have others?

16 STAFF COUNSEL HOLMES: No, I think we should wait
17 until we have the information that we need to conduct the
18 analysis.

19 HEARING OFFICER KRAMER: Okay. In case Mr. Oktay
20 cannot be with us the next time, there is a certification
21 that's required under the Commission rules to the effect
22 that the air district has analyzed the project and has
23 found that it meets the district standards and that all of
24 the required emission offsets will be provided within the
25 time that is required by district rules.

1 Is that a certification can you make to us for
2 our record?

3 MR. OKTAY: It appears that that has been
4 accomplished, and I want to thank I forget her name now,
5 that said that those additional generators are going to be
6 portable, so it appears that I'm not going to need any
7 additional applications and I do not believe that we're
8 going to need to revise the final determination document.

9 So we believe that the project will meet all the
10 applicable requirements and there aren't going to be any
11 offsets required, from what we can tell today. And as far
12 as we're concerned, this project is good to go.

13 HEARING OFFICER KRAMER: Thank you.

14 MR. OKTAY: Sure.

15 HEARING OFFICER KRAMER: Okay, anything else on
16 air quality from the parties.

17 Mr. Thompson?

18 MR. THOMPSON: No. We will be submitting that
19 spreadsheet. And that should have all the assumptions on
20 it. And I would encourage our expert witness and staffs
21 to get to together and discuss it, so that a cohesive
22 presentation can be presented later this week.

23 HEARING OFFICER KRAMER: Okay. I'll add it to
24 the topic list again on Friday to be covered before we
25 adjourn.

1 Okay, with that -- please.

2 We'll take a five minute break for everyone and
3 so we'll be back here. There are no clocks. So whatever
4 five minutes would be on your -- we'll come back 2:40 my
5 time, which would be about seven minutes.

6 (Thereupon a recess was taken.)

7 HEARING OFFICER KRAMER: We're back on the
8 record. And we will be starting visual resources in a
9 moment. But first Andy Silva from Supervisor Mitzefelt's
10 office wanted to say a few words to us.

11 MR. SILVA: I am Andrew Silva I work for San
12 Bernardino County Supervisor Brad Mitzefelt. My favorite
13 little factoid is that he represents the largest
14 supervisorial district in the country. This is the first
15 district of San Bernardino county, 17,000 square miles
16 from Wrightwood to Trona to Needles, all of the Victor
17 Valley. That's the supervisor's area. So most of these
18 projects fall within his district.

19 So on behalf of the Supervisor and the entire
20 board of supervisors, and the residents of San Bernardino
21 county, I just want to say thanks for coming down here. I
22 know it's quite an effort, and the State is strapped. And
23 that technically it's a challenge. Timewise it's a
24 challenge.

25 So I just want to say on behalf of the county,

1 thank you very much for going to the extra time and
2 effort. I also want to thank the Commission staff for all
3 of their hard work on this project, and a number of other
4 projects that are in the pipeline currently.

5 It's been quite a challenge, and there are
6 difficult issues to deal with, the timelines these
7 projects face, the various impacts. So I just want to say
8 thanks to the Commission and everybody who's been involved
9 in this process.

10 Tomorrow morning, our assistant county
11 administrative officer, Gerry Newcombe, is going to try to
12 be here. The Board of supervisors last month passed a
13 couple of resolutions regarding development of renewable
14 energy projects in the county. And also I think most of
15 you -- or if not I have some copies here -- are familiar
16 with the policy on renewables that the Board of
17 supervisors adopted in April.

18 Just in a nutshell, the resolution one
19 addressed -- one resolution addressed species mitigation.
20 And I believe our comments and briefs have touched on
21 this, that we're concerned because of the size of these
22 projects and the mitigation requirements that we have
23 concerns about vast areas of private land being bought up,
24 taken off their tax rolls and no longer being eligible for
25 either taxes or future economic growth and development.

1 We also, in that same vein, have concerns that if
2 mitigation is done on public lands, that we not eliminate
3 historic uses on public lands. Public lands belong to the
4 public. They've a history of multi-use. And we hate to
5 see some of those uses restricted.

6 For example, Off Highway Vehicle recreation,
7 mining and other activities that take place on the public
8 lands, we don't want to see the entire desert become a de
9 facto wilderness as a result of these projects.

10 So that pretty much covers it. So once again
11 welcome to San Bernardino county. And thanks for coming.
12 And we really appreciate all your efforts and hard work.

13 PRESIDING MEMBER EGGERT: Thanks you very much.
14 I'm sorry I missed your name.

15 MR. SILVA: It's Andy Silva.

16 PRESIDING MEMBER EGGERT: So Mr. Silva, thank you
17 very much for welcoming us and it's our pleasure to be
18 here. And I don't know if you caught Commissioner Byron's
19 comments earlier, but we did make the decision to come
20 down because we wanted to be here near the project site,
21 hear from folks like yourself and others in the community.
22 And I know from the Commission's perspective, the
23 partnership between the State and local jurisdictions is
24 becoming increasingly important in almost everything that
25 we do for renewables development, for you know commercial

1 and residential building retrofit activity.

2 We're going to be launching programs in
3 partnership with local jurisdictions and pretty much
4 almost all of the policy areas that we touch. It's
5 instrumental that we have a good close working
6 relationship with the local jurisdictions. So appreciate
7 your comments.

8 MR. SILVA: And I think that relationship has
9 certainly improved. Early on, that was a big concern, but
10 I really think there's a real partnership forming and
11 that's very important.

12 ASSOCIATE MEMBER BYRON: Mr. Silva, I'd also like
13 to thank you for being here. We met last year. But I
14 thought your comments were really good concise description
15 of the issues and concerns that, you know, and I should
16 say your supervisor have. It's very helpful to be made
17 aware of those things. So I thank you for being here.

18 MR. SILVA: And I'll leave these. We have
19 copies. I made like 10 copies of the resolutions and the
20 policy. So I'll just leave these here and folks who are
21 interested can take a look at those. And Mr. Newcombe
22 will be down tomorrow and he'll speak during public
23 comment also to go over these in a little more detail and
24 answer any questions you might have about that.

25 Thanks for accommodating me. I have to run,

1 because the BrightSource decision is out, and I have to go
2 read it.

3 Thank you very much.

4 HEARING OFFICER KRAMER: Okay, visual resources.
5 The applicant, you had two witnesses.

6 MS. GANNON: We will just have one, Angela Leiba.
7 Whereupon,

8 ANGELA LEIBA
9 was called as a witnesses herein, and after first
10 having been duly sworn, was examined and
11 testified as follows:

12 HEARING OFFICER KRAMER: And were you here to be
13 sworn earlier.

14 MR. LEIBA: I was sworn earlier.

15 HEARING OFFICER KRAMER: Okay. Please, go ahead.

16 DIRECT EXAMINATION

17 BY MS. GANNON:

18 Ms. Leiba, are you the same Angela Leiba who
19 submitted testimony earlier in these proceedings?

20 MR. LEIBA: Yes, I am.

21 MS. GANNON: And is the resume that's
22 attached -- is that testimony still accurate and valid?

23 MR. LEIBA: Yes, it is.

24 MS. GANNON: And do you have any changes or
25 corrections to make to that testimony that you submitted?

1 MR. LEIBA: I do not

2 MS. GANNON: Thank you. Have you had an
3 opportunity to review the Supplemental Staff Assessment
4 with regard to visual resources?

5 MR. LEIBA: Yes, I have.

6 MS. GANNON: And can you comment on the overall
7 analysis that the staff has completed?

8 MR. LEIBA: Yes. Overall, I agree with the
9 staff's conclusions in the Supplemental Staff Assessment.
10 Essentially, they followed pursuit with what we initially
11 adhered to, which was the project itself. Although as
12 Sean Gallagher had mentioned actually was sited outside of
13 wilderness and recreation areas.

14 Overall, visually you're putting a development
15 within an area that will change the landscape character.
16 So we did work --

17 STAFF COUNSEL HOLMES: Excuse me. We're having
18 trouble hearing Ms. Leiba.

19 MR. LEIBA: I'm sorry. I'll speak a little
20 louder.

21 So I was saying that we do agree with the staff's
22 conclusions that the project itself will have visual
23 impacts, and we also agree that the cumulative impacts
24 associated with visual resources are also significant.

25 MS. GANNON: And do you agree with the staff's

1 conclusion that the cumulative impacts are essentially
2 unmittigable?

3 MR. LEIBA: We do. However, we do not agree that
4 the LORS impacts, which will talk about in land use,
5 although they do tie to scenic, are unmittigable.

6 MS. GANNON: And have you reviewed the Conditions
7 of Certification that were included in the Supplemental
8 Staff Assessment?

9 MR. LEIBA: Yes, I have.

10 MS. GANNON: And I note in the exhibit A, which
11 was attached to Ms. Bellows rebuttal testimony, Exhibit
12 82, includes some suggestions to three of those visual
13 conditions. Have you reviewed those changes?

14 MR. LEIBA: Yes, I have.

15 MS. GANNON: Can you comment on there's a change
16 in Vis 1, which is essentially to put in a -- to the
17 extent feasible language. Can you just provide in summary
18 the necessary of that change?

19 MR. LEIBA: Yes, I think Felicia Bellows, in
20 previous testimony, has talked extensively on this issue.
21 Essentially, we're asking that -- this condition is asking
22 for all non-layered surfaces be treated somewhat by a
23 paint color. So we've been working with BLM to establish
24 what paint color would be feasible for what surfaces.

25 So we're just asking that it be added to the

1 extent feasible for those particular surfaces, that we can
2 paint, we will. For those that we cannot, we won't.

3 MS. GANNON: Thank you. And with regard to the
4 changes proposed for Vis 2, it looks like it's a strike
5 out of one provision. Can you explain the basis for that
6 proposed change?

7 MR. LEIBA: Yeah, I think this may have been an
8 oversight. It was just referencing exhaust stacks. And
9 obviously, this project doesn't have exhaust stacks, so we
10 just outlined that.

11 MS. GANNON: And finally, with regard to Vis 3,
12 there is a change, I believe, in the minimum distance
13 setback that is proposed. Can you describe the basis for
14 that change?

15 MR. LEIBA: Sure. We struck the 360 out and
16 replaced it with 223. The same staff that's working this
17 project is also working on the Imperial Valley project.
18 And in that case, they agreed that 223 was the distance
19 that they felt from a highway you could place SunCatchers.
20 So we replaced it with staff's conclusion from that case.

21 MS. GANNON: And you agree with that conclusion,
22 that that would be sufficient to offset or avoid any
23 potentially significant impact?

24 MR. LEIBA: Yes, I do.

25 HEARING OFFICER KRAMER: Can I ask where, because

1 you may have said it, but I was multi-tasking. Where
2 would I find these proposed changes in which exhibit?

3 MS. GANNON: It's attachment A to Exhibit 82.

4 HEARING OFFICER KRAMER: Thank you.

5 MS. GANNON: And with regard to Vis 3, there was
6 also a change with regard to the pipeline. Can you
7 comment on that?

8 MR. LEIBA: Yes. There was a provision in here
9 that we needed to setback from the gas line. We think
10 that that was in error, so we struck that out obviously.
11 We don't feel that there's visual impacts to an
12 underground and existing gas line, so we took that out of
13 the condition.

14 MS. GANNON: Thank you, Ms. Leiba. I would offer
15 her for cross-examination.

16 HEARING OFFICER KRAMER: Any questions of this
17 witness?

18 STAFF COUNSEL HOLMES: Staff has none.

19 HEARING OFFICER KRAMER: Can we ask staff, if you
20 agree or disagree with the proposed changes to the
21 conditions that she's outlined?

22 STAFF COUNSEL HOLMES: The staff visual resources
23 witness is prepared to go through the changes to Vis 1,
24 and Vis 2. Vis 3 is a hybrid with glint and glare, and I
25 think that we'd refer to wait until the glint and glare

1 report is in the record to address that condition.

2 HEARING OFFICER KRAMER: Any other conditions?

3 STAFF COUNSEL HOLMES: Vis 3.

4 MR. LEIBA: I think she said she agreed with Vis
5 1 and Vis 2.

6 STAFF COUNSEL HOLMES: No, we didn't say we
7 agreed. I said that the witness is available to go
8 through the proposed changes to Vis 1 and Vis 2 and that
9 we don't want to address Vis 3 until the glint and glare
10 report is in the record.

11 HEARING OFFICER KRAMER: Okay. So let's talk
12 then about 1 and 2.

13 STAFF COUNSEL HOLMES: Do you want me to do it or
14 do you want to have the witness do it?

15 HEARING OFFICER KRAMER: I guess the witness
16 would be more qualified.

17 (Laughter.)

18 STAFF COUNSEL HOLMES: I think that that's
19 probably correct.

20 HEARING OFFICER KRAMER: No offense meant.

21 (Laughter.)

22 HEARING OFFICER KRAMER: And I can't recall if
23 Mr. Kanemoto was going TO testify or simply be available
24 for cross-examination?

25 STAFF COUNSEL HOLMES: I believe he's available

1 to testify?

2 Bill, are you on the line?

3 MR. KANEMOTO: Yes, I am.

4 HEARING OFFICER KRAMER: So hold on a minute, Mr.
5 Kanemoto. Did we have any other party wishing to ask
6 questions of Ms. Leiba?

7 Seeing none.

8 Whereupon,

9 FELICIA BELLOWS and SEAN GALLAGHER
10 were called as witnesses herein, and after first
11 having been duly sworn, were examined and
12 testified as follows:

13 HEARING OFFICER KRAMER: Mr. Kanemoto, could you
14 discuss the proposals for Vis 1 and Vis 2, the changes to
15 the conditions?

16 MR. KANEMOTO: Right, well the proposal to modify
17 the wording for Vis 1 to add feasible is acceptable to
18 staff. We don't object to that change, but we just note
19 that if color treatment to the backs of the mirror units
20 is found to be unfeasible that the potential impacts of
21 the project would likely be increased, possibly
22 substantially increased.

23 This too -- let's see, my understanding was that
24 their primary request in that case was to change the
25 period of notification under verification from 90 days to

1 30 days; is that correct?

2 MR. LEIBA: Yes, it is.

3 MR. KANEMOTO: Yeah. That's acceptable to staff.
4 We have no objection to that.

5 Right, the deletion for the errata reference to
6 the exhaust stacks, that's obviously fine with staff as
7 well.

8 For Vis 4 --

9 STAFF COUNSEL HOLMES: There is no Vis 4.

10 MR. KANEMOTO: Right, okay. Yeah, we deleted Vis
11 4 in response to applicant's previous comments.

12 So that's all we have to say about those two
13 conditions, I guess.

14 HEARING OFFICER KRAMER: Okay thank you. So
15 we'll put Vis 3 on the list to be discussed on the 18th
16 with glint and glare.

17 Any cross-examination for Mr. Kanemoto?

18 Let's see, CURE, you had indicated maybe 10
19 minutes and Basin and Range Watch as well.

20 MS. MILES: We have no questions at this time.

21 HEARING OFFICER KRAMER: And I see shake of heads
22 saying none from Basin and Range Watch. So that would
23 appear to end the topic of visual resources. Unless
24 somebody else has something else to raise?

25 But we will not close the record on visual

1 resources, because we'll be discussing the glint and glare
2 aspects on the 18th in connection with the traffic issues.

3 So our next topic is land use.

4 MR. LEIBA: That's me too.

5 HEARING OFFICER KRAMER: Okay. And you've been
6 sworn. You were just offered for cross-examination; is
7 that correct?

8 MS. GANNON: She had been offered for
9 cross-examination on visual, yes.

10 HEARING OFFICER KRAMER: Okay. Land use as well?

11 MS. GANNON: Yes.

12 HEARING OFFICER KRAMER: Okay.

13 MS. GANNON: That's fine.

14 HEARING OFFICER KRAMER: So we're now on the
15 topic of land use. Staff did you wish to cross-examine
16 Ms. Leiba?

17 STAFF COUNSEL HOLMES: No.

18 HEARING OFFICER KRAMER: Mr. Brizzee.

19 MR. BRIZZEE: No questions for this witness.

20 HEARING OFFICER KRAMER: CURE?

21 MS. MILES: No questions.

22 HEARING OFFICER KRAMER: Mr. Jackson, I think is
23 not with us today. Staffs's witness was Negar Vahidi.
24 Are you on the phone with us?

25 MS. VAHIDI: Yes. High.

1 HEARING OFFICER KRAMER: Okay, you'll need the
2 speak up a bit.

3 MS. VAHIDI: Can you hear me now.

4 HEARING OFFICER KRAMER: That's better. Were you
5 previously sworn?

6 MS. VAHIDI: Yeah I was sworn at the beginning
7 with the group.

8 HEARING OFFICER KRAMER: Okay. Ms. Holmes, do
9 you wish to offer some direct testimony from her?

10 STAFF COUNSEL HOLMES: Ms. Vahidi, did you want
11 to -- I believe she has a brief summary of her testimony
12 prepared. I guess it's up to the committee as to whether
13 or not they would like to hear it.

14 HEARING OFFICER KRAMER: Well, let me ask, do any
15 of the parties anticipate having cross-examination
16 questions for Ms. Vahidi?

17 MS. GANNON: The applicant does.

18 HEARING OFFICER KRAMER: Okay. So why don't you
19 go ahead and provide the summary by way of context for us.

20 Whereupon,

21 NEGAR VAHIDI

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

25 DIRECT EXAMINATION

1 BY STAFF COUNSEL HOLMES:

2 MS. VAHIDI: This is not much different than
3 what's in the written testimony.

4 HEARING OFFICER KRAMER: You need to speak up.

5 MS. VAHIDI: Yes. Okay, sorry I'm going to have
6 to yell into my phone.

7 Land-use staff conducted initially in the joint
8 staff assess Environmental Impact Statement, we conducted
9 awe joint CEQA/NEPA analysis of impacts to land use
10 resources, including items usually analyzed by the BLM in
11 their land use section.

12 Currently, and I'm only going to focus on the
13 items that have been brought up for question. There are
14 three issues that the parties have brought questions up
15 about.

16 One is the BLM interim policy guidelines on land
17 and water conservation funds. We found -- staff found an
18 inn consistency with this BLM finance document. The other
19 issue is significant unavoidable cumulative impacts and I
20 believe some folks had questions regarding the Hector Road
21 crossing as it affects private property.

22 And other than that the majority of the rest of
23 the conclusions are of course in my written testimony.

24 STAFF COUNSEL HOLMES: Does that conclude your
25 summary?

1 MS. VAHIDI: Yeah, it does.

2 STAFF COUNSEL HOLMES: Ms. Vahidi is available
3 for cross-examination?

4 HEARING OFFICER KRAMER: The applicant?

5 CROSS-EXAMINATION

6 BY MS. GANNON:

7 Is Ms. Vahidi this is Ella Gannon, counsel to the
8 applicant. I have a question about the analysis that you
9 undertook to make the conclusion to make the conclusion
10 about consistency or inconsistency with the BLM policy you
11 just referenced. Can you explain how you analyzed that
12 please?

13 MS. VAHIDI: Well, we analyzed that interim
14 policy guideline, which was actually just to give a little
15 bit of background for the Committee. The State director
16 of the BLM had issued, what he call, an interim policy
17 guideline on LWCF lands that were encompassed by project
18 site. Since the revision of the project site boundary,
19 the amount of those lands has decreased, but there are
20 some still LWCF lands included, as far as we can tell in
21 the project site boundary.

22 But at any rate, that memorandum was pretty clear
23 in its description of these lands being an either
24 exclusion or avoidance areas, meaning you can't fight on
25 them. Now, we know that this has been an issue that the

1 applicants brought up. And if you recall at the April
2 2010 staff workshop, we had a conversation about this
3 then.

4 And basically the applicant feels that this not
5 an applicable LORS discussion, but we took that interim
6 policy guideline memorandum at face value and, in fact,
7 at the December 22nd, 2009 staff workshop, the BLM did
8 specifically request that we analyze that policy
9 guideline, if applicable, and in fact, make sure that we
10 include analysis that both considers LWCF lands -- in
11 other words, project implementation with LWCF lands
12 included in project implementation without LWCF lands
13 included.

14 So that is the general approach we just took that
15 policy guideline at face value and conducted the analysis
16 as the BLM had requested at the time.

17 MS. GANNON: Taking the memo at face value and
18 the provisions that are articulated in it, the way that I
19 read this, there are alternative provisions if the
20 conservation or preservation components of the policy
21 cannot be met. Do you know which provisions I'm
22 referencing?

23 MS. VAHIDI: No, I don't.

24 STAFF COUNSEL HOLMES: I'm sorry. I'm having
25 trouble -- Ms. Gannon, I'm having trouble understanding

1 you if you could speak a little bit more loudly maybe and
2 a little bit more slowly, that would help.

3 MS. GANNON: In the interim memo, there is a
4 discussion of the preservation or the conservation which
5 was just described. The policy, as I read it, also
6 references a procedure that is to be followed if this
7 preservation cannot be accomplished. Specifically, it
8 references taking the matter to the State director, do you
9 know where that --

10 MS. VAHIDI: Could you be more specific. Are you
11 looking at the May 28th, 2009 memorandum issued by the BLM
12 State office? And if so, which bullet item are you
13 talking about, because that's the month of interim policy
14 guideline memorandum that I was talking about?

15 MS. GANNON: I am sorry. I am being challenged
16 electronically today with my computer. I am having
17 someone else pull up that memo. It will just take one
18 second.

19 MS. VAHIDI: Sure.

20 HEARING OFFICER KRAMER: For the also
21 uninitiated, we're talking about the Catellus lands
22 basically?

23 MS. VAHIDI: Yes.

24 MS. GANNON: Yes, that's correct.

25 HEARING OFFICER KRAMER: Or Catellus?

1 MS. GANNON: Catellus.

2 HEARING OFFICER KRAMER: Catellus, okay.

3 MS. GANNON: I think we've almost reached
4 success.

5 STAFF COUNSEL HOLMES: I have a question about
6 this. If the applicant is going to be cross-examining the
7 witness on it, we don't -- none of us have this as a
8 cross-examination exhibit, unless it was submitted, with
9 your testimony, is that the case?

10 MS. GANNON: It was not submitted with our
11 testimony, but we understood that the staff made a
12 conclusion base specifically upon this memo. Is that not
13 what we just heard in testimony?

14 MS. VAHIDI: Yes.

15 MS. GANNON: So I think it's appropriate to
16 cross-examine the basis for the conclusion.

17 STAFF COUNSEL HOLMES: I wasn't objecting to the
18 question. It's just typically when there's a
19 cross-examination question on a document, applicant will
20 make copies for people that are at least in the room.

21 MS. GANNON: We can make it available by Email.
22 My understanding was, since the staff was relying upon it,
23 that it was appropriate to discuss it. But then there was
24 the request that we reference the specific language and
25 take the document up. But question certainly Email it to

1 other parties.

2 I'm sorry, do you have this document in front of
3 you?

4 MS. VAHIDI: Are you asking me?

5 MS. GANNON: Yes.

6 MS. VAHIDI: Yes, I do have it in front of me.

7 STAFF COUNSEL HOLMES: I do not

8 HEARING OFFICER KRAMER: Then it's probably not
9 an exhibit yet, correct?

10 MS. GANNON: It is not an exhibit.

11 HEARING OFFICER KRAMER: Okay, so can staff get
12 this thing --

13 MS. GANNON: It's described in the SSA. I mean,
14 because they made a determination about the LORS based
15 upon this.

16 MS. VAHIDI: And we can try to Email it to you.

17 HEARING OFFICER KRAMER: No, I'm just thinking
18 that for the record --

19 MS. MILES: It's reference in the SSA as well.

20 HEARING OFFICER KRAMER: -- now that you want to
21 take to her about it.

22 STAFF COUNSEL HOLMES: Yeah I think that for
23 the -- not only would it be helpful to mark it as an
24 exhibit, but I'm assuming that while the cross-examination
25 is going on, the other parties and Commissioners would

1 like to have access to it.

2 HEARING OFFICER KRAMER: Or how much of it -- how
3 much of it are you going to be quoting from, Ms. Gannon,
4 just a little bit?

5 MS. GANNON: Yeah. It's just a little bit.

6 HEARING OFFICER KRAMER: So it's something you
7 could read to us --

8 MS. GANNON: Absolutely.

9 HEARING OFFICER KRAMER: -- and then it could be
10 circulated later for people to take in the whole context.

11 MS. GANNON: That's correct.

12 HEARING OFFICER KRAMER: So go ahead with your
13 question then.

14 MS. GANNON: Okay. Under the second bullet, the
15 policy is setting up the framework as is described in the
16 SSA for ensuring consistency with this policy to preserve
17 these donated or acquired lands.

18 And the second bullet says, "Should the BLM
19 California managers have use authorization applications
20 pending, or received new applications on lands that meet
21 the above criteria, referencing the donated or acquired
22 lands, they are required to notify the State director and
23 set up a briefing to address how to respond to those
24 applications."

25 MS. VAHIDI: Okay.

1 MS. GANNON: Do you read that paragraph as saying
2 that those applications should not be considered under
3 this policy?

4 MS. VAHIDI: I do not read it as that. And
5 again, I will tell you that, and you guys were all there,
6 several occasions, and I don't know if Jim Stobaugh is
7 still on the line, but maybe BLM can chime in, if they
8 can.

9 We were told specifically to analyze this interim
10 policy guideline as it relates to this proposed project
11 site.

12 MS. GANNON: Maybe it can also help if Mr.
13 Stobaugh is still on the line and is willing to give his
14 been, recognizing he is not under sworn statement, there
15 is a third bullet that says should managers have inquires
16 related to pre-application activities for any land-use
17 authorization on lands that meet the above criteria,
18 you're supposed to notify the applicant and advise them to
19 avoid these lands or provide details on how they would
20 plan to operate or mitigate their project in a
21 manner-which is consistent with the values of the lands
22 donated or acquired.

23 Again, do you read that provision of saying this
24 policy therefore precludes use of these lands?

25 And also for the parties, if people want to see

1 this language, it's in the SSA at B.2-50. That's the
2 electronic copy. Electronically, that is the page number.
3 The hard copy is page C.8-20.

4 MS. VAHIDI: Yes the three bullet items are in
5 our LORS consistency data.

6 MS. GANNON: And this is really the whole salient
7 part of the memo, as I read it.

8 MS. VAHIDI: Yes. Those three bullet items, you
9 are correct, are the three items in the memo that
10 indicates to ensure consistency statewide with this
11 interim policy.

12 MS. GANNON: So again, I guess my question is in
13 this third bullet, the way I read it, there's an or
14 provision, which says that the BLM under this policy is
15 instructed to advise you to avoid these lands or to
16 provide details on how you're going to operate or mitigate
17 to make sure that the -- that the intent of this policy is
18 carried forth.

19 Again, do you read that as precluding under this
20 policy that it would be inconsistent with this policy to
21 make a proposal for how you could mitigate the impacts to
22 these lands?

23 MS. VAHIDI: Okay, again, the memo, and granted I
24 think any policy analyst would agree that there's not a
25 lot of detail provided. It's pretty clear that when you

1 have a set of mitigation lands, i.e., lands that were
2 originally set up to mitigate the impacts of other
3 projects, when a project on comes along and wants to site
4 facilities on those mitigation lands, that, you know, you
5 would have to talk to the land management agency or the
6 agency that has jurisdiction over those lands, i.e., in
7 this case BLM, and figure out how they want it analyzed.

8 So again, that was the guidance provided by BLM
9 at that time prior to the bifurcation of the
10 process -- the CEQA/NEPA process between the CEC and the
11 BLM.

12 Now, to further, you know, go on this discussion
13 and if you recall in the April Staff Assessment or staff
14 workshop that we had, the applicability of this federal
15 LORS is really up to the BLM to decide. And as you
16 recall, and it's no longer in the Supplemental Staff
17 Assessment, but originally, there was an entire
18 alternative that actually addressed the avoidance of LWCF
19 lands

20 So that alternative, at that time -- again, it's
21 not -- it was taken out when you redid your boundaries,
22 but at that time the reason that alternative was even
23 analyzed by all staff in all the sections of the Staff
24 Assessment was because BLM had provided us with that
25 guidance. They wanted a worst case scenario of how the

1 project would impact the lands, in the project were to be
2 sited on those lands and analysis of the project if those
3 lands were not sited upon.

4 So I don't know what more I can -- I hope that
5 answers your question.

6 MS. GANNON: I guess my question is different
7 than what I think you're responding to. I was not
8 asking --

9 MS. VAHIDI: Then maybe I'm not understanding
10 your question.

11 MS. GANNON: Okay, I was not ask whether the LORS
12 should apply or not. I was actually getting to the
13 language of this. But to simplify this, if the BLM found
14 that this project was approvable and therefore consistent
15 with their policies, would you make -- would that change
16 your determination about whether the project is consistent
17 with the applicable LORS?

18 MS. VAHIDI: Most likely, yes, because all along
19 I've said if they decide on the applicability and the
20 legality of it, then sure, if they've done analysis to
21 clear it under NEPA, then I would most likely change the
22 conclusion --

23 MS. GANNON: Excellent.

24 MS. VAHIDI: -- because if they're the land
25 management agency, they're the ones with jurisdiction.

1 They're the one that has the final authority.

2 MS. GANNON: Excellent, thank you.

3 No further questions.

4 HEARING OFFICER KRAMER: Well, that begs a
5 follow-up. So do we know what BLM's interpretation is at
6 this point?

7 MS. GANNON: We have been told that they have
8 made the determination that this is consistent with this
9 policy. This will be addressed in the final EIS, which is
10 to be published on Friday.

11 HEARING OFFICER KRAMER: Okay.

12 STAFF COUNSEL HOLMES: Staff would be happy to
13 address this issue in the briefs based on anything that
14 BLM provides in a filing after the close of hearings.

15 HEARING OFFICER KRAMER: And one of things we
16 will be discussing on the 18th is what I call a true-up,
17 if you will, of what staff is recommending and what BLM
18 ends up telling us they are proposing to do in the FEIS.
19 And this sounds like a definite topic to be on that list
20 to be discussed.

21 Okay, anything else for, let's see -- let me go
22 down the list of people who asked to cross-examine.

23 Mr. Brizzee -- I'm sorry I've forgotten how the
24 pronounce your name all of a sudden.

25 MR. BRIZZEE: Brizzee.

1 HEARING OFFICER KRAMER: Brizzee. You say
2 tomato, I say tomato.

3 Did you have any questions?

4 MR. BRIZZEE: Just a couple for Ms. Vahidi.

5 STAFF COUNSEL HOLMES: We're having trouble
6 hearing.

7 CROSS-EXAMINATION

8 BY MR. BRIZZEE:

9 Yes. My name the Bart Brizzee I'm deputy county
10 counsel with the county of San Bernardino and I have a
11 couple of questions regarding the historical uses of the
12 project site.

13 MS. VAHIDI: Okay.

14 MR. BRIZZEE: The first has to do with grazing.
15 Do you know if this site has historically been used for
16 grazing?

17 MS. VAHIDI: Not that I recall, but let me -- if
18 you go to -- do you have --

19 HEARING OFFICER KRAMER: Speak up please.

20 MS. VAHIDI: Caryn, what's the exhibit number for
21 the land use section?

22 STAFF COUNSEL HOLMES: All of the staff sections
23 are Exhibit 300. So if you just said the land use section
24 of Exhibit 300 you'd be okay.

25 MS. VAHIDI: Okay, section C.8.

1 MR. BRIZZEE: Let me help you there, go to page
2 11 I believe is where I'm going to be focusing my
3 questions.

4 MS. VAHIDI: Oh you're -- yeah. So actually
5 under horses and burros topic or which?

6 MR. BRIZZEE: Yes, I guess it falls under that.

7 MS. VAHIDI: Yes.

8 MR. BRIZZEE: Actually, it's the last paragraph
9 of that section.

10 MS. VAHIDI: Um-hmm.

11 MR. BRIZZEE: My question has -- and my questions
12 relate to -- this was in a BLM Cady Mountains allotment,
13 is that right?

14 MS. VAHIDI: You'd have to actually go back to
15 the settings section on page nine. If you go the C.8-9,
16 we talk about the specifics of the site with regard to
17 grazing.

18 So let me -- and I believe -- hold on.

19 STAFF COUNSEL HOLMES: Negar, if I could point
20 your attention to page C.8-11.

21 MS. VAHIDI: Yes.

22 STAFF COUNSEL HOLMES: The second full paragraph,
23 there's a discussion of grazing in the Cady Mountains.

24 MS. VAHIDI: Oh, yes. Okay. Yes, and actually
25 it just sparked my memory, this information was actually

1 provided directly by the BLM project manager at the time.

2 MR. BRIZZEE: Let me ask you about your
3 understanding, because I'm somewhat confused. You say it
4 is designated as a grazing allotment for 177,000 plus
5 acres.

6 MS. VAHIDI: Um-hmm.

7 MR. BRIZZEE: But then there's a conclusion about
8 in the middle of that paragraph that grazing is not
9 currently authorized.

10 MS. VAHIDI: Yes, that's because of -- as I
11 understand it based on what BLM has told us, it's based on
12 sort of the uses allowed on site and the fact that
13 allotment or that portion of the allotment that affects
14 the allotment, BLM doesn't believe that it would have an
15 affect.

16 So on the issue of the grazing allotment, BLM
17 provided us with this information. So they didn't feel
18 that it was -- they basically, because lack -- because of
19 lack of use and lack of grazing, they're looking to take
20 it probably out of the allotment. Hence, the discussion
21 of the voluntary relinquishment under the wet Mojave plan.

22 MR. BRIZZEE: Now, Ms. Vahidi, to me the term
23 voluntary means somebody has to give something up of their
24 own accord.

25 MS. VAHIDI: Correct, sure.

1 MR. BRIZZEE: So this would only be taken out of
2 the BLM grazing allotment if those who had the right to
3 graze there took it out of their own accord is that right?

4 MS. VAHIDI: Right, right.

5 MR. BRIZZEE: So --

6 MS. VAHIDI: That is true. But according to
7 BLM's staff from -- who were working this project, that
8 area is not, according to them, being used for grazing as
9 they identify it currently.

10 And the applicant can probably verify that,
11 because they probably are at the site more than we are.
12 But that was our understanding from the BLM, as they have
13 knowledge of their own resources than they manage.

14 MR. BRIZZEE: All right. So this paragraph is
15 basically your recitation of what BLM told you then?

16 MS. VAHIDI: Yeah, pretty much, because they
17 provided the information in an Email.

18 MR. BRIZZEE: So do you believe that authorizing
19 and building the project would eliminate a grazing right
20 that anybody has?

21 MS. VAHIDI: Not to my knowledge, no.

22 MR. BRIZZEE: All right. Let' move on to the
23 next session down, which is wilderness and recreation.

24 MS. VAHIDI: Um-hmm.

25 MR. BRIZZEE: And you sort of have a lead in

1 sentence. And the second sentence into that says as such
2 the proposed project would not directly disrupt wilderness
3 or recreation activities.

4 MS. VAHIDI: Okay.

5 MR. BRIZZEE: And my question goes to this, is
6 it -- would it not directly disrupt, because the area is
7 not currently being used for wilderness and recreation
8 activities or would it not disrupt, because there's plenty
9 of other places out there that people could go to have
10 their wilderness and recreation experiences?

11 MS. VAHIDI: It's actually a little bit of both.
12 The site is not known for recreational use, and you know,
13 the area does have a lot have other resources that can be
14 used for recreation activities.

15 MR. BRIZZEE: Now, as I understand this section
16 also, one of your conclusions is the cumulative effect of
17 the project on land use would be significant and not
18 capable of being mitigated; is that correct?

19 MS. VAHIDI: That's correct. And that's actually
20 the case for most of these projects that are currently
21 under review by the CEC and BLM.

22 MR. BRIZZEE: And that's because there are so
23 many projects that are being planned to be constructed out
24 there is that right?

25 MS. VAHIDI: Yeah. It's attributable to not just

1 the type of project, meaning renewables, but actually it
2 attributed to the conversion of a approximately a million
3 acres of open space to other uses or development.

4 MR. BRIZZEE: And along that line, I believe
5 there's something like 63 proposed solar projects and 62
6 proposed --

7 MS. VAHIDI: Yeah. And in fact the latest filing
8 by staff today's errata, I believe also has the listing,
9 but yet it is 62.

10 And let me -- I'm going to pull that up very
11 quickly if I have it in front of me, so I can give you the
12 exact number right now. Just give me a second.

13 Apparently, I'm having computer issues as well.

14 Okay, so based on -- Caryn does that have an
15 exhibit number, the latest --

16 STAFF COUNSEL HOLMES: Are you referring to the
17 rebuttal testimony that was filed?

18 MS. VAHIDI: No, no, no, the errata to the
19 supplemental -- or I guess, that's to -- it was just
20 Emailed out today, so I don't know if it.

21 MR. BRIZZEE: Ms. Vahidi, it's not necessarily
22 important to my questions the exact number of projects or
23 the exact acreage. But what I've got is --

24 MS. VAHIDI: Okay, I have it now, if you want me
25 to tell you.

1 MR. BRIZZEE: Well, it's roughly 120 projects
2 wind and solar and a about a million acres?

3 MS. VAHIDI: Yeah 63 solar, and 62 wind energy.

4 MR. BRIZZEE: An about those projects would take
5 up about a million acres, correct?

6 MS. VAHIDI: Just a little over a million acres,
7 yes.

8 MR. BRIZZEE: Now, does the million acres include
9 the mitigation?

10 MS. VAHIDI: Are you talking about the mitigation
11 of these projects?

12 MR. BRIZZEE: Correct. The mitigation land --

13 MS. VAHIDI: Mitigation land required? I don't
14 believe they do.

15 MR. BRIZZEE: So --

16 MS. VAHIDI: But I can't testify to the actual
17 scenario, because I didn't actually write the scenario.
18 But as I understand it, it does not include mitigation
19 lands.

20 MR. BRIZZEE: And has it been your experience in
21 working with these solar and wind projects that mitigation
22 is generally required in multiples of that project
23 acreage?

24 MS. VAHIDI: Actually, yes. And I'm sure it will
25 come up on the biology testimony, so...

1 MR. BRIZZEE: All right. Thank you. I have no
2 other questions of this witness.

3 MS. VAHIDI: Sure.

4 HEARING OFFICER KRAMER: CURE.

5 MS. MILES: No questions at this time.

6 HEARING OFFICER KRAMER: Okay, to get at -- Mr.
7 Brizzee, just so we can understand the county's concern it
8 was alluded to a little bit by the supervisor's
9 representative, is it that in setting aside the land, it
10 will -- among the consequences will be that the land will
11 no longer be a part of the tax base, is that a part of the
12 county's concern?

13 MR. BRIZZEE: That is a significant part county's
14 concern. But an equal part, and Mr. Newcombe can probably
15 address this tomorrow when he talks about the county's
16 adopted policy, is the historic uses of these projects,
17 which, as we understand it, would be taken off the table,
18 both the project site as well as the mitigation land.

19 HEARING OFFICER KRAMER: Because they are --

20 STAFF COUNSEL HOLMES: I'm sorry, we're having
21 trouble hearing.

22 HEARING OFFICER KRAMER: Yeah, you weren't
23 projecting.

24 MR. BRIZZEE: Sorry.

25 HEARING OFFICER KRAMER: Could you repeat your

1 response.

2 MR. BRIZZEE: Yes.

3 HEARING OFFICER KRAMER: Verbatim.

4 (Laughter.)

5 MR. BRIZZEE: Yes can I have the reporter read
6 that answer back.

7 It is the concern, not only for the tax
8 implications of these projects, but also the historic
9 uses, at least as we're talking about this one right here,
10 land use, and that is these sites that were traditionally
11 used for grazing, wilderness, recreational use, off road
12 vehicles, our concern is that in addition to the project
13 acreage also, the mitigation acreage, which is generally
14 in multiples as least as we've seen it in the projects, in
15 which we've been involved, takes this land out of the
16 capability being used for those historic uses.

17 HEARING OFFICER KRAMER: And if somebody is, for
18 instance, grazing on BLM land, the county can tax the
19 possessory interests, correct?

20 MR. BRIZZEE: I believe that's the case.

21 HEARING OFFICER KRAMER: Whereas, if the land is
22 just lying there tortoises are not taxed, and so the
23 county would receive no tax income, because it's federal
24 land?

25 MR. BRIZZEE: Correct.

1 STAFF COUNSEL HOLMES: I'm sorry, Mr. Kramer,
2 we're still having trouble. I heard something about tax
3 implications and taxing BLM land and grazing, but we're
4 not following it. What's happening is that we're losing
5 every third or fourth word.

6 HEARING OFFICER KRAMER: Okay. Our sound man is
7 on it. Well, I was just trying to clarify from my own
8 perspective, you know, thousand financial part works out.
9 And as I understand -- I'll summarize and then Mr. Brizzee
10 can tell me if I've put words in his mouth.

11 Basically, the county is concerned about -- well
12 lost tax revenue, and that can come from either private
13 lands that are basically converted to open space. There
14 would still be some tax revenue there, but presumably the
15 valuation of the property would be less. And therefore,
16 the taxes would be less.

17 And then in the case of federal land, if the land
18 is lying vacant, the county doesn't receive any sort of
19 taxes there, because the federal government is exempt from
20 county taxation, property taxation. But if some private
21 party uses the federal land for a private or commercial
22 use, that's what they call a possessory interest. And
23 that's an interest in real property that can be taxed by
24 the county, and brings them some more revenue.

25 And then secondarily, or in addition, they are

1 also interested in seeing the multiple use of these lands
2 maintained, so that presumably their residents, and
3 tourists that they would like to come to the area are able
4 to use those lands for recreation and other uses, which
5 would be precluded in most cases, if it's set aside as
6 habitat or it has solar facilities on it.

7 Is that a fair summary, Mr. Brizzee?

8 MR. BRIZZEE: I think that is very accurate,
9 Hearing Officer Kramer.

10 STAFF COUNSEL HOLMES: Thank you, that was much
11 clearer.

12 ASSOCIATE MEMBER BYRON: If I may, Mr. Kramer,
13 Mr. Kramer could explain those things a lot better than
14 can I, Mr. Brizzee, as an attorney. But as one of the
15 members on this Committee, I note that the county does not
16 currently intend on calling witnesses or producing
17 documentary evidence during this hearing.

18 I think we'd be very interested in hearing more
19 from the county and understanding in complete detail what
20 your interests and concerns are in this project. And this
21 has been the first real summary I've heard, I believe,
22 since we haven't received anything in writing. So we're
23 very interested in hearing what you have to say.

24 MR. BRIZZEE: All right. Thank you,
25 Commissioner.

1 HEARING OFFICER KRAMER: That concludes land use,
2 I believe. Is there anything else from the parties?

3 MS. GANNON: Not on land us, no.

4 HEARING OFFICER KRAMER: Okay.

5 MR. BASOFIN: Excuse me, Mr. Kramer, Josh Basofin
6 with Defenders of Wildlife. I just wanted to clarify
7 since we have gotten into this subject of land use and
8 particularly the Catellus lands, the acquired and donated
9 lands, I know that staff's intention was to sponsor
10 testimony by a BLM representative. And I'm wondering if,
11 since this is within their domain, if we'll have an
12 opportunity to ask them questions about this topic when
13 they do appear or are called into the hearing.

14 HEARING OFFICER KRAMER: Ms. Holmes, did you
15 intend to have more witnesses responsive to Mr. Basofin's
16 interest?

17 STAFF COUNSEL HOLMES: No, I don't believe staff
18 plans to call a BLM representative with respect to land
19 use.

20 HEARING OFFICER KRAMER: You might try posing,
21 although you didn't ask for any time, I could give you a
22 couple minutes to ask your questions of either the
23 applicant's or the staff's witnesses if you desire?

24 MR. BASOFIN: Well, I don't have any questions at
25 the moment, but it was my understanding from Mr. Adams at

1 the prehearing conference, that we would have witnesses
2 from both CDFG, BLM and Fish and Wildlife Service.

3 STAFF COUNSEL HOLMES: That's for biological
4 resources.

5 MR. BASOFIN: So I'm just wondering if it's
6 appropriate to combine this topic or the hold the topic
7 over until that time.

8 STAFF COUNSEL HOLMES: I believe -- my
9 understanding is that the agency witnesses that will be on
10 the panel tomorrow will be talking only about biological
11 resources.

12 HEARING OFFICER KRAMER: So it will not be
13 concerned about the ownership of the ground itself.

14 Okay, well, Ms. Basofin, what would be the nature
15 of your questions regarding -- that would be specific to
16 the Catellus lands as opposed to just general biological
17 impacts?

18 MR. BASOFIN: Well, because we've gotten into the
19 topic of the Catellus lands here and the federal decision
20 of whether to allow development on those lands, it seems
21 appropriate to have a BLM representative who comes from an
22 agency who will be making that decision to testify.

23 HEARING OFFICER KRAMER: Well, but what is the
24 relevance of the BLM decision to the Commission decision
25 is only as I suppose evidence of whether there is this

1 LORS issue. But it certainly would be inappropriate for
2 us to be trying to litigate or instruct -- and I'm sure
3 they would not take instruction from the Commission the
4 BLM in deciding, you know, how their lands are going to be
5 used.

6 So I'm still not sure I see the connection and
7 why -- what we would gain by asking them specific
8 questions about that decision.

9 And I'll also note that it wasn't -- you didn't
10 highlight it earlier, so we're -- you know we're at a
11 little bit of a timing disadvantage here trying to bring
12 those people in at this point on this topic.

13 MR. BASOFIN: Okay. I'll withdraw it.

14 HEARING OFFICER KRAMER: Okay. That's it for
15 land use.

16 Wow, this day has gone faster than we expected.

17 ASSOCIATE MEMBER BYRON: Don't that say that Mr.
18 Kramer.

19 (Laughter.)

20 ASSOCIATE MEMBER BYRON: Thank you, Ms. Leiba.

21 HEARING OFFICER KRAMER: Well, I think that was
22 pretty obvious. So hopefully that wasn't a surprise to
23 anyone.

24 Okay, let's see you needed, Ms. Miles, about 15
25 minutes to get Mr. Marcus back up. So if you could send

1 that note. Well, let's see. Staff, are you ready on
2 efficiency and reliability or do you need a minute to
3 gather your troops.

4 STAFF COUNSEL HOLMES: We were under the
5 impression that transmission system engineering is next.
6 I could try to fetch the people who are doing power plant
7 efficiency and reliability, but we're ready to go on
8 transmission system engineering.

9 HEARING OFFICER KRAMER: Okay. Well, can Mr.
10 Marcus be up quickly. She's checking. So we'll go off
11 the record for just a couple seconds and -- but if you
12 could also queue them up, we very likely could get to both
13 before the public comment period.

14 MS. GANNON: And Hearing Officer Kramer, we could
15 like to add a witness to the transmission panel, if at all
16 possible, Sean Gallagher who's previously testified.

17 HEARING OFFICER KRAMER: Okay. How long would he
18 need?

19 MS. GANNON: I can just have 10 minutes of
20 direct.

21 HEARING OFFICER KRAMER: Okay. We went off the
22 record, right?

23 THE COURT REPORTER: No.

24 HEARING OFFICER KRAMER: Okay, well let's go now.

25 (Thereupon a recess was taken.)

1 HEARING OFFICER KRAMER: Back on the record and
2 use our best radio voices.

3 Our next topic is power plant efficiency and
4 reliability. And then we are going to try transmission
5 system engineering. Dinner is going to be brought in at
6 about 5:30. And then we'll have public comment at 6. And
7 following public comment we will -- or perhaps even before
8 that, if we have time, we'll deal with the uncontested
9 items.

10 STAFF COUNSEL HOLMES: Hearing Officer Kramer?

11 HEARING OFFICER KRAMER: Go ahead.

12 STAFF COUNSEL HOLMES: I think that it may take
13 those of us here in Hearing Room A a bit more than a half
14 an hour. If you'll recollect from doing late hearings
15 here before, we need to move cars or the garage locks, and
16 we can't get our cars out. So we may need more than a
17 half an hour.

18 HEARING OFFICER KRAMER: Well, is it critical for
19 all of you to hear the public comment?

20 STAFF COUNSEL HOLMES: I would like to hear the
21 public comment. If you want to go ahead, go ahead.

22 HEARING OFFICER KRAMER: Okay, so you'd like us
23 to break maybe at 5:15, if we can then?

24 STAFF COUNSEL HOLMES: I think that would be
25 better.

1 HEARING OFFICER KRAMER: Okay, well, we'll shoot
2 for that.

3 Okay, so -- and then after public comment, we
4 were going to try to do -- bring forward project
5 alternatives from Friday. So let's with no further delay,
6 let' go into transmission -- I'm sorry, power plant
7 efficiency and reliability. And we have two witnesses
8 from the applicant.

9 Ms. Gannon.

10 MS. GANNON: That's correct. We are calling way
11 Ron Votaw and Rick Reiff. Mr. Reiff was sworn in earlier
12 this morning Mr. Votaw arrived later and has not been
13 sworn in.

14 HEARING OFFICER KRAMER: So, Mr. Votaw, if you
15 could raise your right hand.

16 (Thereupon MR. WAYMON VOTAW was sworn, by the
17 the Hearing Officer to tell the truth, the whole
18 truth and nothing but the truth.)

19 HEARING OFFICER KRAMER: Thank you.

20 Whereupon,

21 WAYMON VOTAW and RICK REIFF
22 were called as witnesses herein, and after first
23 having been duly sworn, were examined and
24 testified as follows:

25 DIRECT EXAMINATION

1 BY MS. GANNON:

2 Good afternoon, Mr. Votaw. Are you the same
3 Waymon Votaw who gave written testimony earlier in these
4 proceedings that are marked as Exhibit 80 and 89?

5 MR. VOTAW: That's correct.

6 MS. GANNON: And do you have any corrections or
7 additions to make to that testimony?

8 MR. VOTAW: I have just one minor correction on
9 the rebuttal testimony

10 MS. GANNON: So that is Exhibit 89; is that
11 correct?

12 MR. VOTAW: The rebuttal testimony, correct, yes.
13 It states in one of the final questions, I believe the
14 final question, that Maricopa Solar --

15 STAFF COUNSEL HOLMES: I'm sorry. I'm having
16 trouble hearing Mr. Votaw, could you speak up a little bit
17 please.

18 MR. VOTAW: Sure, I'll try again.

19 So the Maricopa Solar facility is listed there as
20 60 megawatts, rather than 60 SunCatchers. I just wanted
21 to make sure that that was clear. It's 1.5 megawatts or
22 60 SunCatchers.

23 STAFF COUNSEL HOLMES: Thank you.

24 MS. GANNON: Thank you. No further additions or
25 corrections to make?

1 MR. VOTAW: No, that's it.

2 MS. GANNON: And is the resume that was attached
3 to your earlier testimony still valid and correct?

4 MR. VOTAW: It is.

5 MS. GANNON: I assume no one -- if any party
6 wants to question his expertise?

7 Hearing none.

8 STAFF COUNSEL HOLMES: I'm sorry. I can't here.
9 I'm sorry.

10 MS. GANNON: I was just asking if anyone wanted
11 to question him about his ability to testify as and expert
12 on these matters, based on the resume that was submitted
13 with his testimony.

14 STAFF COUNSEL HOLMES: No.

15 MS. GANNON: Thank you.

16 Mr. Votaw, have you had an opportunity to review
17 the analysis included in the Supplemental Staff
18 Assessment?

19 MR. VOTAW: I have.

20 MS. GANNON: And can you give us your overall
21 impression of that analysis as it relates to plant
22 reliability and efficiency?

23 MR. VOTAW: I'll try to be brief. The staff's
24 approach for availability and for reliability is generally
25 appropriate and typical. Their methodologies for the

1 comparison analysis of availabilities for power facilities
2 is industry norm. I think it's appropriate for our
3 project.

4 They've also made or found conclusions relative
5 to equipment availability or for fuel availability, and
6 also for our facility's ability to withstand natural
7 hazards, such as seismic, and wind loading and erosion. I
8 think all those again are appropriate. I agree with their
9 findings and conclusions.

10 One area, however, was on plant maintainability.
11 And their findings, I believe, were inconclusive. But, I
12 think --

13 MS. GANNON: And do you believe you could make a
14 conclusive determination with regard to this?

15 MR. VOTAW: Well, in my experience with Maricopa
16 Solar, I believe that it has demonstrated that the
17 equipment is maintainable. And by that I mean, it is
18 demonstrated both through the operation of the facility,
19 the measurement of its performance through availability
20 and reliability metrics, that it is performed at our
21 expectations. And with the technology then carrying
22 forward to Calico project, we expect to see similar
23 results at that future facility.

24 MS. GANNON: And what was the relative efficiency
25 that you have demonstrated at Maricopa?

1 MR. VOTAW: Efficiency or availability?

2 MS. GANNON: Availability, I'm sorry.

3 MR. VOTAW: Availability, in my prior testimony,
4 was through July 21st. Just to update that for
5 availability through July 28th, the SunCatcher
6 availability is operating at 97.4 percent. And the
7 overall field, including the rest of the balance of plant
8 equipment is operating at 96.1 percent availability.

9 MS. GANNON: And are these numbers within the
10 range of what you were anticipating?

11 MR. VOTAW: We are targeting 98 percent for
12 Calico for periods beyond the first operating year. So
13 the initial year we're assuming a lower target, but the
14 commercial years two through 20, we expect to see 98
15 percent availability.

16 Even in the first 140 days of operation at
17 Maricopa Solar, we're in striking distance of that, even
18 with the facility in its early days of operation.

19 MS. GANNON: So you've reached this level of
20 availability -- I'm sorry, how long has the facility been
21 in operation?

22 MR. VOTAW: Through today, 140 days.

23 MS. GANNON: Thank you.

24 And there has been some questions raised about
25 the ability to make generalizations for a large scale

1 operation based upon a smaller commercial operation, like
2 as has been demonstrated at Maricopa. Can you respond to
3 that criticism?

4 MR. VOTAW: There's been two comments that I'm
5 aware of. One related to a need to test smaller scale
6 facilities prior to the full scale up to a large
7 commercial facility of the size of the Calico project.

8 What our approach has been from both a
9 operational and from a commercial management standpoint,
10 is to use the building block of Maricopa Solar to test
11 capabilities, such as commercial capabilities for
12 operations, the maintenance processes and practices and
13 systems or the business reporting other capabilities
14 required for the operation and maintenance of these
15 facilities.

16 If can you operate them at the 1.5 megawatt
17 level, the conversion from that to a larger scale facility
18 is the duplication, or the repetition of that scale
19 project at multiple scale to again carry those same
20 capabilities, be it maintenance processes, the
21 computerized maintenance management systems, the
22 commercial reporting systems. All those are then scalable
23 from the 1.5 megawatt building block, which is used as the
24 base component for all these larger facilities.

25 So our experience at Maricopa Solar gives us from

1 an asset management standpoint, confidence that we can
2 easily scale to the larger scale facilities.

3 MS. GANNON: And are you familiar with the
4 testimony which was cited by staff in the Supplemental
5 Staff Assessment of a Dr. Butler that was given in a 2007
6 proceedings before the PUC?

7 MR. VOTAW: I've read his report.

8 MS. GANNON: And can you comment upon the
9 criticisms or critiques that Dr. Butler raised in those
10 proceedings?

11 MR. VOTAW: The report appears to be based
12 on -- or it is based on equipment that is not ours, right.
13 So the equipment that I operate at Maricopa Solar was not
14 the direct focus of his report. He's focused on SAIC
15 equipment and it's also -- the report is somewhat dated.

16 MS. GANNON: So the actual technology that he was
17 commenting on is a similar but not the same technology; is
18 that correct?

19 MR. VOTAW: It's similar, in that it's a Stirling
20 engine based concentrated solar technology. But ours has
21 undergone considerable work for commercialization. So
22 it's similar in base design, but drastically different
23 just based on the modifications that we have made to our
24 equipment beyond prototype stage.

25 MS. GANNON: And you mentioned that the -- it may

1 be dated. Does the passage of time -- how has that
2 affected the validity of any criticism that he was raising
3 at that point?

4 MR. VOTAW: Well, I think just from a -- looking
5 at the SunCatcher technology specifically, the report was
6 based or was written at a time when the SunCatcher was in
7 its prototype stage. It was at the model power plant
8 stage at Sandia National Labs.

9 At that stage, we were experiencing some of the
10 same design issues, where we were trying to overcome rod
11 seal leakage, which his report mentioned for SAIC.

12 They also had heater head gas leakage, which we
13 had to design through the prototype stage to design those
14 issues out of our systems.

15 So since the time of the report, we've moved
16 through our full R&D and prototype stage to get into two
17 successive or two subsequent generations of equipment, the
18 X-0 and the X-1 with Maricopa Solar having fielded is X-1
19 version of the equipment, which was -- again, X-0 was
20 fielded in 2009, which was after the report was issued.

21 And then obviously X-1 was fielded at Maricopa,
22 which was after the X-0 but coming on line commercially in
23 2010.

24 MS. GANNON: Thank you. And turning now to you
25 Mr. Reiff, are you the same Rick Reiff who provided

1 written testimony in these proceedings, which has been
2 marked as Exhibit 76?

3 MR. REIFF: That's correct.

4 MS. GANNON: And is the resume attached to that
5 written testimony still valid and accurate?

6 MR. REIFF: Yes.

7 MS. GANNON: Mr. Reiff, can you describe the role
8 that you have played with relationships to the Maricopa
9 project and the Calico project?

10 MR. REIFF: Sure. I'm with R.W. Beck. We're an
11 independent engineer that provides due diligence technical
12 review services for projects, power generation projects is
13 my area of expertise. I've been involved with a multitude
14 of different generation technologies, including solar.

15 We were hired by Stirling Energy and Tessera last
16 April to provide independent analysis and due diligence
17 services, in association with the respective projects, as
18 well as the technology. So during the past year, we have
19 been involved in reviewing the supply side, the McLaren
20 Engine Test facility, the Sandia facility and now the
21 Maricopa facility to provide an independent assessment of
22 the technology.

23 MS. GANNON: And I know your written testimony
24 provides a more detailed summary of your analysis and your
25 conclusions. Can you provide for the Committee a summary

1 of those conclusions?

2 MR. REIFF: Yes, we have found that SES and
3 Tessera have taken the steps necessary and involved the
4 process as necessary to go from the prototype stage of
5 development into the commercial stage. The Maricopa
6 facility is that closure of that gap, because as
7 referenced before, the building block or the module used
8 to commercialize this technology is the 1.5 megawatts, 60
9 unit block.

10 So this facility is -- at Maricopa has been
11 operating since March, mid-March, when it went commercial.
12 We're analyzing the data now, and have analyze it
13 up -- our analysis is up through June. We got recent data
14 that we're going through that Waymon talked about, that
15 helps give us a better level of comfort with regard to the
16 reliability of the unit coming in to, you know next phase,
17 which is the commercial application.

18 And those high numbers in the nineties, you don't
19 find that a lot with other technologies as this stage of
20 development. So that's encouraging from the standpoint of
21 being a reliable source.

22 Again, it call kind of falls back on this -- the
23 way the project the built, you know, using the one and a
24 half megawatt modules and basically replicating that
25 process and building a larger plant.

1 MS. GANNON: So when you are looking at our
2 analyzing the -- doing a due diligence on the
3 dependability of the technology, what's your primary
4 focus. Are you looking at the technology itself? Are you
5 looking at the maintenance? What is your primary focus?

6 MR. REIFF: Well, we look at it all actually. We
7 look at the technology, what data is available to do an
8 assessment on the ability of the technology to operate on
9 a continuous basis. We look at the -- with regard to the
10 maintenance, we look at the ability to maintain the
11 equipment, you know, how long it takes to get the
12 equipment down and maintained or replaced. We look at the
13 costs associated with that. So we look at a multitude of
14 things with regard to the technology and the maintenance
15 of it.

16 MS. GANNON: And taking all these factors in
17 consideration, what conclusion did you come to about the
18 Calico Solar Project?

19 MR. REIFF: That it's -- that the technology is
20 suitable, given the results we've seen at McLaren, Sandia,
21 and Maricopa, that it's -- the technology is suitable for
22 commercial applications.

23 MS. GANNON: I think you just heard me discussing
24 with Mr. Votaw, Dr. Butler's testimony before the PUC. In
25 that same testimony, he had stated that it would be

1 beneficial or desirable our even necessary to first do a
2 one megawatt, then a 10 megawatt, then a 100 megawatt
3 before you went to a large scale facility. Can you
4 comment upon that suggestion with regard to this project?

5 MR. REIFF: Yes. His report talks about, you
6 know, that he should have at least 2,000 -- between 2,000
7 and 10,000 hours between meantime failures before they go
8 to the commercial phase.

9 One of the -- the week kind of link with this
10 technology historically has been a seal that is stationary
11 that the piston rod goes up and down through.

12 When Dr. Butler did his analysis in 2007, they
13 were only getting a couple hundred hours of run time
14 before those seals failed. And as such, he said wait, you
15 know, before you go to the next step, you've got to solve
16 this problem with the seals.

17 They've run over 6,600 hours with the redeveloped
18 seal, which means, okay, you fall within his recommended
19 range for meantime between failures of the 2,000 to 10,000
20 hours. They're still running. And we may have an even
21 more recent updated number on how many hours they've run
22 on that seal.

23 So they've met that criteria. The building block
24 of 1.5 megawatts at Maricopa, I'm not sure you'd learn a
25 lot by building you know a 4 megawatt or a 4.5 megawatt

1 plant, when you're basically replicating the 1.5 megawatt
2 module on a larger scale.

3 So I wouldn't necessarily agree you've got to go
4 1, 10, 100 then on from there. I use the analogy of like
5 gas turbine plant. You've got a gas turbine and you're
6 proving its viability. Before you build a three unit
7 plant, you need to build a two unit plant, if you've got a
8 good understanding with regard to one unit operating.

9 Similar process here is you've got a 1.5 megawatt
10 block and you're going to replicate it into a series of
11 similar units all operating together using basically
12 standard technology to group them altogether.

13 MS. GANNON: So it would be fair to state that
14 you need to look at the type of technology when you're
15 making the determinations about what you need to look at
16 to make sure of your reliability determinations?

17 MR. REIFF: Exactly. This technology is
18 different than a lot of technologies that go through
19 teething problems with scale up. You know, a tower, a
20 concentrated solar tower or a trough system would -- I'd
21 be a lot more concerned going from 1.5 megawatts in that
22 application up to a thousand, or you know, 200 megawatts,
23 because the scale up there is a little different than
24 here. We're using modules.

25 So when you initially look at this, you've got to

1 keep that in mind that this is a replicated module type
2 application, and not going from, you know, a small size to
3 a huge size with a one point of failure type of piece of
4 equipment.

5 MS. GANNON: Thank you. I will offer these
6 witnesses for cross.

7 HEARING OFFICER KRAMER: Any cross-examination?

8 STAFF COUNSEL HOLMES: Staff has
9 cross-examination.

10 HEARING OFFICER KRAMER: Go ahead Ms. Holmes.

11 CROSS-EXAMINATION

12 BY STAFF COUNSEL HOLMES:

13 I want to apologize in advance to Mr. Votaw,
14 because he answered similar questions just last week with
15 respect to the Imperial project, but I'm going to go
16 ahead, because I'd like the information on the record for
17 this case as well.

18 I want to specifically ask you some questions
19 about the Maricopa facility. You said there are 60
20 engines at the Maricopa facility; is that correct?

21 MR. VOTAW: There's 60 SunCatcher installations
22 with a larger number based on spares of actual engines or
23 PCUs.

24 STAFF COUNSEL HOLMES: I'm sorry. I couldn't
25 hear your answer clearly. Could you please repeat it.

1 MR. VOTAW: There are 60 SunCatcher installations
2 at Maricopa Solar. There are a larger number of engines.

3 STAFF COUNSEL HOLMES: Thank you. And how many
4 individual engines are there?

5 MR. VOTAW: Today, there are 63.

6 STAFF COUNSEL HOLMES: And have all 63 engines
7 operated?

8 MR. VOTAW: I'm sorry could you say that one more
9 time?

10 STAFF COUNSEL HOLMES: Have all 63 engines
11 operated?

12 MR. VOTAW: Yes, they have.

13 STAFF COUNSEL HOLMES: How many of those 63 have
14 experienced failure, and by failure I mean they did not
15 operate when they were called upon to do so?

16 MR. VOTAW: There have been failures on a
17 minority or a subset of the engines. The majority of the
18 engines have been running in a steady state since March.

19 STAFF COUNSEL HOLMES: So 31.5 were left have
20 experienced failure of some sort?

21 MR. VOTAW: Yeah. I haven't checked the exact
22 number, but --

23 STAFF COUNSEL HOLMES: That's fine.

24 MR. VOTAW: -- well over half are running in
25 steady State.

1 STAFF COUNSEL HOLMES: Thank you. And have from
2 the beginning?

3 MR. VOTAW: Since March, correct.

4 STAFF COUNSEL HOLMES: How many have required
5 maintenance since March?

6 MR. VOTAW: Well, the ones that are in that
7 steady state operation, are put into -- are put on sunny
8 stay, right. As the DNI is available, those engines are
9 run and produce power, the ones that are in that steady
10 state.

11 There is a subset, a minority of the engines,
12 that have had maintenance interventions. And again, these
13 engines are expected to have maintenance interventions
14 periodically.

15 So I can't give you an exact number of the number
16 of engines that have been worked on, but it's a minority.
17 It's a subset.

18 STAFF COUNSEL HOLMES: So are you saying that the
19 half or more engines that have -- I can't remember the
20 phrase you used, been -- the ones that have not -- the
21 ones that have been operating when called upon, what did
22 you -- what phrase did you use to describe those?

23 MR. VOTAW: I think I called them running in a
24 steady State.

25 STAFF COUNSEL HOLMES: Steady State. Thank you.

1 So those engines that have been running in steady state,
2 have any of them required maintenance?

3 MR. VOTAW: No, they have not. The -- no by
4 steady state I mean that they have not hit a -- they've
5 not hit their first required preventive maintenance and
6 they've not encountered a need for reactive maintenance
7 interventions.

8 STAFF COUNSEL HOLMES: Thank you. Do you know
9 how many hours of maintenance has been required for the
10 minority of engines that have failed to operate when
11 called upon?

12 MR. VOTAW: You mean, maintenance labor hours
13 or --

14 STAFF COUNSEL HOLMES: Yes.

15 MR. VOTAW: I don't have that number.
16 Commercially what -- well, there's two things obviously
17 you could track. You could track the labor resource
18 inputs to the engines for a -- from a maintenance
19 standpoint. We have been more focused on the critical
20 piece of the lost production hours, which drives both
21 availability calculations as well as utilization.

22 STAFF COUNSEL HOLMES: Have you been able to
23 calculate a meantime between failure for the Maricopa
24 facility?

25 MR. VOTAW: I don't have that number.

1 STAFF COUNSEL HOLMES: One moment please.

2 Did I hear you -- oh, I'm sorry. I'll ask this
3 question later.

4 Have the SunCatchers failed to operate due to
5 problems other than components -- excuse me. Have the
6 SunCatchers failed to operate due to problems with
7 components other than the PCU?

8 MR. VOTAW: There have been -- well, contributors
9 to our full facility availability include required
10 maintenance on the SunCatcher PCU, the SunCatcher drives,
11 as well as some of the balance of plant equipment,
12 including the collection system, the control system, and
13 the hydrogen supply system. But all those systems are
14 aggravated in the field availability number.

15 STAFF COUNSEL HOLMES: What's the highest
16 capacity factor on any given day for the facility?

17 MR. VOTAW: I don't know what our peak is, in
18 that I just don't have the number in front of me. Our
19 cumulative capacity factor through the 28th of July was
20 26.7 percent, but that's smoothed based on full run days
21 versus ragged days that have clouds and low DNI days. And
22 instantaneous peak capacity, I just don't that have number
23 in front of me.

24 STAFF COUNSEL HOLMES: How many engines would be
25 running on full capacity days?

1 MR. VOTAW: I'm sorry, I didn't follow the
2 question.

3 STAFF COUNSEL HOLMES: I'm wondering how many
4 SunCatchers would be operating on full capacity days?

5 MR. VOTAW: Oh, it's 60. 60 SunCatchers, the
6 full facility.

7 STAFF COUNSEL HOLMES: So is it your projection
8 that, or is it your objective to have all 60 SunCatchers
9 available for operation during sunlight hours?

10 MR. VOTAW: That's correct. That's the
11 objective.

12 STAFF COUNSEL HOLMES: One moment, please.

13 I have some questions to the recent testimony
14 about commercialization of this technology. I'm wondering
15 what specific activities were undertaken to move this to a
16 point where, I believe it was Mr. Votaw -- Mr. Reiff said
17 that this was -- that this was an appropriate technology
18 for commercialization. Could you please describe that?

19 MR. REIFF: When I meant by that is that steps
20 were taken by the applicant to resolve issues that were
21 causing problems with reliability, which is a big
22 component of being ready for commercialization. There are
23 other aspects as well. They're not necessarily related to
24 the reliability.

25 But with regard to supply chain vendors being

1 able to produce the numbers of equipment, having contracts
2 in place to support that, so there's a whole host of
3 things that are involved that we've looked at that made us
4 realize or actually opine that the SunCatcher technology
5 was ready for commercial application.

6 STAFF COUNSEL HOLMES: I'd like to ask you to
7 answer that question specifically with respect to the
8 steps and issues associated with the technology itself?

9 MR. REIFF: Okay. With regard to the technology,
10 as I mentioned earlier, they were having problems, you
11 know, five years ago or so, when they were only getting a
12 approximately a couple hundred hours of run time between
13 failure for the units. That was primarily at Sandia,
14 where a lot of the work was done by multitude of
15 companies.

16 And then SES expanded their analysis and
17 incorporated McLaren to run, I think, six units at
18 McLaren. They've different test sells there, where they
19 run the units continuously. They stress the units to 120
20 percent. They do a whole host of things there as well as
21 at Sandia as well. They've got test rigs that they've
22 established to find out what the weak link is. They've
23 extended the life, as I mentioned earlier, of the seal,
24 the piston rod seal to be able to withstand operation for
25 65 -- 6,650 hours, Six thousand six hundred and fifty

1 hours.

2 That's not constant running. That's running
3 hours. So it's on sun, off sun. It's idle. Back on sun
4 again. So it's gone through cycling and has acquired
5 about 6,600 hours of run time between failure.

6 That step was taken. In addition to that, the
7 technology they've cut down the number of parts. And for
8 example, the number of hydrogen leakage points on the old
9 engine, the Kokam's engine. There were 81 points that
10 were subject to leakage.

11 Through the assistance with McLaren and Lenmar
12 they've been able to reduce the leakage points by half.
13 It's down the 40. There are other components they've
14 streamlined to make the engine easier to manufacture,
15 easier to maintain and more reliable.

16 So there's a whole host of things that have
17 happened between 2007, when Dr. Butler's assessment was
18 made to 2010. And it's our review of those steps that
19 were taken that got us comfortable with them being able to
20 take the units to commercial operation.

21 STAFF COUNSEL HOLMES: Did I understand you
22 correctly that each PCU would need to have hydrogen seals
23 replaced, you would expect a approximately 6,600 hours?

24 MR. REIFF: That's the average that a unit can
25 run before replacement. Let's remember a couple of

1 things. That unit if it's out of service can be removed
2 from the dish array in about an hour or maybe even less.
3 I think it's like 28 minutes.

4 So if a unit is not operating, they replace that
5 unit with one out of the spare parts supply, and can
6 replace the unit that has problems and maintain it during
7 off sun hours or even during -- regardless of the time,
8 because it's not in the array. So you maintain high
9 availability rates as evidenced by the results of
10 Maricopa, because of the ability to change units quickly
11 and maintain units available for operation real quickly.

12 So one unit coming down, you can pull out of
13 service, replace it with a unit that's ready to operate,
14 go work on it while the other unit is generating power.
15 So just keep that in mind when you look at these
16 availability numbers and the ability of this technology to
17 operate on a commercial basis.

18 STAFF COUNSEL HOLMES: And do you have a sense of
19 how the project would be able to scale up the kinds of
20 maintenance activities that you just talked about?

21 MR. REIFF: Well, that's the benefit of Maricopa.
22 We're learning a lot with regard to they had 63 units
23 there and have been able to maintain 90 plus percent
24 reliability in the first couple of months of operation.
25 That's a pretty good track record.

1 So we'll use the information gained from that to
2 help finalize or streamline what we think is necessary
3 with regard to the number of spare units as well as the
4 information from Sandia and McLaren. All three of these
5 different facilities are providing data that SES and
6 Tessera can use to determine the level of spare parts
7 necessary to support a high availabilities.

8 STAFF COUNSEL HOLMES: Is the number of spare
9 engines proportional? In other words, if there's -- you
10 need three engines for 60 SunCatchers, would we expect a
11 proportional number of spare engines for 34,000
12 SunCatchers?

13 MR. REIFF: I'm not sure. We'll have to do the
14 analysis as we get a little more data on Maricopa. I'm
15 not sure it's proportional.

16 STAFF COUNSEL HOLMES: And I'm very poor at math.
17 Can you tell me approximately what that number would be if
18 it were proportional?

19 MR. VOTAW: If I may, this is Waymon Votaw again.
20 So what we've found in looking at the performance at
21 Maricopa and it's provided us some information to refine
22 our projections of what our maintenance would look like at
23 Calico and other commercial facilities.

24 With failures, they're -- they're never smooth.
25 And by smooth, I mean there's not one a day every day.

1 There may be a day with zero and there may be a day
2 following where you have a cluster of multiple failures.
3 The three engines at Maricopa, allow to us handle all of
4 our spikes. So that's a peaking level -- a peaking level
5 spares allocation allows us to maintain that facility.

6 The probabilistic grouping of failures is not
7 entirely known, and -- but we believe that the rate at
8 which -- or the number of PCUs that would be required for
9 the facilities would benefit partially from scale, in that
10 you're groupings probabilistically won't be as large. You
11 can still have large numbers of engines, but they will not
12 spike to the magnitude that it would at a facility with
13 very very low numbers of installed units.

14 But --

15 STAFF COUNSEL HOLMES: I'm sorry, can you explain
16 that further. I'm really not following it.

17 MR. VOTAW: If you had -- if you had -- say you
18 had three units only at Maricopa, you had three
19 SunCatchers --

20 STAFF COUNSEL HOLMES: Well, let's stick with the
21 60 that we've got. We've got 60 --

22 MR. VOTAW: If we take 60 --

23 STAFF COUNSEL HOLMES: -- and we know we've got
24 three spare engines. I'm just trying to figure out how
25 many spare engines we're going to have 430 per 1,000.

1 MR. VOTAW: Okay, yeah so at Maricopa, with 60
2 operating SunCatchers, you would have the potential for on
3 a given day no failures, or if you had a clustering of
4 certain components probabilistically, you know, you have a
5 distribution on the peak -- or the basic meantime on a
6 specific component.

7 If you get to --

8 STAFF COUNSEL HOLMES: I guess what I'm trying
9 to -- are you saying that the failure rate is going to be
10 different at a 800 megawatt facility than it is at a 1.5
11 megawatt facility?

12 MR. VOTAW: The failure rates of the individual
13 units would not be different. They would still be
14 probabilistically the same.

15 STAFF COUNSEL HOLMES: So the conclusion that I'm
16 reaching is that you'd need approximately 1,700 spare PCUs
17 at Maricopa to achieve the -- excuse me, at Calico to
18 achieve the same level of reliability.

19 MR. VOTAW: Possibly. And what we talked about a
20 week ago and let me just revert back to --

21 STAFF COUNSEL HOLMES: So you're telling me my
22 math is incorrect and it's really 5,000?

23 MR. VOTAW: It's a -- in reality, it's an open
24 question. From the project perspective, which is mine,
25 right, so I would be the operator of the facility.

1 Contractually, the facility -- I buy my own spares at a
2 level of about a fraction of a percent less than one
3 percent of PCU spares, plus we have spares for every
4 individual component. We've got spares for balance of
5 plant equipment based on the expected failure rates in
6 the MTBF, so those pieces of equipment.

7 If the SunCatchers specifically has failure rates
8 that are unexpectedly higher than what we've experienced
9 at Maricopa, that would require a larger number of PCUs
10 for swap spares, in the early years -- the critical early
11 years of commercial operations, under contract, our
12 equipment supplier SES will provide the required number.
13 Maybe it's less than a percent or two percent. They will
14 provide, at a particular moment in time, the required
15 number of spares to meet their availability guarantees,
16 which again, would be in the 98 percent range.

17 STAFF COUNSEL HOLMES: So you're saying it
18 doesn't -- to you, it doesn't matter how many are
19 required, because you've got a contractual arrangement
20 that requires that whatever is needed be provided to you.
21 Well, I'm saying two things that you're correct on your
22 last statement that contractually, the project is
23 protected.

24 But additionally, what we talked about earlier is
25 that I have confidence that, based on what we know from

1 Maricopa, that the number of spares required to hit the
2 required 98 percent availability will not be five percent.
3 I believe it's closer to just shy have one percent or
4 maximum, based on spiking or clustering of multiple
5 failures at any one point in time, would maybe reach two
6 percent. But that could be managed across multiple
7 facilities and wouldn't require a great deal of on site
8 PCU spares perpetually for the life of the project.

9 STAFF COUNSEL HOLMES: And 34,000 SunCatchers in
10 operation on a peak day, how many people will be present
11 on the site in order to provide these change outs that you
12 were describing?

13 MR. VOTAW: The site staff is in excess of a
14 hundred. And I don't want to give the exact number,
15 because I will be wrong, because I just don't have that in
16 my head. But that's the Tessera Solar operating staff.

17 In addition to that, there is a -- again, SES, as
18 a service provider, will provide warrantee labor that will
19 provide PCU swap labor as well as the maintenance labor
20 for those PCUs during the first five years of commercial
21 operation.

22 In years six through 20, Tessera would take on
23 that task and provide the labor to do that.

24 STAFF COUNSEL HOLMES: So how many people would
25 be providing maintenance during those first five years on

1 any given day?

2 MR. VOTAW: To give you --

3 ASSOCIATE MEMBER BYRON: Excuse me, if I may.
4 Just hold that thought. Ms. Holmes, this is Commissioner
5 Byron, and I too have had the benefit of hearing a lot of
6 this testimony on another case. I would just like to ask
7 if you could please explain to us, because we're a little
8 mystified here at the dais, where is this all going? What
9 are you trying the get at with these questions?

10 STAFF COUNSEL HOLMES: We're trying to understand
11 what kinds of recourses that it will take to operate these
12 facilities reliably. We didn't have a lot of
13 information -- we had no information to speak of, other
14 than the reports that have been referred to earlier when
15 this application came in. We have had benefit of the new
16 facility.

17 Perhaps, one way to cut this short would be to
18 say that -- or to indicate that we would be happy to stop
19 all of our questions if we could reach an agreement with
20 the applicant here, if the applicant would agree to
21 provide us with detailed information from the Maricopa
22 facility as this facility is constructed, so that we can
23 make sure that any lessons learned get appropriately
24 accommodated as the project is built.

25 MS. GANNON: We provided information under

1 confidential cover to the staff from the Maricopa
2 facilities. So we were hopeful that that was going to
3 address the questions.

4 STAFF COUNSEL HOLMES: I think we'd like to see
5 continuing information as -- we're learning more tonight
6 and last week as a result of these cross-examination
7 questions that we do. And I understand the need to move
8 the hearing along, so I'm suggesting that perhaps an
9 alternative to continuing to ask questions was just to
10 simply indicate we think its appropriate to continue
11 receiving information from Maricopa --

12 MS. GANNON: As long as the information will be
13 maintained confidential, we will submit you the most
14 recent reports.

15 ASSOCIATE MEMBER BYRON: Well and
16 confidential --

17 STAFF COUNSEL HOLMES: Of course, the Commission
18 has got confidentiality provisions that allow us to
19 receive and maintain information in confidence.

20 ASSOCIATE MEMBER BYRON: If I may Commissioner?

21 PRESIDING MEMBER EGGERT: Please.

22 ASSOCIATE MEMBER BYRON: That's all very good
23 that the staff has access to confidential information.
24 However, the Commissioners are interested in being able to
25 make a determination on whether or not these devices

1 indeed operate reliably --

2 STAFF COUNSEL HOLMES: I'm sorry, Commissioner
3 Byron, I can't hear you. I apologize.

4 ASSOCIATE MEMBER BYRON: That's all very well and
5 good that the staff has access to the confidential
6 information. However, the Committee is very interested in
7 understanding the reliability of these devices as well,
8 seeing as a great deal of land is involved. So let me ask
9 just a couple of quick questions, if I may.

10 And again, I apologize, Ms. Holmes, I've
11 interrupted you, but I'm trying to get to the information
12 that I think this Committee could use. I'm going to
13 assume that the Power Purchase Agreement that you have for
14 this facility is still in existence. And that there's
15 probably some sort of performance or demonstration that
16 you need to have -- to satisfy your -- the utility that's
17 buying the power. Have you fulfilled those performance
18 requirements yet?

19 MR. VOTAW: I'd like to actually defer to Ms.
20 Bellows, if I could.

21 MS. BELLOWS: We are currently in compliance with
22 the PPA with SRP for Maricopa Solar facility.

23 ASSOCIATE MEMBER BYRON: Have you fulfilled all
24 of the performance requirements?

25 MS. BELLOWS: The performance requirements are

1 yearly. And, at this point in time, we have met the
2 performance criteria until this date.

3 ASSOCIATE MEMBER BYRON: And, in my mind, that's
4 pretty much satisfactory. Commissioner Eggert may have
5 some questions as well. But I mean those are the folks
6 that are making the determination on the use of rate pair
7 funds for the purchase of electricity.

8 And although I like the fact that my staff is
9 evaluating this and I think it's extremely important, I'm
10 not going to get the benefit of access to that
11 information. So in my mind, that's a satisfactory answer.

12 Commissioner Eggert.

13 PRESIDING MEMBER EGGERT: Yeah I just -- I guess
14 maybe a thought. You know, this is one of those topic
15 areas where the interests and goals of the Commission and
16 the goals of the applicant I would suspect are quite
17 aligned. You know, you want for specifically the economic
18 bottom line, the ability to generate revenue requires a
19 certain level of reliability. And the more you have to do
20 maintenance, the more you're off line.

21 Your PPA is on a delivered energy basis, is
22 that --

23 MR. VOTAW: That's correct.

24 PRESIDING MEMBER EGGERT: Okay. So I think I'm
25 going to agree with Commissioner Byron, to the extent that

1 there is the ability to share the information in a
2 confidential form that allows the staff to make a
3 reasonable assessment of this particular item, I mean, I
4 think that is probably adequate.

5 I do have one question, I think, that's kind of
6 related, if I also might interrupt. And that is, in terms
7 of when -- assuming the project is approved and assuming
8 you proceed in construction of phase one, is there a
9 period of time in which the phase one facility will be
10 operating prior to the construction of phase two? In
11 other words, are this going to be opportunities to learn
12 along the way, so that if -- yeah maybe that's I'll just
13 stop there.

14 MR. VOTAW: Yes, absolutely. For this specific
15 project, that's true. But it's also in a broader
16 portfolio sense. So me as asset management right. So the
17 group that we are -- the group that I lead is designed
18 specifically to be perpetually learning. Right, so we're
19 learning from Maricopa. We'll learn from the first units
20 at Calico. We'll learn from the last units. We'll
21 continue to learn at multiple projects as we build out
22 that portfolio.

23 And all those back -- I think I -- all that will
24 get -- there's a perpetual feedback loop, so that all that
25 gets fed back into the development of capabilities,

1 processes and systems to make sure that we're perpetually
2 improving.

3 HEARING OFFICER KRAMER: This the Paul Kramer.
4 Question for staff or Ms. Holmes. You're obviously very
5 curious to learn more about how this project is going to
6 operate. But, how will that information affect your
7 recommendation to us, at this point in time, about whether
8 or not to approve the project?

9 In other words, are you saying that until we get
10 more information, we should not go forward, or are you
11 simply asking to be looped in to the new information as it
12 comes along, so that you can monitor the applicant's
13 progress, but you want to see the applicant have an
14 opportunity to conduct this research, if you will.

15 STAFF COUNSEL HOLMES: I think it's more along
16 the lines of the latter. And that's why I've offered to
17 shift our attention to Condition of Certification that
18 would allow us to receive not aggravated, but information
19 about individual pieces of equipment from the Maricopa
20 facility.

21 To the extent that it's confidential, staff can
22 look at it and learn. And we can also maintain
23 confidentiality while aggregating information that I think
24 that would be of use or be of interest to both
25 Commissioners and to the general public.

1 So I would suggest that we work on crafting a
2 relatively simple Condition of Certification that allows
3 us access to that information with respect to individual
4 pieces of equipment. It's likely to be confidential and
5 we could use it hopefully, work with the developer to the
6 extent that there are any issues associated with
7 reliability, and also provide aggregated information to
8 the Commission for its purposes, as well as to other
9 members of the industry.

10 HEARING OFFICER KRAMER: Okay, so then are staff
11 and applicant willing to work together on some kind of --

12 MS. GANNON: We are absolutely willing to
13 work --

14 STAFF COUNSEL HOLMES: We had suggested this
15 earlier with respect to the Imperial facility, and didn't
16 receive a response, which is one of reasons why I was
17 asking the questions I was asking tonight.

18 MS. GANNON: We are absolutely willing to work.
19 I mean, I think we're a little confused. You know, we can
20 provide the information that we have to date. We're a
21 little confused about how long staff is assuming this
22 needs to go on of the sharing the continual sharing of the
23 information under Conditions of Certification.

24 So we would like to hear -- be able to see what
25 they're thinking, but we are certainly willing, as again,

1 to share what we have right now.

2 HEARING OFFICER KRAMER: So could staff propose
3 something to be discussed on the 18th?

4 STAFF COUNSEL HOLMES: Yes.

5 HEARING OFFICER KRAMER: Okay. Did you have any
6 other questions? We've been talking about reliability,
7 were there any efficiency issues that staff had?

8 STAFF COUNSEL HOLMES: Staff doesn't have any
9 efficiency issues.

10 HEARING OFFICER KRAMER: Okay. Would that
11 complete your cross-examination then?

12 STAFF COUNSEL HOLMES: Yes.

13 HEARING OFFICER KRAMER: Defenders of Wildlife.
14 I'm sorry CURE was next to the list.

15 CROSS-EXAMINATION

16 BY MS. MILES:

17 I just have two questions. One of which is how
18 many employees are employed to do maintenance at the
19 Maricopa facility?

20 MR. VOTAW: There are three under Tessera Solar,
21 and there are three under Stirling Energy Systems. And
22 keep in mind that the numbers of staff is
23 basically -- it's designed around shift design. And by
24 that, I mean we hired the number of people to make sure
25 that they're available around -- or to staff a full week.

1 The actual work demand requires a much lower staffing
2 level. Does that make sense?

3 MS. MILES: I couldn't hear your last statement.

4 MR. VOTAW: Much lower staffing level. The
5 demand of actual maintenance labor is lower than what is
6 required to actually have people thereto be available to
7 do maintenance around the clock.

8 MS. MILES: Thank you. My other question is
9 relating to the Condition of Certification that will be
10 drafted. I was hoping that we could get that circulated
11 to the parties prior to the hearing, so that -- because we
12 are interested in reviewing that and potentially
13 participating in the formation of that.

14 STAFF COUNSEL HOLMES: It's being written as we
15 speak.

16 MS. MILES: Thank you.

17 HEARING OFFICER KRAMER: On a napkin perhaps?

18 STAFF COUNSEL HOLMES: It looks like.

19 HEARING OFFICER KRAMER: Okay. Defenders of
20 Wildlife.

21 MR. BASOFIN: Thank you. Joshua Basofin with
22 Defenders of Wildlife.

23 CROSS-EXAMINATION

24 BY MR. BASOFIN:

25 I have a couple questions. The Maricopa study

1 was conducted from March through jump; is that correct?

2 MR. REIFF: Is that to me or to --

3 MR. BASOFIN: I think Mr. Votaw testified
4 concerning that.

5 MR. VOTAW: Which study?

6 MR. BASOFIN: The Maricopa study on -- that you
7 had referenced in your testimony.

8 MR. VOTAW: I'm not sure what you're referring
9 to. I quoted just some cumulative performance statistics
10 through July 28th. In my direct testimony there's some
11 different date cutoffs for those same Tier 1 metrics.

12 MR. BASOFIN: Okay, so those -- that data was
13 collected between March and July?

14 MR. VOTAW: March 16th through various cutoff
15 dates dependent -- but the ones I gave today were March
16 16th through July 28 it is.

17 MR. BASOFIN: Was that data also collected in
18 other months of the year?

19 MR. VOTAW: Continuously from March 16th, which
20 is when we entered into commercial operations through July
21 28th was my most recent report. We monitor it on a daily,
22 weekly, and monthly basis and perpetually update that
23 information.

24 MR. BASOFIN: So you'll be continuing to monitor
25 and update the data going forward?

1 MR. VOTAW: Absolutely, yes.

2 MR. BASOFIN: And a question for Mr. Reiff. I
3 think you mentioned that you would expect for a gas fired
4 power plant, that you would scale up from one unit to two
5 units and then to three units.

6 How is Stirling -- this engine technology
7 different in the sense that you would scale up from 60
8 units to 3,400 units?

9 MR. REIFF: The point I was trying to make and
10 maybe I over-simplified it, was that if you have a gas
11 turbine that you've proven the viability, you know, to
12 operate on a commercial basis and you had the need to have
13 a plant that had six of them, you wouldn't be compelled to
14 build a project, if you know one unit would work, you
15 wouldn't -- I don't think it's necessary to build a
16 project with three before you build one with six, because
17 you've proven the one. So there's a pretty high assurance
18 that if you were to build six of them, the six within a
19 small range would operate pretty much identically.

20 What I was saying about the SunCatcher is you've
21 got a 60 unit facility at Maricopa, which is the building
22 block for the 36,000 unit or 11,000 unit whatever units
23 your using. That's the basis of that.

24 So you could, instead of gas turbines, you build
25 modules of, you know, 60 units, 1.5 megawatts to get

1 whatever output is necessary on the project you're
2 building. That's the only comparison I was making there.

3 MR. BASOFIN: Thank you. So that assessment
4 isn't different based on how long a certain technology has
5 been operated at a utility scale?

6 MR. REIFF: No, it is more from a -- the scale up
7 reference point. You know, like I said the trough -- a
8 trough unit or a power tower, if you're going from 5
9 megawatts, to 300, know, you've got heat exchanger sizes,
10 piping sizes, everything is different. And it makes sense
11 to have an intermediate step.

12 But when you're using a modular technology, such
13 as what Stirling Energy is using, then I don't think you
14 need that step, because you're demonstrating the viability
15 of the modular you're going the replicate.

16 MR. BASOFIN: Okay, thank you

17 Mr. Votaw, you had mentioned that in the data
18 that you've collected, on the Maricopa plant that over
19 half of the units were functioning without failure; is
20 that correct?

21 MR. VOTAW: They have functioned consistently
22 since March, correct.

23 MR. BASOFIN: Okay. Can you quantify the number
24 that have not functioned?

25 MR. VOTAW: Not from numbers that are in my head,

1 but that can be quantified, yes. I just don't have that
2 number with me today.

3 MR. BASOFIN: I think that's all I have right
4 now.

5 HEARING OFFICER KRAMER: Okay. I lost my place.
6 Sorry. Sierra Club.

7 MR. RITCHIE: Yes, thank you. It's Travis
8 Ritchie with the Sierra Club.

9 CROSS-EXAMINATION

10 BY MR. RITCHIE:

11 Just as a clarifying question to start with, the
12 availability fact for that has been referenced. When
13 we're talking about a 95 percent availability factor, is
14 that considering shutting things down like you said for
15 low sun events, does that affect the availability factor?

16 MR. VOTAW: Let me maybe describe the calculation
17 in total. Right, so for industry norms, you would
18 calculate your ability or your readiness to be able to
19 produce power against some reference period, right. Our
20 reference period is reduced by periods in which we cannot
21 commercially operate, right.

22 So if, for example, the sun is not shining, we're
23 not commercially ready -- we're not commercially -- it's
24 not commercially feasible for us to produce energy at that
25 point. So that's an opportunity for us to then perform

1 maintenance when the sun is not shining.

2 So our availability metric removes all those
3 items that are outside of management control, specifically
4 it's when the sun is not shining, when the wind the
5 blowing beyond the technical limits of the equipment or
6 when the temperature exceeds the limits -- the technical
7 limits of the equipment.

8 MR. RITCHIE: And so you mentioned wind, so when
9 the wind is blowing beyond the technical limits of the
10 SunCatchers, that's at 35 miles per hour they begin to
11 move into a stow position, correct?

12 MR. VOTAW: If there's a peak of 35 or sustained
13 beyond that, yes, controls will automatically move it into
14 a wind stow.

15 MR. RITCHIE: Now, at the Maricopa facility, have
16 you experienced those wind factors, where you've had to
17 shut down or go into a stow position because of high
18 winds?

19 MR. VOTAW: We've had two occurrences at
20 Maricopa.

21 MR. RITCHIE: Since March.

22 MR. VOTAW: Before March, we had an extremely
23 high wind event, right, in excess of 60 miles an hour.
24 The equipment autonomously went to wind stow, gave us
25 a -- or it gives me confidence that under high wind

1 conditions, that as they are designed they performed well.
2 In the wind stow, they were protected.

3 After commercial operations, we've had one event
4 where we've exceeded 35 miles an hour, and they again
5 autonomously went to wind stow. And those hours again are
6 non-utilized, but they're not exceeding the technical
7 limits of the equipment, right.

8 So when the wind returns, the equipment goes back
9 on sun, and we continue to produce power.

10 MR. RITCHIE: So just that I understood you
11 correctly, since March, when the Maricopa facility went
12 into commercial operation, there's been one wind event?

13 MR. VOTAW: That's right.

14 MR. RITCHIE: And I understand then that you
15 essentially stopped counting the factor

16 However, so there's only been one wind event
17 during the time period that has led you to conclude that
18 there's a 95.1 percent, I think was the original
19 availability factor. I think you reevaluated that up to
20 96 percent, and then now the 97 percent.

21 But whatever that moving target is, there's only
22 been one wind event that has essentially been tested. I
23 understand that when they're in the wind event -- I'm
24 sorry, let me let you answer that question first.

25 MR. VOTAW: There's been only one, that's

1 correct.

2 MR. RITCHIE: So since March, there hasn't
3 been -- let me back up. The Calico proposed facility is
4 in a very windy area, correct?

5 MR. VOTAW: Well, that sounds like a relative
6 term. Let me maybe say at least how we approach wind for
7 Calico. So the projections of our operations at Calico
8 were based upon historical data that includes wind, so we
9 have -- we have an understanding of what the expected wind
10 events would be for Calico. And those are embedded into
11 our projections for operations.

12 MR. RITCHIE: Thank you. So now we also
13 discussed the comparison to a gas turbine, where if you
14 had a problem with one component, one unit of gas
15 turbine -- I'm sorry, if you had proven that one unit of
16 gas turbine was working efficiently, then you could assume
17 so for the other three units and the other six units.

18 Now, with this facility, we be multiplying this
19 up to the full project scale by about 576 times, correct?

20 MR. VOTAW: I'll trust your math.

21 (Laughter.)

22 MR. VOTAW: Yes.

23 MR. RITCHIE: That may be dangerous.

24 (Laughter.)

25 MR. RITCHIE: But we'll call it a ballpark.

1 So now to the same extent that you can assume
2 that there will be certain reliability issues for each of
3 those 576 units, isn't it also fair to assume that if
4 there are problems that you don't know about, that you
5 have yet to address and yet to fix, those would also be
6 multiplied by 576 times?

7 MR. VOTAW: Not necessarily. I mean
8 there's -- reliability engineering is a pretty deep
9 discipline, right. So there's -- without going into a
10 whole lot of detail, there are different types of failure
11 modes and there are different reasons just
12 probabilistically why multiple failures would occur.

13 Doing linear type a approximations of
14 probabilistic failure modes or taking individual
15 components and trying to apply to engineered systems is a
16 more complex question.

17 MR. RITCHIE: Okay, so we won't say it's linear,
18 but we'll say that it's something more than the
19 probability risk of scaling up something six times over as
20 it would be with a gas turbine.

21 MR. VOTAW: You mean from a -- like a single
22 component failure mode? Like you have multiple currents
23 of a single component failure?

24 MR. RITCHIE: I'm talking about the issues that
25 would a rise that would affect the availability factor and

1 the reliability of the SunCatcher unit or 60 SunCatchers
2 or one unit as the Maricopa facility.

3 MR. VOTAW: Well, I'm not sure I follow your
4 question. Could you restate the original question, then.

5 MR. RITCHIE: You had earlier suggested that or I
6 believe Mr. Reiff suggested that this was a -- in one
7 aspect at least, a superior technology to something like a
8 gas turbine, whereas -- sorry, I'll strike that, it wasn't
9 superior.

10 That scaling up was not a problem, because you
11 had a unit that had proven itself to be reliable, and
12 similar to a gas turbine, where you scale that up three
13 times over or six times over, you could still be confident
14 about that reliability. However, is it equally fair to
15 say that for the unknown risks that are there, the
16 problems that you haven't encountered, that's also
17 potentially a problem, when you scale up, because that
18 risk could multiply itself many times over?

19 MR. REIFF: I think you're talking about like a
20 serial defect, that may manifest itself and. One of the
21 benefits that we have with Calico is we've got Maricopa
22 that's continuing to operate and you would expect if
23 there's a serial defect that would happen before its first
24 tier maintenance evolution, we'll know that before Calico
25 goes into commercial operation. Because of the operation

1 of Maricopa will help reveal if there are any serial
2 defects.

3 So -- but they can still happen. Gas turbines
4 have had them, you know, after seven or eight thousand
5 hours of operation. So you deal with it on a fleet basis
6 if that's a problem.

7 MR. RITCHIE: And so at this point in time,
8 having experienced one wind event, and being in operation
9 since March, is it fair to say that there will be problems
10 like that that you will address?

11 MR. REIFF: Well, the wind issue is just -- it
12 stows to protect itself when there's more than 35 miles an
13 hour of wind, that, you know, you use historical, typical,
14 meteorological data to figure out whether or not there's a
15 high probability of exceeding that. And then the
16 equipment is designed to stow itself, so it protects it.

17 So I guess that, to me, is a whole different
18 thing than a serial defect, which could be a manufacturing
19 issue, a design issue. Those kinds of things are
20 different than just the wind event to me. And like was
21 discussed earlier, that meteorological data is input into
22 the analysis of the ability of the plant to generate
23 megawatt hours. So that's all accounted for in the
24 modeling.

25 MR. RITCHIE: For the interests of time, I'll

1 stop on the reliability issue and we'll move to the
2 efficiency issue, which although the two are very related.
3 And Commissioner Byron, I think made the point that this
4 is a land-use intensive decision and therefore we should
5 understand what exactly is the efficiency of this thing as
6 we're making this very large land use decision.

7 And so if I could direct your attention to the
8 table in the SSA, the Supplemental Staff Assessment on
9 page D.3-7. Do you guys have -- do we not have that.

10 MR. VOTAW: Sorry for the delay, could you give
11 me the table reference again.

12 MR. RITCHIE: Sure, it's efficiency table one
13 page D.3-7.

14 MR. VOTAW: Okay, I finally caught up with you.
15 Go ahead.

16 MR. RITCHIE: All right. And so that's the table
17 entitled Solar Land Use Efficiency.

18 MR. VOTAW: Okay.

19 MR. RITCHIE: Now, this table shows the projects
20 currently under consideration by the California Energy
21 Commission, correct?

22 MR. VOTAW: I have no idea.

23 MR. RITCHIE: Are you aware of the -- so are you
24 familiar with this table? Have you seen it?

25 MR. VOTAW: I have reviewed, yes.

1 MR. RITCHIE: And so it compares various solar
2 projects and the relative efficiencies, correct?

3 MS. GANNON: Excuse me, officer Kramer -- Hearing
4 Officer Kramer. Did you repair this table?

5 MR. VOTAW: No, I did not.

6 MS. GANNON: Just to make sure that if the
7 questions are going to any conclusions or basis or things
8 that were formulated in this table, just that he did not
9 prepare it. It was prepared by staff.

10 MR. RITCHIE: I understand that, but the table
11 will help guide us in this discussion.

12 So based on this table, this shows that the land
13 use efficiency of the proposed technology at Calico is the
14 lowest land use efficiency of all of these projects
15 proposed with the exception of Ivanpah; is that correct?

16 MR. VOTAW: I'm reading the table, that's what it
17 says.

18 MR. RITCHIE: Now --

19 MR. VOTAW: Well, to be clear we're using -- when
20 you say efficiency, I'm thinking of conversion efficiency.
21 Whereas, this is land use efficiency. For efficiency in
22 the industry generally that's a conversion of input energy
23 to output energy. This the land use efficiency as opposed
24 to engine or technology efficiency. Do you understand my
25 distinction?

1 MR. RITCHIE: I do. I understand we've shifted
2 gears a little bit here.

3 MS. GANNON: And I done believe that Mr. Votaw
4 was offered as an expert for land use efficiency. So I
5 don't think he is really qualified to testify to that.
6 None of his testimony went to that. So if we're in doing
7 redirect on him --

8 MR. RITCHIE: So we are in the Staff Assessment
9 section on power plant efficiency.

10 MS. GANNON: That's correct. We offered this
11 witness, if you look at the testimony that he as submitted
12 both in direct and in rebuttal, there is no discussion of
13 land use efficiency. So he's really not the expert to
14 speak to this issue.

15 HEARING OFFICER KRAMER: Well, as far as this
16 goes, the table -- we can all read the table for
17 ourselves. So I don't think you need to ask him to
18 confirm to us what it says. But do you have in questions
19 that would follow from that?

20 MR. RITCHIE: No, I think the evidence in the
21 record, at this point, I can make that discussion later.

22 I have no further questions. Thank you.

23 HEARING OFFICER KRAMER: Okay. I think that
24 exhausts our cross-examination of the applicant's
25 witnesses.

1 STAFF COUNSEL HOLMES: Excuse mere, Hearing
2 Officer Kramer?

3 HEARING OFFICER KRAMER: Ms. Holmes?

4 STAFF COUNSEL HOLMES: Could I ask one additional
5 question.

6 CROSS-EXAMINATION

7 BY STAFF COUNSEL HOLMES:

8 And it's actually not related to reliability, so
9 I don't know if this witness can answer the question. I'm
10 asking this generally of the applicant. We heard
11 testimony earlier this evening about additional or
12 employees, or SES employees coming on site for maintenance
13 and providing engines and whatnot.

14 Staff would appreciate knowing at some point by
15 the end of the evening tonight, whether or not those
16 employees were counted for both -- for purposes of both
17 socioeconomics and traffic and transportation.

18 MS. GANNON: And Ms. Bellows can answer that
19 question.

20 MS. BELLOWS: That's correct, those total numbers
21 were included there.

22 STAFF COUNSEL HOLMES: I'm sorry. I can't
23 understand the answer.

24 MS. BELLOWS: That's correct. The numbers
25 include all personnel coming on to the site.

1 STAFF COUNSEL HOLMES: Thank you.

2 MR. BASOFIN: Mr. Kramer, this is Josh Basofin.
3 I just have one additional question if I could.

4 HEARING OFFICER KRAMER: Go ahead.

5 RECROSS-EXAMINATION

6 BY MR. BASOFIN:

7 Thank you. Mr. Votaw, you had testified earlier
8 regarding the number of spare engines that could possibly
9 be needed at the Calico facility; is that correct?

10 MR. VOTAW: I gave a ballpark, yes.

11 MR. BASOFIN: And I think you're testimony was
12 that it's possible that you would need a proportional
13 multiple of the three engines that are needed at the test
14 facility, also at the Calico facility; is that correct?

15 MR. VOTAW: That's been -- there's been
16 speculation around that. My belief is that we wouldn't.

17 MR. BASOFIN: But I think you testified that it's
18 possible, is that right?

19 MR. VOTAW: I said that if that is an occurrence,
20 the project is protected was my original testimony earlier
21 today. I personally do not believe that we're going to
22 need multiple beyond one percent of the installed number
23 of SunCatchers in the field.

24 MR. BASOFIN: Okay. You also testified that in
25 the event --

1 HEARING OFFICER KRAMER: That's the fourth
2 question by my count. Last one. And don't --

3 MR. BASOFIN: I don't think I've used all time.
4 I actually think I only used a fraction of my time.

5 HEARING OFFICER KRAMER: Wrap it up please.

6 MR. BASOFIN: Okay. You also testified that in
7 the event that you would need the maximum number of spare
8 units that you have a contractor available to provide
9 those to you?

10 MR. VOTAW: That's correct. Actually, the
11 availability is guaranteed for the projects by suppliers,
12 so that the availability and/or reliability of the
13 equipment if it's balance of plant, is a part of the
14 contracting structure for the balance of plant supplier.
15 And then for the SunCatchers that's part of the
16 contractual structuring for the SES provision of supply
17 for the SunCatchers themselves.

18 MR. BASOFIN: Okay, so my question is, and this
19 is my final question, if in the event that you would need
20 that contractor to provide the maximum possible number of
21 spare engines, have you done a cost analysis of what that
22 would mean to the overall finances of the project?

23 MR. VOTAW: We've run multiple sensitivities on
24 the projects, obviously, just as a part of the
25 development. The maximum that you refer, I'm not sure

1 what the maximum is --

2 MR. BASOFIN: But I think Ms. Holmes quoted it as
3 she ran the calculation and got to about 5,000 spare
4 units.

5 MR. VOTAW: I don't know that we've run a
6 sensitivity of the exact numbers she determined. I don't
7 know if there's a sensitivity specific to that assumed
8 spare count.

9 MR. BASOFIN: Okay. Thank you.

10 MR. EMMERICH: Could I ask one question
11 for -- Kevin Emmerich from Basin and Range Watch?

12 HEARING OFFICER KRAMER: And you understand what
13 one means, right?

14 MR. EMMERICH: Yeah just one. I promise.

15 (Laughter.)

16 HEARING OFFICER KRAMER: Okay, go ahead.

17 CROSS-EXAMINATION

18 BY MR. EMMERICH:

19 My comment and it would probably concern
20 something like, it would be under a category maybe long
21 term viability of the project, where I live I don't
22 live -- I live about 30 miles north of an area called Big
23 Dune. It's a very sandy area. And on the project site in
24 the area that's coincidentally near the Fringe-toed Lizard
25 habitat it's very very sandy and there's going to be a lot

1 of construction. And part of this project will be built
2 there.

3 In the Amargosa Valley there's local people that
4 live there and there's a guy that has a motorcycle there.
5 And he parks it in his garage, because he doesn't want the
6 sand abrasion. He just restored this old motorcycle, and
7 he doesn't want the sand abrasion to start wearing it
8 down.

9 And I'm wondering if that's a problem that you
10 see in the future here, if you're going to build these
11 facilities near those sand dune, are you worried about the
12 long-term sand blasting and abrasion on all of this
13 delicate equipment, and do you have a possible idea of how
14 long it would take before that would become a problem or
15 noticeable?

16 MR. REIFF: I'll try and take that one.

17 One of the things that's embedded into pro forma
18 for the facility is a degradation rate to account for
19 pitting and erosion and other effects that time has on a
20 project. So it's a .15 percent per year to account for
21 that.

22 I'd have to go back and look at our report with
23 regard to the coatings and things of that nature that are
24 added to the facets for the mirrors to help mitigate
25 erosive effects. But they have accounted for degradation

1 in the pro forma of the facility.

2 HEARING OFFICER KRAMER: Okay, staff were you
3 merely offering Mr. Khoshmashrab for cross-examination or
4 did he have some testimony?

5 STAFF COUNSEL HOLMES: I'm sorry, could you
6 repeat the question please?

7 HEARING OFFICER KRAMER: Did Mr. Khoshmashrab
8 have some testimony or is he merely available for
9 cross-examination?

10 STAFF COUNSEL HOLMES: He's available for
11 cross-examination.

12 Whereupon,

13 SHAHAB KHOSHMAHRAB

14 was called as a witness herein, and after first
15 having been duly sworn, was examined and
16 testified as follows:

17 HEARING OFFICER KRAMER: CURE, any questions?

18 MS. MILES: No questions.

19 HEARING OFFICER KRAMER: Defenders?

20 MR. BASOFIN: I do have a couple questions. I
21 just need a second to get them together.

22 HEARING OFFICER KRAMER: Okay, Sierra Club, any
23 questions?

24 MR. RITCHIE: No.

25 HEARING OFFICER KRAMER: Okay. The floor is

1 yours Mr. Basofin.

2 I didn't have the applicant down for cross.

3 STAFF COUNSEL HOLMES: I'm sorry, we're having
4 trouble hearing again.

5 HEARING OFFICER KRAMER: It was just noise.

6 (Laughter.)

7 MR. BASOFIN: Okay, I'm all set. This is Joshua
8 Basofin with Defenders of Wildlife

9 CROSS-EXAMINATION

10 BY MR. BASOFIN:

11 Mr. Khoshmashrab, am I pronouncing your name
12 correctly?

13 MR. KHOSHMAHRAB: Yes.

14 MR. BASOFIN: Good. I didn't think I'd get it on
15 the first try.

16 HEARING OFFICER KRAMER: Sorry to stop you, but I
17 suppose we should wear him in. Was she sworn?

18 MR. KHOSHMAHRAB: No.

19 HEARING OFFICER KRAMER: Could you raise your
20 right hand.

21 (Thereupon MR. SHAHAB KHOSHMAHRAB was sworn, by
22 the Hearing Officer to tell the truth, the whole
23 truth and nothing but the truth.)

24 HEARING OFFICER KRAMER: Thank you. Go ahead.

25 MR. BASOFIN: Mr. Khoshmashrab, in your -- in the

1 Staff Assessment, you've indicated that the data on the
2 Maricopa plant that the applicant has provided would be
3 better data if it had come from a commercial scale
4 technology with thousands of hours of operational
5 experience is that right?

6 MR. KHOSHMAHRAB: Yes, relatively. I mean
7 probably.

8 MR. BASOFIN: Okay. And you've concluded that
9 because the data is limited, that at this time staff can't
10 determine what the actual availability factor for the long
11 term operation of the Calico project would be, is that
12 right?

13 MR. KHOSHMAHRAB: Yes.

14 MR. BASOFIN: Okay, and after that you've stated
15 that you believe that with more operational experience and
16 continuously demonstrating a reliable and stable power
17 plant technology, it will be more possible to make long
18 term decisions about the availability factor for this type
19 technology?

20 MR. KHOSHMAHRAB: Yes.

21 MR. BASOFIN: So is it your opinion that allowing
22 the Calico facility to move forward with the limited data
23 available will allow you to gather the necessary data
24 during operations?

25 MR. KHOSHMAHRAB: Sorry, can you repeat that, I

1 couldn't hear you.

2 MR. BASOFIN: The question is, is it your opinion
3 that allowing the Calico project to move forward with what
4 you've admitted to be the limited amount of data will
5 allow you to gather additional data at a utility scale in
6 the future, is that right?

7 MR. KHOSHMAHRAB: That's correct.

8 MR. BASOFIN: And can you explain how you've sort
9 of made that transition from limited data to allowing the
10 technology to ramp up to 34,000 SunCatchers?

11 STAFF COUNSEL HOLMES: I'm sorry, I don't
12 understand -- I don't understand the question.

13 MR. BASOFIN: The question is I'm asking Mr.
14 Khoshmashrab to explain a little bit about the rationale
15 of acknowledging the limitations and the data, but also
16 saying that moving forward with the Calico plant will
17 allow them to gather data.

18 STAFF COUNSEL HOLMES: Well, that's two factual
19 statements, what's the question?

20 HEARING OFFICER KRAMER: The question I heard was
21 he answered a question a minute ago, yes he -- the project
22 could -- should go forward a give additional data. And I
23 think Mr. Basofin is asking well why is he saying that?
24 Is that --

25 STAFF COUNSEL HOLMES: I'm sorry, Mr. Kramer, I

1 can't hear you.

2 HEARING OFFICER KRAMER: Is it that my volume
3 level is low or it's just garbled?

4 STAFF COUNSEL HOLMES: We lose words towards the
5 end of sentences.

6 HEARING OFFICER KRAMER: Modulation. Okay. A
7 minute ago he answered yes to a question about does he
8 think that it's acceptable for the project to go forward
9 to generate additional utility scale data.

10 STAFF COUNSEL HOLMES: I believe that the answer
11 was not that it was acceptable but that it would generate
12 additional utility scale data. And you could probably
13 have the court reporter read that back, if there's a
14 question about that.

15 HEARING OFFICER KRAMER: Okay, well -- okay now
16 we're all lost.

17 Go ahead, Mr. Basofin, and try again.

18 MR. BASOFIN: Okay. All right. I guess the
19 question is -- okay, let me try it this way. Is there
20 another feasible mechanism that would allow Commission
21 staff to collect the data on operations of this technology
22 without going forward with a fully scaled 850 megawatt
23 facility?

24 MR. KHOSHMAHRAB: I don't believe -- not that I
25 can think of. You know, that's -- the reason for asking

1 for a Condition of Certification is to monitor the
2 operation of Maricopa and to basically assess the progress
3 on that. And that is the only reasonable method that I
4 can think of

5 MR. BASOFIN: So is it your opinion that a 275
6 megawatt Calico facility would not allow you to gather
7 that type of data?

8 MR. KHOSHMAHRAB: That's not my -- that's not
9 what I believe, no

10 MR. BASOFIN: Okay. Well, your testimony a
11 minute ago was that there was no other way besides a fully
12 scaled 850 megawatt facility to gather the requisite data
13 on utility scale operations, is that right?

14 MR. KHOSHMAHRAB: Okay, I'm not quite sure what
15 you're trying to accomplish in what it is that you're
16 actually asking me? I mean, if you clarify your question,
17 I can answer those better.

18 MR. BASOFIN: Is it your opinion that you could
19 collect the necessary data on utility scale operations of
20 the project, if the project why scaled to a 275 megawatt
21 facility?

22 MR. KHOSHMAHRAB: Well, it would be obviously
23 beneficial to have it -- data coming from a much bigger
24 power plant, but we don't have that luxury.

25 MR. BASOFIN: Okay, I think that's all I have.

1 HEARING OFFICER KRAMER: Thank you. Well, that
2 was the last of the -- did you?

3 MS. GANNON: No, I have no questions.

4 HEARING OFFICER KRAMER: Okay, Commissioner
5 Byron, did you have something?

6 ASSOCIATE MEMBER BYRON: I think there's been
7 some very good questions and answers provided here. This
8 is very helpful in the testimony. I think it's fair to
9 say that we realize that availability factor is not the
10 only consideration in this, in determining the long term
11 reliability and viability of these devices, meantime
12 between failure or some serial or common mode failure
13 mechanism some of which have been described here earlier
14 are serious concerns.

15 I think my question for Mr. Khoshmashrab is have
16 you had sufficient access to the failure data to -- and
17 it's not just failure data, let's say to the operating
18 data and the performance of the existing SunCatchers to be
19 satisfied to draw any conclusions and could you just
20 briefly summarize them for this Committee?

21 MR. KHOSHMAHRAB: I have not. Typically, staff
22 evaluates availability and reliability of a project based
23 on the data from years of experience with a mature
24 technology. We have no such data. This is preliminary.
25 It's new data to me, and for me it's -- it's not -- there

1 is not enough data to determine how reliable this project
2 will be. I'm referring to Calico.

3 ASSOCIATE MEMBER BYRON: Thank you.

4 PRESIDING MEMBER EGGERT: So I guess maybe just a
5 quick thought. I mean, I think this is -- I want to agree
6 with Commissioner Byron, this has been actually an
7 interesting and useful discussion. And I think it does
8 highlight one of the challenges that we face when dealing
9 with technologies that aren't necessarily new. I
10 understand that Stirling Engines and concentrating systems
11 have been around for decades. But in terms of their
12 deployment, even on a limited basis, such as Maricopa, is
13 still -- you know, this the really sort of breaking new
14 ground. And the data that we have before us is maybe not
15 as comprehensive as we might like, you know, embarking
16 upon a project of this size. I suspect you get a lot of
17 these same questions from the investors as well.

18 But you know, again, I'd just sort of restate my
19 other point, which is, you know, the more confidence that
20 can be provided through the data, the better. And to the
21 extent that, you know, it sounds like there's steps being
22 taken to address some of the design concerns. Those were
23 discussed and including things that might have sort of
24 systematic and repeat failures, like seals, and to the
25 extent that these -- this is going to be -- or this is

1 being proposed as a phased project, I think offers further
2 opportunity for continuous learning, should it go forward.

3 But again, I appreciate the questions and as has
4 been stated, this is a very large land use decision, and
5 we want to make sure that we do have all of the
6 information that allows us to make a decision about
7 whether or not this is a good idea or not.

8 HEARING OFFICER KRAMER: Okay, I think that does
9 it. Unless somebody wants to correct me for efficiency
10 and reliability. And nobody seems to want to.

11 We just -- well, we've hit the 5:15 mark, so
12 we'll break for dinner and return at 6 o'clock, where we
13 will have public comment. And staff, please apologize to
14 the transmission system engineering folks, we'll need the
15 get to them after the --

16 STAFF COUNSEL HOLMES: They had bad luck at the
17 last hearing too. But I will pass along your apologies.

18 HEARING OFFICER KRAMER: And then that may push
19 back Susan Lee a little bit, but I'm hoping that's not
20 going to be a problem for her, but it still would be good
21 to get to her tonight to offer us more breathing room for
22 the rest of the week on alternatives.

23 So we'll try to do transmission system
24 engineering and alternatives tonight, after public
25 comment. And we'll be back at 6 o'clock.

1 So we'll go off the record.

2 (Thereupon a dinner break was taken.)

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1 we'll start with those that have signed up on the blue
2 card. If you haven't already signed up again, our Public
3 Adviser is Ms. Jennings. She's in the back of the room.
4 She's holding up the blue cards. You can fill those out.
5 Provide your information, name, and the topic that you'd
6 like to say or just your name is fine as well, and we'll
7 call you up.

8 So also I'd just like to just see if there's the
9 CEC staff have successfully moved their cars out of the
10 parking garage and are back at the CEC building?

11 STAFF COUNSEL HOLMES: Staff is here.

12 PRESIDING MEMBER EGGERT: Okay. Welcome back.
13 So let's go ahead and get started. We're going to take
14 Bruce Garlinger. Is Bruce here in the audience?

15 This is representing Desert Mountain Sheep.

16 He just stepped out. Okay, well we'll come back.

17 I also have Fred Stearn, private landowner in a
18 project surrounded by the area. I believe I got that
19 right. Go ahead, Fred. Welcome.

20 MR. STEARN: Good evening, Commissioners. My
21 name the Fred Stearn, 29926 Fort Cady Road, Newberry
22 Springs.

23 I'm a real estate agent representing three
24 landowners in Section 1, 8 north 5 east; Section 36, 9
25 north 5 east who are in danger of being land locked inside

1 the project area.

2 I've read most of the Staff Assessment and draft
3 EIS about 1,400 pages. I haven't been able to get the
4 recent Supplemental Staff Assessment, so I don't know
5 what's in there.

6 CEQA requires -- I've been reading EIR's for 30
7 years. And I don't claim to be an expert, but CEQA seems
8 to require a reviewing agency to examine 17 environmental
9 factors listed in Appendix G.

10 In my estimation, the private landowners in said
11 section 1 and 36 will be subject to potentially
12 significant environmental impacts in the following seven
13 Appendix G categories out of CEQA.

14 Aesthetics, hazards and hazardous materials,
15 public services, utilities/service systems, hydrology,
16 noise, land use planning, and transportation. I think the
17 main issue is access, but they're all important.

18 The written evidence submitted by myself and
19 others into the EIS and prior to the EIS to California
20 Energy Commission staff and the BLM staff or the BLM
21 agency pointing to said potentially significant impacts in
22 the seven categories, has been largely and inexplicably
23 ignored regarding these private in-holdings in section 1
24 and section 36.

25 I don't see how any objective observer could come

1 to the conclusion -- any other conclusion that therefore
2 the EIS is delinquent and doesn't meet the CEQA
3 requirements. And that's all I have to say unless there's
4 some questions.

5 Thank you very much.

6 PRESIDING MEMBER EGGERT: So I guess one
7 question. I do believe the Supplemental Staff Assessment
8 is docketed -- is on the website currently or has that
9 been posted?

10 Okay, so we do have for your information, sir,
11 Mr. Stearn, the supplemental is available for review.

12 And I think we'll go now to -- is Bruce back in
13 the -- Bruce, welcome.

14 MR. GARLINGER: Bruce Garlinger representing
15 Bighorn Sheep and myself.

16 I am just wondering when the project proponent
17 will be writing a habitat conservation plan for all of the
18 plants and animals that occur in the study area?

19 And also note that the draft EIS that I looked at
20 the references and it does not seem that the draft EIS in
21 any of your supplemental documents, the EA or anything
22 referred to any references to noise impacts on bighorn
23 sheep.

24 I wrought a few references that URS should have
25 cited. *The Bighorn of Death Valley*, a landmark study,

1 1950's Welles and Welles, that documented bighorn sheep in
2 the valley floor of Death Valley a common site especially
3 on good floral years.

4 Sierra Club, bighorn of Sierra Nevada, Ph.D
5 thesis Berkeley.

6 Landmark study 1940's and 50's, Arizona, not
7 reference by anybody on this project by Terry Russo.

8 Here is the bighorn Bible. It came out in 1980.
9 *The Desert Bighorn, Its Life History, Ecology and*
10 *Management.* Half of these authors I knew, and are good
11 men, and not referenced in any of these documents.

12 *Mountain Sheep of Man*, Dr. Val Geist, Canada.

13 These are landmark studies documenting some of
14 them human disturbance related to construction.

15 As a biologist that really is into sheep, there
16 was a few references from Dr. Vern Bleich, Halls and
17 Ramey, Epps, all of whom I know. They're colleagues in
18 the field. And they reference some stuff but not very
19 much.

20 And as a member of Desert Bighorn Council, since
21 1980 -- actually 1982, you know, there's a lot of
22 literature out there, that's what I'm trying to say, of
23 bighorn sheep, human disturbances in Death Valley, Lake
24 Meade, central Arizona project.

25 And while bighorn can get used to disturbances,

1 you know it can be bad for them. *Wild Sheep in Modern*
2 *North America*, Boone and Crockett Club. Here's one,
3 *Wildlife Monographs*, evaluation factors potentially
4 influencing the Desert Bighorn sheep population. There's
5 studies where bighorn sheep have gone extinct in the
6 Catalina Mountains of Tucson, because of human impact
7 relating to hiking during the breeding season. So where
8 humans chose, do we want the hikers to be able to go in
9 the Catalina Mountains of Tucson, or do we want to bighorn
10 sheep to survive and -- the disturbance basically caused
11 lamb mortality. You have that for eight to 10 years, and
12 then you've got humans one bighorns zero.

13 The Desert Bighorn Council has been on acted
14 since 1957. URS, any of your documents don't hardly
15 document anything from these publications.

16 *Journal of Mammalogy*, there's lots of stuff
17 there. Hardly any references. And CEC commission needs
18 to realize this, that the work was done totally
19 inadequately for bighorn, Desert Tortoise, rare plants.

20 *The Wild Sheep of the World*, and probably the
21 only bighorn authority in this room right now. Raul
22 Valdez Desert Bighorn technical staff member.

23 So anyway, my point is that the bighorn work was
24 not done by bighorn professionals that I know, because
25 I've been going the wildlife society meetings and Desert

1 Bighorn Council meetings since 1982 and I've never seen
2 Dr. Mock there nor any of his team.

3 And I've also been going to Desert Tortoise
4 Council regularly since -- almost yearly, since 1989. And
5 I don't recognize any of his team there. And they're
6 great people and it's not a personal attack against any of
7 his team. But if you look at their resumes, they had
8 almost no desert experience.

9 So I find it interesting that the project
10 proponent is trying to get a CEC override when there's
11 low experience of the crew, tortoise, botanist, sheep
12 person, no burrowing owl surveys. And no habitat
13 conservation plan for the whole thing. This is just
14 pretty much nuts.

15 And I just got an Email on my phone this morning
16 that the CEC approved the Ivanpah solar. And, you know,
17 that's just a crime against nature.

18 I'm a biologist. I'm environmentally aware, and
19 I want to go green. I've got solar panels on my roof. So
20 there are a place for solar panels and there's wrong place
21 for solar panels. And you shouldn't be -- we shouldn't be
22 blading up the planet wild habitat and killing tens of
23 plants and animals that also have rights. We shouldn't be
24 doing this, so some company can get good dividends and
25 profit for their stockholders.

1 So what I suggest is that everybody might be
2 happy is even Sierra Club, Defenders, instead of
3 nitpicking all the little things we want, project
4 proponent could do a habitat conservation plan and a long
5 term research and monitoring plan, which would for
6 research and monitoring -- I mean long term at least 25
7 years of all the rare T&E species, Golden Eagle, North
8 American Badger, burrowing owl, Desert Tortoise, rare
9 plants, bighorn sheep, and research and monitoring long
10 term. Gather better information.

11 And an idea there, that if there's any other
12 projects that come in to this area within a 50-mile
13 radius, you know, initially, Calico Solar, Tesla, they may
14 have to initially start it. But if anybody comes in, then
15 they're going to have to put money into this long term
16 habitat conservation plan.

17 And so initially this proponent may have to put
18 in \$10 million or something. But as other proponents come
19 in, if they want to do it, they'll have to add to this
20 long term monitoring fund. And the notion is that you
21 can't mitigate for this loss of habitat by buying land
22 somewhere else. San Bernardino county is totally against
23 that. And the reality is you can't destroy 500,000 acres
24 in California and buy it somewhere else. You're still
25 going to have the net loss of a million acres or 500,000

1 acres for wind and solar.

2 Bighorn people, I know from here to Texas and
3 they're just screaming about this wind, because where is
4 the wind going, it's going to all the ridge lines. Where
5 do the bighorn lambs drop their babies and raise them for
6 six months to a year and have them on the ridge lines.
7 And the bighorn also cross the valleys.

8 So I was telling the Fort Irwin people, I'm a
9 volunteer bighorn consultant for them. I go your entire
10 Fort Irwin -- you don't look at it as mountains and
11 valleys, you know, tortoise and squirrels in the valleys
12 and you don't look at it as bighorn mountain only. Well,
13 the males have ram range. They've to cross valleys to get
14 to their ram range. And so all of Fort Irwin, all of
15 China Lake, all of the west Mojave between here and
16 Victorville and here to Texas the valleys are bighorn
17 habitat. So that's therefore not a good place to put
18 solar.

19 And the tortoise people don't want it, because
20 you know, it's tortoise habitat or squirrel habitat, or
21 cacti. So, you know, where we need it is on our roof tops
22 and back yards. And the utilities and some of you people
23 the project proponent want to make money, you've got to
24 learn how to make money by putting it on individual roof
25 tops. And this's companies that do that.

1 You buy a building permit, \$150, \$400, we'll put
2 solar panels in your -- on your roof, backyard for free.
3 You have to agree to by power from us for 25 years.

4 So the solution the out there. But blading the
5 desert, which is killing tens of thousands of critters per
6 acre, that's not clean, that's not green and you'll do it
7 over my dead warm body. And it's not a threat, it's just
8 a promise, because I'm pissed.

9 Anyway there's these ideas -- unfortunately three
10 project proponent if everything goes well tomorrow, and
11 they're going to have do the tortoise surveys again,
12 burrowing owl. They should hire experienced people with
13 five or 10 more years experience doing tortoise stuff.
14 They should hire experiences botanists, which have Mojave
15 desert experience -- basin. And they need some sheep
16 person. You know a good herbotologist. And they need a
17 little bit better qualified teams.

18 So my daddy always says take the time to do it
19 right instead of twice. But as the way I see it, if all
20 goes well tomorrow, Tesla is going to have to do it twice,
21 because the data is totally not sufficient, done by the
22 wrong people and not done enough.

23 And what's really interesting, I got an Email
24 from Sheep Society in April, you know -- I think it's
25 April -- is the proponent is going to fly for eagles and

1 bighorn sheep. So they sent me Dr. Mock's phone number.
2 I called Dr. Mock at least once or twice, and says hey,
3 you know, I'm a consultant. I've had sheep experience.
4 You need a sheep person. You need one on the bird,
5 because if they don't have sheep experience, you're not
6 going to see nothing, and never heard back from him.

7 And I was trying the bring my cell phone records
8 to prove that to enter it into evidence. So I offered my
9 services. Most of you people are agency people.
10 California has one sheep consultant, Dr. John Wehausen.
11 He's a good man. Just brains and legs.

12 And then there's me. And then most of the State
13 agencies, they work on the animals theirselves because
14 they can and they want to.

15 But, you know, I know sheep people from here to
16 Alaska. And I'm in the loop because I go to meetings. So
17 it seems like they're going to have to do the work again
18 and I'll be waiting for their call.

19 But, you know, can I get a team of -- I'm going
20 to hire my retired humble friends that are shepherders
21 and Mark Jorgensen and maybe a few people with Ph.D's. If
22 I can get five more people to help me with this sheep
23 project or anybody's sheep project, six people we'll have
24 over 200 years of sheep experience.

25 If I had hired the tortoise crew, my wife and I,

1 if they would have subbed to my wife and I, we have at the
2 end of this year, we have a cumulative 62 years of friggin
3 experience, 99 percent of which was in the Mojave Desert.

4 So, you know, I know why they do. I'm a business
5 person. I'm a biologist, but I'm also a business person.
6 You do it for low bid. You try to keep the money and you
7 do it, you use your own staff. And if you done have them,
8 you hire new college students. And I was looking at the
9 resumes. I go oh, yeah, graduate 2008, one page resume,
10 graduated 2007-8. 2007, two and half page resume. 2005.

11 And I was looking, you know, oh yeah, these guys
12 got 20 years experience in Alaska. Woohoo. And that
13 equates to Mojave Desert. How? Yeah.

14 Well, anyway, unless the Cal Energy Commission
15 decides to sign off of it real quickly like apparently
16 they just did at Ivanpah, I think the work is going to
17 have to be done sooner. But I really think a lot of
18 people my esteemed colleagues of the -- in this community
19 over here, might buy off on someone doing a comprehensive
20 habitat conservation plan, which would mean subplans for
21 particular species, tortoise, rare plants, bighorn sheep,
22 badger, burrowing owl, maybe Le Conte's Thrasher, Golden
23 Eagle, Prairie Falcon, stuff like that.

24 But, you know, it could be done. And I think San
25 Bernardino county would buy off on this, because what this

1 means is, they're not going to lose any land, because
2 buying land as mitigation is not working. It doesn't
3 work.

4 And, okay.

5 PRESIDING MEMBER EGGERT: Thank you very much,
6 Mr. Garlinger.

7 MR. GARLINGER: Who's going to clean this up?

8 PRESIDING MEMBER EGGERT: Just a couple of
9 thoughts. Again, first of all, thank you very much for
10 your input. It's clear that you've got a wealth of
11 experience and time in this area. And with these
12 particular issues relating to biology, and particularly
13 the bighorn sheep, I would encourage you to come to
14 tomorrow's portion of the evidentiary hearing. We're
15 going to be spending approximately 16 hours, by last
16 count, on biological impacts. And so you can hear the
17 testimony from the applicant. We're going to have our own
18 CEC staff.

19 We've got some really excellent biologists that
20 work for the CEC siting committee, as well as all of the
21 good questions I'm sure that we'll have from the parties
22 here.

23 I did also want to take the opportunity to
24 mention that the CEC is very very committed to distributed
25 renewable generation and particularly rooftop PV. We have

1 a number of programs, the California Solar Initiative,
2 approximately \$2 billion for incentives to do rooftop
3 solar. We've got a new solar homes partnership that's a
4 component of that to incentivize solar on new facilities.
5 And we are going to be launching this year a number of
6 programs for residential and commercial retrofit, which
7 include energy efficiency first, because that's the most
8 important resource to the state, is to actually reduce our
9 demand, and then solar on top of that for both residential
10 and commercial buildings.

11 MR. GARLINGER: May I add one more thing --

12 PRESIDING MEMBER EGGERT: Sure.

13 MR. GARLINGER: -- that I sort of forgot?

14 PRESIDING MEMBER EGGERT: One last thing, sure.

15 MR. GARLINGER: Well, the reason I commented
16 today is because I'm not expert witness for any of these
17 folks, you know, so I didn't think I'd have a chance
18 tomorrow. I'm sort of late in the game.

19 The other thing I forgot to mention is CEC has
20 your guidelines for birds and wind projects. But there
21 was not one or two years of point counts for birds on this
22 project. And people think, of, it's a solar, birds can
23 fly around them. But the habitat is going to be disturbed
24 or mowed, there's going to be loss of habitat. And since
25 I was born in Mojave and spent most of my life in the

1 Mojave Desert and I'm out there every year, as a
2 consultant, migratory birds, warblers, and shore birds and
3 such migrate sometimes this far off the deck going right
4 through creosote. They land on creosote and other shrubs,
5 in spring migration and fall migration.

6 And they flutter through at this level and you're
7 going to mow it to that level -- you're going to mow it a
8 few inches. So you have migratory birds, which are
9 protected under the Migratory Bird Species Treaty Act with
10 Mexico, Canada, Russia, Japan. And there wasn't any
11 really good bird studies. And I've had shore birds at 11
12 a.m. in the morning, a flock of 20, almost take me out
13 flying right over the deck.

14 And so what I'm wondering is, it's not a wind
15 project, but it seems like bird studies are ignored,
16 because it's not a wind project. And I've been working
17 the past two years for a couple clients. I would tell you
18 more, but then I'd have to kill you, because of my
19 confidentiality agreement.

20 But bird stuff, you know. So, you know, I would
21 think they would have to do a year or two of point counts
22 and that would be part of the habitat conservation plan,
23 because of this mowing of habitat loss.

24 PRESIDING MEMBER EGGERT: Okay. I appreciate
25 that as well. And actually one other very important

1 activity, which is probably one of those things when you
2 look -- you know, in retrospect you wish we had begun a
3 couple of years ago or maybe even longer, is the desert
4 resource conservation plan planning activity. And I know
5 there's going to be opportunities for a lot of public
6 input into that process, to help identify, you know, where
7 are the most resource intense areas, in terms of both the
8 biological resource, as well as the renewables resource.

9 But I do want to give opportunity for others who
10 might be either here in the room or potentially on the
11 phone. So first off, we don't have anymore blue cards up
12 here, but if there's anybody that feels a desire to
13 provide comment, anybody?

14 We'll take a pause here.

15 No. Okay we're going to open up the phone lines
16 on the WebEx or those who have dialed in. And I would
17 just say go ahead and introduce yourself if you want to
18 make a public comment.

19 Do we have -- are the lines open unmuted?

20 Okay.

21 One last chance, anybody in the room?

22 No.

23 Okay. Did I hear something?

24 Okay.

25 MR. BURKE: I'm Bob Burke. I'm a local resident

1 and I'm on the Board of directors for the Society of
2 Conservation of Bighorn Sheep. And I would like to thank
3 the Commission and the staff and the applicant for holding
4 these hearings down here, so that those of us that live in
5 the area and actually care about what's going on have the
6 opportunity, rather than making that trip to Sacramento.

7 Thank you.

8 PRESIDING MEMBER EGGERT: Thank you very much for
9 recognizing that.

10 Okay, I think we are going to go right back into
11 the topics. So I'm going to turn it over to our fearless
12 hearing officer here. And we'll see what more we can get
13 done today.

14 HEARING OFFICER KRAMER: Okay thank you. The
15 next topic is transmission system engineering. Staff or
16 you might have been expecting a little longer public
17 comment period, but are you ready?

18 STAFF COUNSEL HOLMES: Staff's witnesses are
19 available.

20 HEARING OFFICER KRAMER: Okay. And in the table
21 I do not have a staff witness listed. Could you give us
22 their names.

23 STAFF COUNSEL HOLMES: Mark Hesters and Sudath
24 Edirisuriya.

25 HEARING OFFICER KRAMER: Go ahead and spell

1 Sudath.

2 STAFF COUNSEL HOLMES: Sudath Edirisuriya.

3 HEARING OFFICER KRAMER: Okay, S-u-d-a-t-h. And
4 I'm going to let you do the rest.

5 MR. EDIRISURIYA: E-d-i-r-i-s-u-r-i-y-a.

6 HEARING OFFICER KRAMER: S-u-r.

7 MR. EDIRISURIYA: E-d-i-r-i-s-u-r-i-y-a.

8 HEARING OFFICER KRAMER: Okay, S-u-r.

9 MR. EDIRISURIYA: I-y-a.

10 HEARING OFFICER KRAMER: I-y-a.

11 Okay, were both -- neither of you were probably
12 around earlier to be sworn as witnesses; is that correct?

13 MR. HESTERS: Yes, we have not been sworn.

14 HEARING OFFICER KRAMER: Okay, if you'd raise
15 your right hands.

16 (Thereupon the witnesses were sworn, by the
17 Hearing Officer to tell the truth, the whole
18 truth and nothing but the truth.)

19 HEARING OFFICER KRAMER: Okay. Ms. Gannon, did
20 you wish to present some testimony from Mr. Gallagher?

21 MS. GANNON: We would like to have him be able to
22 be available for rebuttal. I don't have any direct to
23 offer prior to staff.

24 HEARING OFFICER KRAMER: Okay. Ms. Holmes, your
25 witnesses.

1 STAFF COUNSEL HOLMES: Yes. My witnesses
2 are -- excuse me for a moment.

3 My witnesses both have a single change to
4 Condition of Certification as well as response to the
5 points that were raised by the California Unions for
6 Reliable Energy.

7 HEARING OFFICER KRAMER: Okay, go ahead with
8 those.

9 Whereupon,

10 MARK HESTER and SUDATH EDIRISURIYA
11 were called as witnesses herein, and after first
12 having been duly sworn, were examined and
13 testified as follows:

14 DIRECT EXAMINATION

15 BY STAFF COUNSEL HOLMES:

16 Panel witnesses, would you please identify the
17 change that was just referenced?

18 MR. HESTERS: This is Mark Hesters. The changes
19 to Condition of Certification TSE COC 5 and sub -- you
20 want to call it the number under that of 8, which states
21 that the project owner shall provide to the CPN the
22 detailed Facility Study as Part A, and the executed
23 project owner and California ISO Large Generator
24 Interconnection Agreement as Part B.

25 The applicant has actually provided the detailed

1 Facility Study and the executed Large Generator
2 Interconnection Agreement. That Large Generator
3 Interconnection Agreement has been approved by FERC, the
4 Federal Energy Regulatory Commission.

5 So it makes -- doesn't make much sense to require
6 that as a Condition of Certification. It's already been
7 docketed.

8 HEARING OFFICER KRAMER: And did you say it was
9 or was not approved by FERC?

10 MR. HESTERS: There is a FERC stamp on the
11 bottom.

12 HEARING OFFICER KRAMER: Well, you know, you can
13 get one of those on any corner.

14 MR. HESTERS: Exactly.

15 (Laughter.)

16 HEARING OFFICER KRAMER: So you're proposing to
17 delete the subpart 8 to right above the verification on
18 TSE 5?

19 MR. HESTERS: Yes.

20 HEARING OFFICER KRAMER: Okay. And was there
21 another change?

22 MR. HESTERS: That was it.

23 HEARING OFFICER KRAMER: Okay. Mr. Marcus, I see
24 you're signed into the computer. Are you hearing us okay?

25 MR. MARCUS: Yes, I am.

1 HEARING OFFICER KRAMER: Okay. You were CURE's
2 witness. But first let me ask of CURE, my notes say that
3 you only intended to cross-examine -- you did intend to
4 cross-examine staff regarding Mr. Marcus' testimony.
5 Would you prefer to do that after Mr. Marcus testifies?

6 MS. MILES: Yes.

7 HEARING OFFICER KRAMER: Okay, so then you can
8 put on Mr. Marcus at this point. And then cross-examine
9 after that.

10 Whereupon,

11 DAVID MARCUS

12 were called as a witness herein, and after first
13 having been duly sworn, was examined and
14 testified as follows:

15 DIRECT EXAMINATION

16 BY MS. MILES:

17 Mr. Marcus, I believe that you were sworn at the
18 beginning of this hearing today; is that correct?

19 MR. MARCUS: That's correct.

20 MS. MILES: And who's testimony are you
21 sponsoring?

22 MR. MARCUS: My own.

23 MS. MILES: And do you have any changes to your
24 sworn testimony?

25 MR. MARCUS: No, I don't.

1 MS. MILES: And are the opinions in your
2 testimony your own?

3 MR. MARCUS: Yes, they are.

4 MS. MILES: Please summarize your education and
5 professional experience?

6 MR. MARCUS: I have a Master's degree --

7 MS. GANNON: We're willing to stipulate to his
8 expertise if other parties are as well.

9 STAFF COUNSEL HOLMES: Staff will stipulate.

10 HEARING OFFICER KRAMER: Anybody -- does anybody
11 want to inquire about his qualifications?

12 Okay seeing none, then we will accept a
13 stipulation that he's qualified as an expert to this
14 topic.

15 MS. MILES: Thank you. At this time, I'd like
16 the move exhibits 401 through 403 into the record. That's
17 the rebuttal testimony of David Marcus and supporting
18 exhibits.

19 HEARING OFFICER KRAMER: We were talking about
20 waiting to move all of these at the end of the proceeding
21 is that okay with you.

22 MS. MILES: That's fine.

23 HEARING OFFICER KRAMER: Okay. But in addition,
24 I wanted to add one exhibit, it's something that was
25 docketed in December of 2009. And I believe all parties

1 have had a chance to look at it, but I did not see it in
2 any of the other parties' exhibits. It's a memo -- it's a
3 staff memorandum to Felicia Bellows and Bob Therkelsen
4 regarding transmission lineup grades, and it was dated
5 October 21, 2009, and docketed in December. And I can
6 send out a copy of this electronically to everyone
7 tomorrow. This would be exhibit 438.

8 HEARING OFFICER KRAMER: Okay who is the author
9 of that?

10 MS. MILES: That was Christopher Meyer is the
11 author.

12 HEARING OFFICER KRAMER: Does any party object to
13 her using this document today before you've seen it?

14 We're just pausing because they are consulting.

15 MS. GANNON: We have no objection.

16 HEARING OFFICER KRAMER: Okay. When you're done
17 let me borrow that document, so can I get the proper
18 information for the exhibit list.

19 MS. MILES: Sure.

20 HEARING OFFICER KRAMER: Go ahead.

21 MS. MILES: Mr. Marcus, would you please describe
22 for us what it was that CURE asked to do in reviewing
23 this project?

24 MR. MARCUS: CURE asked me to independently
25 review the Staff Assessment and the Supplemental Staff

1 Assessment, focusing on the transmission needs of the
2 project, and the applicant's additional testimony and
3 filings to the extent that they related to transmission.

4 And then they also asked me to review the
5 testimony of Sean Gallagher and Felicia Bellows related to
6 project description.

7 MS. MILES: Thank you. Can you please summarize
8 your primary concerns with the staff's analysis?

9 MR. MARCUS: That's set forth in my testimony.
10 And I guess there are seven main conclusions that the
11 parts 3A through 3G, on pages two to five of my testimony.

12 And the first of those substantive sections I
13 report that there appear to be major transmission upgrades
14 that are going -- that are assumed to be built prior to
15 the Calico project, that appear to be needed to enable
16 reliable delivery of Calico generation, but which there's
17 neither environmental analysis in the Calico SA nor a
18 citation to somewhere else, where such analysis has been
19 done elsewhere.

20 You know, it's assumed that these preceding
21 projects are going to get built by others as part of other
22 projects, but there's no identification of what those
23 other projects are or where the environmental analysis
24 might be.

25 The next three sections 3B to 3D are components

1 of the Calico project itself that don't appear to have had
2 their environmental impacts fully analyzed. And then the
3 final three parts, 3E, F, and G, I discuss mitigation
4 conditions for the Calico project that should be added,
5 particularly a requirement for an approved LGIA. We just
6 heard staff talking about how there's already a signed
7 LGIA, but in fact FERC did not fully approve that LGIA.
8 They reject the part that applies to phase 2, and that's
9 what Exhibit 403 attached to my testimony shows. That's
10 the FERC decision from earlier this year.

11 And since they don't have an approved LGIA for
12 the entire project, at the present, I'm proposing that
13 that be made a condition, that they come back and provide
14 one when and if they have one.

15 MS. MILES: Have you done further research since
16 your testimony was submitted?

17 MR. MARCUS: Yes. In page two of my testimony
18 where I list Tuesday six projects that staff had
19 identified or staff had named as one that were assumed to
20 be built prior to the project, I went and looked on my own
21 to see what I could find as to the status of any
22 environmental analysis that had been done on those
23 projects.

24 MS. MILES: And what did you learn about those
25 six projects?

1 MR. MARCUS: I indeed found references to all six
2 of them as prospective projects. They were either in the
3 Edison Transmission Ranking Cost Report, commonly known as
4 TRCR, that's something that Edison submits to the CPUC and
5 I looked at the one that was approved by the PUC last year
6 or I looked at ISO deliverability studies and I looked at
7 the California Transmission Planning Group's phase 3
8 report that came out two weeks ago, and all of those
9 projects are listed in one or more of those three places.

10 The number three on the list that's on page two
11 of my testimony, new transmission between Kramer and Lugo,
12 the listed a couple different ways. It's been proposed at
13 both the 220 kV and the 500 kV level.

14 What I didn't find was that any of these projects
15 have been approved by the ISO either in past ISO
16 transmission -- annual transmission plans or in the most
17 recent 2010 transmission plan.

18 MS. MILES: Have you EIRs been prepared for any
19 of these projects?

20 MR. MARCUS: Not by name. However, there's a
21 draft EIR issued this year at the PUC which is reviewing
22 the El Dorado Ivanpah Transmission Project, and
23 the -- that project EITP, El Dorado Ivanpah Transmission
24 Project, would replace about 85 percent of the existing
25 mountain passed El Dorado 115 kV line, with a double

1 circuit 230 kV line, and then would remove a 115 to 230 kV
2 transformer at El Dorado.

3 And so I think that replaces items 5 and 6 that
4 are on the list that the staff prepared and that is
5 repeated on page two of my testimony. So I think
6 effectively, there's an EIR for items 5 and 6.

7 I was unable to find any evidence of any EIR work
8 on the other four projects listed on page two of my
9 testimony.

10 MS. MILES: In your opinion, would any of those
11 projects require an EIR?

12 MR. MARCUS: It's possible that three of them
13 would not. The first, second, and fourth projects on that
14 list are all projects that exist in substations. And
15 those might either not require any environmental work, if
16 they're entirely inside existing substation boundaries or
17 only require Mitigated Negative Declarations.

18 But number 3, which is new transmission between
19 Kramer and Lugo would almost certainly require an EIR,
20 because that would be something like 50 miles of new
21 transmission line.

22 MS. MILES: In section 3D on page 3 of your
23 testimony, you refer to the expansion of the Pisgah
24 Substation as part of the Calico project. Is that a
25 correct reference?

1 MR. MARCUS: Not necessarily. There's a document
2 that's been docketed, although it's not on the Energy
3 Commission's website, which is the applicant's response to
4 the CEC staff's transmission inn upgrades memorandum, that
5 contains a document from Southern California Edison, which
6 was talked about earlier today in cross-examination.

7 MR. MILES: And just to interrupt for one moment,
8 I believe that that is the applicant's Exhibit 28.

9 MR. MARCUS: Okay. So that Exhibit 28 is an
10 Edison document where Edison says that it has not yet
11 decided whether the permanent interconnection from Calico
12 to Edison would expand at Pisgah, which is what I assumed
13 or at a new Pisgah Substation to be built up to 6 miles
14 away.

15 And so the effect is that when my testimony says
16 that an expansion of the Pisgah Substation is part of the
17 project, it could be that, in fact, a relocation of the
18 Pisgah Substation up to 6 miles away disturbing up to 100
19 acres and requiring up to 6 miles of additional gen-tie
20 line because the proposed gen-tie line would go to the
21 existing Pisgah Substation, would it therefore have to be
22 expended to go to a relocated Pisgah Substation.

23 MS. MILES: And I just have one final question.
24 It's actually regarding Mr. Gallagher's testimony this
25 morning. And I just wanted you to briefly testify on

1 the -- because I know you couldn't testify earlier, since
2 you're actually asking the question, regarding the Mr.
3 Gallagher's testimony on project overview and benefits.

4 MR. MARCUS: Yes, the very first benefit that Mr.
5 Gallagher said the project would provide was reduction in
6 carbon emissions. And his testimony has a number for
7 that. And my review those that he has overstated the
8 emissions by a factor of 2,000 by using tons, where he
9 should have used pounds, and has further overstated it by
10 a factor of somewhat more than three by confusing carbon
11 dioxide with carbon. And so the actual carbon reduction
12 benefits of Calico would be approximately 1/7000th of the
13 number that's in his testimony.

14 MS. MILES: Thank you. I have no further
15 questions, and the witness is available for
16 cross-examination.

17 HEARING OFFICER KRAMER: Any questions of this
18 witness?

19 MS. GANNON: I have a few questions.

20 HEARING OFFICER KRAMER: Okay, the applicant.
21 Anyone else want to question the witness?

22 STAFF COUNSEL HOLMES: Staff doesn't have
23 questions of this witness.

24 HEARING OFFICER KRAMER: Go ahead.

25 CROSS-EXAMINATION

1 BY MS. GANNON:

2 In your testimony you state that it is common
3 practice for a signed LGIA to be submitted; is that
4 correct?

5 MR. MARCUS: Can you direct me to --

6 MS. GANNON: You were talking I believe in
7 the --

8 MR. MARCUS: Page 4 Item 3F.

9 MS. GANNON: -- page 4, Item 4.

10 MR. MARCUS: Yes.

11 MS. GANNON: Is that correct?

12 MR. MARCUS: Yes.

13 MS. GANNON: And you're aware that the project
14 has submitted a signed LGIA; is that correct?

15 MR. MARCUS: Yes, but I'm also aware that in this
16 particular case, which is a very unusual situation, FERC
17 has failed to approve that signed LGIA.

18 MS. GANNON: Denied without prejudice, I think is
19 the correct term, is that not right?

20 MR. MARCUS: Yes.

21 MS. GANNON: So they have met the standard
22 condition, which is to submit a signed LGIA; is that
23 correct?

24 MR. MARCUS: I believe so.

25 MS. GANNON: Thank you. No further questions.

1 HEARING OFFICER KRAMER: I detect a theme in this
2 testimony that some people believe that there's an
3 inadequate analysis of some of the downstream impacts of
4 this project. And I wanted to ask staff's witness to
5 respond to, or counsel, in the way -- or in the form of
6 argument to respond to that very definitely implied
7 criticism of the staff analysis.

8 STAFF COUNSEL HOLMES: Well, that was going to be
9 the nature of my additional direct testimony. So I don't
10 think it really matters much whether it comes from you or
11 from me, but why don't we together ask the Energy
12 Commission staff to respond to Mr. Marcus's criticism.
13 And I would suggest, panel witnesses, that you simply go
14 one by one beginning on page two.

15 MR. HESTERS: Okay, this is Mark Hesters. We're
16 going to alternate to some degree.

17 So page 2A, which has the description of upgrades
18 that are required for generating projects that essentially
19 have a higher queue position in the ISO interconnection
20 queue than the Calico project. And these are a series of
21 upgrades that would be assigned to those projects, should
22 those projects go forward.

23 I guess what I'd like to point out is that the
24 studies that determine the need for downstream facilities
25 are a forecast. They're a forecast -- they include

1 forecast of loads. They include forecasts of future
2 generators. As forecasts they're likely wrong.

3 The study that we have has followed the standards
4 that have been set by the ISO and -- for doing these types
5 of studies and included those assumptions. Those
6 assumptions include generators that have a higher queue
7 position. And by sort of pro forma the upgrades that are
8 required for the reliable interconnection of those higher
9 queue position generators.

10 We don't take a position on whether or not those
11 are viable projects and what those futures
12 generators -- whether or not they will happen or will not
13 happen. You could spend a lot of time doing studies
14 guessing at which generators and which downstream
15 facilities for those generators would or would not happen.
16 And we -- it's not a reasonable way to go about planning
17 for generator interconnection.

18 The studies essentially have requirements. The
19 requirements were met through these studies. They're the
20 best guess at this point.

21 Do we want to go through -- this is just a -- do
22 we want to go through each of these individually with
23 cross on our responses or do we want to go through them
24 all and then cross?

25 STAFF COUNSEL HOLMES: What's the Committee's

1 pleasure?

2 HEARING OFFICER KRAMER: I'm not sure I
3 understand the choice. You mean the specific --

4 MR. HESTERS: Well, I could -- this is Mark
5 Hesters. I mean, I can respond to A and then we can
6 answer questions or cross-examination about our response
7 to A and then we can go on to B, or we can respond to A
8 and respond to B and respond to C and respond A through is
9 it F? And then respond the cross to each of them -- go
10 back and respond to each of them. I just wanted to offer
11 up the option of saying you know cross on A, then we'll go
12 to B. We'll present our response and then cross on that

13 Does that make sense?

14 STAFF COUNSEL HOLMES: Does the Committee have a
15 preference?

16 HEARING OFFICER KRAMER: Hold on a second.

17 Well, let's see. It might be best then for CURE
18 to go ahead with their questions of staff and then --

19 STAFF COUNSEL HOLMES: Actually, I think that
20 staff ought to at least have the opportunity to respond to
21 criticism before CURE begins its cross-examination. So if
22 that's going to be the -- if the next step is to allow
23 CURE to cross, I think staff ought to at least be allowed
24 to summarize its response to A through F.

25 HEARING OFFICER KRAMER: Okay, and that's fine.

1 And you were referring to A to -- A through F of which
2 exhibit again?

3 STAFF COUNSEL HOLMES: All of my direct is
4 focused on the criticisms that CURE has made of the staff
5 analysis. So it would be the items A through F that begin
6 on Dr. Marcus' testimony beginning on page 2.

7 MR. HESTERS: Okay, so that was -- this is Mark
8 Hesters. That was the response to A was that essentially
9 the study is a forecast. The forecast has to recover --
10 include generators with higher queue positions. And it
11 makes assumptions about both the generators and the
12 transmission facilities that are needed for the reliable
13 interconnection.

14 It's again not our position to go through and
15 judge which projects are likely to occur and which aren't,
16 and then ask the applicant or Edison to redo the study
17 based on our best guess.

18 Okay Sudath is on.

19 MR. EDIRISURIYA: This is Sudath Edirisuriya. I
20 am providing the information for the 300 megavar dynamic
21 reactive-VAR support. SCE has proposed a 300-megavar
22 dynamic reactive-VAR support by installing the static wall
23 compensator to mitigate the dynamic voltage swing caused
24 by the transient study.

25 The detailed static VAR compensator parameters

1 has not yet completed by the SVC, and still in the process
2 of review. In addition, the SVC static VAR compensator
3 can mitigate active power oscillation through the voltage
4 amplitude modulation. The project will need to provide
5 300 megavars of dynamic reactive power support. The
6 static VAR compensator can continuously provide the
7 reactive power required to control dynamic voltage swings,
8 under the various system conditions and thereby improve
9 power system transmission and distribution performance.

10 That is the answer for the 300 megavar dynamic
11 reactor support. That is the requirement.

12 And for the static reactor VAR support capacities
13 as the applicant has proposed 6 capacitor banks, each 45
14 megavar to be installed in the Calico substation. The
15 preliminary drawings that were submitted by the applicant
16 have included 270 MVAR static VAR support. Staff expects
17 that additional 90 MVV static VAR requirement will be
18 included in the final design phase.

19 These capacitor banks would benefit the voltage
20 regulation of the collective busses and power factor
21 corrections. The capacitor banks are installed in the
22 Calico substation. Therefore, there is no need of
23 additional CEQA analysis, because it is within the
24 substation, which has been proposed by the applicant.
25 These equipment are installed in the Pisgah Substation as

1 well as the Calico substation.

2 MR. HESTERS: This is Mark Hesters. I'd also
3 like to add that the dynamic reactive support would be
4 included in -- built in the expansion of the Pisgah
5 Substation. And we have included an environmental
6 analysis of that expansion. That is the 220 kV expansion,
7 not the 500 kV expansion that's required -- the 220 kV
8 expansion that's required for the 275 megawatt phase one
9 Calico project, not the 500 kV expansion that's required
10 for the full build-out.

11 For D we're onto downstream transmission upgrades
12 that were not studied in the DEIS Staff Assessment and
13 Supplemental Staff Assessment.

14 HEARING OFFICER KRAMER: While you're looking,
15 just for the record, the exhibit containing Mr. Marcus'
16 testimony is Exhibit 400. So that's what you've been
17 responding to, correct?

18 STAFF COUNSEL HOLMES: That's correct.

19 MR. HESTERS: I guess I'd like to focus -- the
20 big environmental impact that we have missed, and it's not
21 just -- it's not missed. There isn't a way that we can
22 adequately analyze it at this point, is the replacement of
23 the 67 mile Pisgah Substation to Lugo Substation, 220 kV
24 line with a new 500 kV line.

25 It's a 65-mile line. Fifty-five miles of it

1 would use an existing right of way and replace an existing
2 line. The last 10 miles would use a new right of way.
3 The 55 miles we've been able to analyze. The 10 miles
4 there has not been an identified route for. And
5 Edison -- we don't even know what the schedule is at this
6 point for Edison determining that route. But that last 10
7 miles will be the subject and the whole thing will be
8 subject of a certificate of public convenience and
9 necessity, essentially licensing permit at the Public
10 Utilities Commission.

11 They will identify environmental impacts. They
12 will identify alternatives. The PUC often chooses
13 alternative routes. Edison may have a preferred route.
14 Southern California Edison may have a preferred route. In
15 many cases, I've seen Edison -- or the Public Utilities
16 Commission require utilities to use other routes, because
17 they are environmentally more benign or less harmful.

18 At this point we can't identify -- analyze that
19 last 10 miles. And at some point, it becomes a chicken
20 and egg, do you wait for this to be identified before you
21 can go ahead with the power plant or -- it's just not
22 possible. The applicant isn't in a position to provide
23 that information and we aren't in a position to identify
24 that information -- or to analyze that.

25 That's the same for the potential movement of the

1 PIsqah Substation, where -- when for the full build-out of
2 the plant, Edison has said that they may have to move the
3 existing power plant 220 kV power plant, in order to add a
4 500 kV Bus to it.

5 That location hasn't been determined. It's
6 impossible for anybody to analyze the environmental
7 impacts of a substation that doesn't have a location. And
8 it's also impossible for anybody in here the applicant, or
9 us to identify where Edison is going to finally locate
10 that project.

11 So that's essentially the response there. That
12 was D.

13 So now we're on E.

14 MR. EDIRISURIYA: I am answering the question for
15 the mitigation requirement in the DEIS discussion of
16 reactive support facilities. We are willing to include
17 the facility requirement for the substation capacitor bank
18 megawatt requirement into the -- as a Condition of
19 Certification.

20 MR. HESTERS: Finally on F the sign Large
21 Generator Interconnection Agreement should be a condition
22 of project approval. They have provided the -- what would
23 normally have met a standard condition. As Mr. Marcus has
24 pointed out, it's a unusual circumstance to see one of
25 these where FERC has not approved a portion of the Large

1 Generator Interconnection Agreement.

2 It may be worth modifying the condition to
3 require the submittal of the -- nay amendments to the
4 Large Generator Interconnection Agreement because it looks
5 likely that there will be amendments to the Large
6 Generator Interconnection Agreement. We've never done
7 that before, but again I've never actually seen one where
8 FERC hasn't approved it. So we'll have to think about
9 that.

10 HEARING OFFICER KRAMER: Okay. I think I'll have
11 some questions eventually, but I'll -- is that it?

12 STAFF COUNSEL HOLMES: I have one question to ask
13 Mr. Hesters.

14 Mr. Hesters, did the Energy Commission staff
15 prepare testimony that outlined or identified the
16 facilities that were likely to be needed in the future as
17 a result of the transmission requirements associated with
18 this project?

19 MR. HESTERS: Yes.

20 STAFF COUNSEL HOLMES: Just for the point of the
21 record here today, we're talking about what was filed this
22 morning with exhibit -- as Exhibit 304. It was
23 inadvertently admitted from the Supplemental Staff
24 Assessment when it was filed.

25 HEARING OFFICER KRAMER: Okay, let's -- do you

1 recall what time that came in?

2 STAFF COUNSEL HOLMES: I beg your pardon?

3 HEARING OFFICER KRAMER: Approximately what time
4 was that September, any idea? I'm trying to find it in my
5 mailbox.

6 STAFF COUNSEL HOLMES: Ten or 11 perhaps. Again,
7 to clarify, what we did was because there were a number of
8 other references in the other sections of the testimony,
9 in which the actual analysis was included to the section,
10 what was filed was actually underlined strikeout. Rather
11 than file it as a new section, we added it to the original
12 section, as we had originally intended to do, so that the
13 subsequent references in the Supplemental Staff Assessment
14 make sense.

15 MS. GANNON: And I'll just note. It was actually
16 sent to an old POS list. So many of us did not -- were
17 not on that. We've had it forwarded it to us
18 subsequently.

19 STAFF COUNSEL HOLMES: All we know is that we
20 took it to dockets and asked that it be POS'd, so I
21 apologize if there was an error there.

22 MS. GANNON: I'm just saying that that may be why
23 people are finding it at different times or having
24 difficulty in finding it. We have received it now.

25 STAFF COUNSEL HOLMES: I think Hearing Officer

1 Kramer's been on the POS from the beginning, but perhaps
2 not.

3 HEARING OFFICER KRAMER: Well, we have a pretty
4 clogged pipe here to the Internet, so I think I'm down
5 loading it now.

6 STAFF COUNSEL HOLMES: This is the -- it's
7 contained in the documents that we discussed earlier this
8 morning that contains Exhibit 304, 305, and 306.

9 HEARING OFFICER KRAMER: Okay, it's only 8
10 megawatts, so we're going to -- we're not going to
11 wait -- I'm going the start down loading it, but it's
12 going to take awhile.

13 STAFF COUNSEL HOLMES: Yeah. It's just a
14 description of the downstream facilities that were
15 analyzed in the individual technical sections.

16 HEARING OFFICER KRAMER: Okay. Then let's go
17 forward with Ms. Miles questions. I want to make sure we
18 come back to the --

19 MR. HESTERS: I had one more.

20 HEARING OFFICER KRAMER: Okay.

21 MR. HESTERS: This is Mark Hesters. I hadn't
22 finished with G.

23 And Mr. Marcus has proposed, I guess it would be,
24 a modification to Condition 5 that would actually read
25 something like the project should be designed and

1 constructed with admit reactive power resources to
2 compensate for the consumption of power by the generator
3 sub-transformers, distribution feeders, and generator tie
4 lines.

5 In this case, it may be a reasonable condition to
6 add. I don't think it materially affects the project in
7 any way, but this is one of the few projects where we've
8 seen a requirement for borrow compensation at
9 the -- reactive compensation at the power plants, which
10 are -- it would be a reasonable -- as we require circuit
11 breakers to be -- I'm trying to get the exact -- we
12 require circuit breakers size to comply with the short
13 circuit analysis. This would be smaller for this type of
14 power plant. It's just something new that we -- I haven't
15 seen. It's, as we know, a new technology and I haven't
16 seen it with other applications before, so it may be a
17 reasonable addition to TSE Condition 5.

18 MR. MARCUS: And this is Dave Marcus, if can I
19 interject briefly. The specific words that Mr. Hesters
20 just used would indeed be the ones that I would suggest,
21 so there's no dispute about what the language would be if
22 you're going to add it.

23 HEARING OFFICER KRAMER: If somebody could reduce
24 that to writing and circulate it as a proposal, then
25 everyone else could respond to it either later this week

1 or on the 18th. I think I'd prefer to resolve that this
2 week.

3 So Mr. Hesters, can you do that?

4 MR. HESTERS: It's actually in the testimony that
5 Mr. Marcus has, and I can write it as part of the modified
6 Condition 5.

7 HEARING OFFICER KRAMER: Yeah, I think people
8 will deal with it most efficiently if they can see it in
9 underline strikeout form as an amendment to the condition.

10 MR. HESTERS: I can do that.

11 HEARING OFFICER KRAMER: Ms. Gannon, did you have
12 something to add?

13 MS. GANNON: I believe that this is not
14 mitigation, this proposal. I believe this is -- this is
15 just details of the design. I don't believe it's designed
16 to mitigate any impact that has been identified by the
17 Staff Assessment or by any party. I don't think it's an
18 appropriate condition.

19 And this may be one that we need to brief.

20 HEARING OFFICER KRAMER: Well, conditions are
21 quite often -- they speak to more than mitigation. So a
22 standard that the condition has -- anything in a condition
23 has to be CEQA mitigation. It would not be consistent
24 with the way the Commission normally does business, I can
25 tell that you much.

1 MS. GANNON: Well, this is also dealt with in the
2 LGIA. And we feel that's the appropriate place for it to
3 be addressed. And so it's redundant. I mean, that's why
4 I guess we don't understand why it would be a Condition of
5 Certification, otherwise -- other than it being a
6 mitigation measure. And we don't see it as being a
7 mitigation measure.

8 So I guess we don't understand what would be the
9 intent of including it as a Condition of Certification.

10 HEARING OFFICER KRAMER: Mr. Hesters, and then
11 Mr. Marcus, do you want to respond to that.

12 MR. MARCUS: I can go first. You've already got
13 the language that I wrote and that Mr. Hesters quoted in
14 both the DEIS/SA and in the SSA. And this is just putting
15 it into a requirement for the applicant to comply with.
16 It already says that the project quote should be designed
17 to construct it, et cetera. This is just telling the
18 applicant, in an enforceable place, that it should be
19 designed and constructed with adequate reactive power
20 resources.

21 It's no different than a whole list of other
22 things that are part of project description in the
23 conditions.

24 MR. HESTERS: This is Mark Hesters. It isn't
25 different -- again, I'm referring to the breakers and

1 Buses in the power plants which are in others -- which
2 this is TSE 54, which has a requirement for
3 breakers -- circuit breakers. That's also part of the
4 LGIA and we put anytime Condition 5. We call out some
5 specific forms of equipment and forms of -- standards that
6 it has to -- that the equipment must comply with.

7 This would be the same thing. I don't think it
8 would materially affect anything that the project did
9 or -- you know, thousand project was built or anything,
10 but it would -- it's there's only project where I've ever
11 seen VAR compensation required at the PowerPoint switch
12 yard. So it doesn't seem unreasonable to add it as a
13 condition.

14 HEARING OFFICER KRAMER: So is the applicant's
15 objection philosophical or does it just -- does it make
16 it -- more difficult to be flexible if a different design
17 is required or what is the nature of it?

18 MS. GANNON: I mean, it's all of those things and
19 plus we're just tired of this.

20 We think it's completely unnecessary. We think
21 that it's being -- it's addressed in the LGIA, which is
22 the appropriate place to address it. And as you said, it
23 adds to flexibility. When we start getting into
24 Conditions of Certification that speak to how we have to
25 tighten our screws, we think it just becomes a little bit

1 much.

2 And we can't think of all -- I mean I'm not
3 thinking of a list of horrors that are going to happen
4 if you require us to do this. I'm not going to, you know,
5 waste people's time tonight talking about this, to a great
6 extent. It's just we really don't think it's necessary.

7 MR. MARCUS: If the applicant thinks 300
8 megawatts of reactive support is the same as tightening
9 screws, then you absolutely need it as a condition.

10 HEARING OFFICER KRAMER: Okay. Well, we'll take
11 that under consideration. Mr. Hesters, though, if you
12 could circulate language.

13 MR. HESTERS: Okay. I'll do that tomorrow
14 morning.

15 HEARING OFFICER KRAMER: Ms. -- are we ready for
16 miss miles to ask you a couple questions?

17 STAFF COUNSEL HOLMES: Yes.

18 HEARING OFFICER KRAMER: Go ahead then.

19 MS. MILES: I actually have no questions. Thank
20 you

21 (Laughter.)

22 MS. MILES: Not to be anticlimactic.

23 HEARING OFFICER KRAMER: Okay. Well, then I have
24 to go back and -- I have a couple.

25 One is on the question of analyzing the

1 transmission line upgrade or replacement or the new
2 transmission line that's required, I've frankly forgotten
3 which it is. But the roughly 60 mile transmission line,
4 staff is it -- you've said you don't know the route,
5 that's correct, right?

6 MR. HESTERS: We don't know route for 10 miles of
7 the line. It's the last 10 miles into the Lugo
8 Substation.

9 HEARING OFFICER KRAMER: Okay, and have you been
10 able to analyze the remainder of the line?

11 MR. HESTERS: I haven't personally, because I
12 don't have expertise in the environmental or other sort of
13 dirt-turning impacts, but it's my understanding that we
14 have included an analysis of the portions of line that we
15 could, the first 55 miles.

16 HEARING OFFICER KRAMER: Okay. And then as to
17 the portion that is still uncertain as to its exact
18 location, is there anything unique about the terrain it is
19 likely to traverse that suggests that it will be difficult
20 to mitigate any of the likely environmental impacts that
21 might result from the line's construction?

22 MR. HESTERS: I have no idea. It's not an area
23 of my expertise, and I don't know what considerations
24 Edison and, ultimately, the Public Utilities Commission
25 will take in determining a route for that last section.

1 HEARING OFFICER KRAMER: Okay, but is there any
2 reason to believe that there are not sufficient mitigation
3 tools available to the PUC to be able to fully mitigate
4 any impacts that might be found from the ultimate route
5 that is chosen?

6 PROJECT MANAGER MEYER: Christopher Meyer,
7 project manager at the Energy Commission.

8 Just to give a very brief background, Energy
9 Commission very early in this process actually -- well, I
10 think one of the earlier meetings was in April of 2009, we
11 met with the Public Utilities Commission on this issue.
12 We brought -- at different times we brought Edison in, the
13 applicant in over a series of meetings, and then BLM in
14 trying to resolve, you know, how to deal with this
15 uncertainty of where the line was going to be when the
16 application -- the CPUC application was going to go from
17 Edison to the PUC, when Edison would actually have a final
18 route, and the environmental engineering information on
19 this line for staff to analyze.

20 And what we were able to do is we were able to
21 get enough information to do the analysis that staff has
22 done on, as Mark says, the approximately 55 miles where
23 they believe route is going the follow an existing
24 transmission line, where they're going to remove one
25 series of poles and replace it with a larger pole.

1 The end, where you get in towards the urban area,
2 is where the right of way where ultimately without the
3 intrusion, the line probably would have gone right down
4 the existing right of way into the existing substation.
5 But by sort of urban sprawl and intrusion into the right
6 of way, that's no longer possible.

7 So that area where they're going to go down,
8 they're going to have to find away into the Lugo
9 Substation in a more urbanized area. So all I can say is
10 from my experience in, you know, PUC projects and Energy
11 Commission projects, I don't anticipate that it's
12 something where the Public Utilities Commission and BLM,
13 since it would be a joint project, wouldn't be able to
14 find a route mitigation. But I -- anything beyond that is
15 reading tea leaves.

16 STAFF COUNSEL HOLMES: I'd like to point out --
17 this is Caryn Holmes. I'd like to point out that there's
18 a discussion specifically of the upgrade, as I said, in
19 each technical section. And there's some -- more than 10
20 pages on this issue with respect to biological resources
21 alone.

22 So I would refer the Committee to those
23 discussions to get some sort of sense of what the
24 potential impacts might be and the availability of
25 mitigation.

1 HEARING OFFICER KRAMER: Okay. Thank you. And
2 then Mr. Edirisuriya --

3 MS. MILES: I'm sorry. I have one just question
4 for Christopher Meyer clarification, really.

5 HEARING OFFICER KRAMER: Of this topic.

6 MS. MILES: Yes, in response to what he just
7 stated.

8 HEARING OFFICER KRAMER: Okay, go ahead.

9 MS. MILES: You stated that they'll be replacing
10 poles -- the existing poles with larger ones. And I was
11 wondering if you could clarify whether there would
12 be -- whether those would number the existing pole
13 locations and whether there would be additional impacts
14 ground disturbance besides just replacing of poles?

15 PROJECT MANAGER MEYER: We've provided general
16 information on that, and provided general information that
17 where existing pole locations are avoiding resources, that
18 they would maintain them, but they -- in the initial
19 meetings we had with Edison, they were not able to commit
20 to the location of every single pole. Where they did
21 infer that they would hope for using the same locations
22 for ease of construction, but they -- my understanding,
23 unless the applicant can clarify that there's going to be
24 any changes, they were not able to commit that every pole
25 location would be the same. This wasn't a situation where

1 they were just retopping the poles.

2 MS. MILES: Do you recall that Edison made a
3 statement during a workshop relating to the transmission
4 that the pole locations could not be in the exact existing
5 locations, at least not all of them, because the poles
6 would have to be spaced differently due to the size of the
7 line? Does that ring any bells?

8 PROJECT MANAGER MEYER: That was a comment made
9 by one representative of Edison. We've been dealing with
10 many different representatives of Edison at different
11 levels. And I'm just referring to the dealing with the
12 engineers in this aspect.

13 MS. MILES: Is there any documentation in the
14 record that is more recent than that discussion?

15 STAFF COUNSEL HOLMES: The most recent
16 documentation is in Exhibit 304.

17 MS. MILES: So there's additional information
18 that was provided by Email today is that what you're
19 saying to clarify?

20 STAFF COUNSEL HOLMES: What was provided by Email
21 today is the description of the potential upgrades that
22 are likely to be needed, based on the information staff
23 had at the time of the Supplemental Staff Assessment.
24 It's the information upon which the authors of each
25 technical area base their analysis of impacts related to

1 those upgrades.

2 MS. MILES: I have not had a chance to review
3 that document. I'm sure you can understand, considering
4 that it was docketed this morning. So I would like to
5 reserve the opportunity to respond to that at the
6 future -- the next hearing. I don't know whether I will
7 have further comment or not at this time.

8 HEARING OFFICER KRAMER: Okay. You're referring
9 to the August 18th hearing?

10 MS. MILES: Yes.

11 HEARING OFFICER KRAMER: Okay, and if can you
12 tell the parties by the -- let me pick a date. If can you
13 notify the parties by Friday August 13th of your intention
14 to raise the issue again, so they can be available,
15 then -- and we will assume that you do not wish to discuss
16 it unless you send out word to the parties that you do by
17 August 13th.

18 STAFF COUNSEL HOLMES: Hearing Officer Kramer, I
19 have, I guess, a question. What was filed this morning is
20 simply the description, and the analysis of impacts
21 associated with the facilities that are described in
22 Exhibit 304 has been out for the requisite period of time.

23 So I'm assuming that the questions would not be
24 with respect to for example biological resources or air
25 quality or anything of that nature. It would be specific

1 to the description; is that correct?

2 MS. MILES: I can't answer that until I see
3 what's in the document.

4 STAFF COUNSEL HOLMES: Well, I guess that's my
5 concern is that the analysis of impacts was included in
6 the Supplemental Staff Assessment.

7 HEARING OFFICER KRAMER: Well, but part of the
8 analysis is the description. And because they haven't
9 been able to see it till now, I think it's only fair that
10 they've a chance. I will modify the request, so that Ms.
11 Miles will need to also in her notice that she wants to
12 talk further about this, specify that particular topic
13 areas that her questions would relate to. And we'll put
14 her on notice now that, you know, we will hold her very
15 strictly to what she tells us as far as what she wants to
16 talk about.

17 STAFF COUNSEL HOLMES: So for example, we could
18 have witnesses recalled on the 13th who's testimony has to
19 date come in by declaration. Is that -- I'm just trying
20 to make -- I'm trying to find out if that's, in fact, what
21 you're suggesting.

22 HEARING OFFICER KRAMER: Well, I think that's the
23 appropriate approach. You know, this is new information
24 coming in late.

25 STAFF COUNSEL HOLMES: Thank you.

1 MS. GANNON: And Hearing Officer Kramer, we would
2 like to support staff's suggestion that any topic that
3 remains open is related to some change that's in this
4 document. So there's a red-lined version that was sent
5 out, so if it's something that is substantively -- so if
6 it could also be identified how it's related to the
7 changes in this document, that would make sense.

8 PROJECT MANAGER MEYER: Hearing Officer Kramer,
9 this is Christopher. Just I to -- I think we've said it
10 enough. Just to make sure everyone's clear, the
11 information, the analysis, has changed little since the
12 Staff Assessment Draft EIS. The information, the analysis
13 has been in there. All that was added was the background
14 information that we provided to staff to do their analysis
15 at that point.

16 In some sections a lot of this is there in the
17 areas and others once they did not reprint all of this
18 information, all of this background. So all is coming up
19 to the background. The analysis has been done in each of
20 the technical areas, and that hasn't changed at all.

21 So my request would be if it's just on the
22 background clarification of what's in this new
23 information, that would be acceptable, and we can work to
24 answer those. But if it's something on the section that's
25 been basically unchanged since the Staff Assessment Draft

1 EIS, I don't know why that would be new.

2 HEARING OFFICER KRAMER: Well, I'm scrolling
3 through here and I'm just seeing pages and pages of new
4 underlying descriptions. So it's quite possible she will
5 look at it and decide that there really is nothing new
6 here.

7 But I think out of fairness, the parties deserve
8 an opportunity to do that. And because no one else has
9 requested that opportunity, we will limit the offer to
10 CURE at this point.

11 MS. MILES: Sounds fine by me.

12 HEARING OFFICER KRAMER: Okay, so by the 13th,
13 you will identify any issues and explain -- let's also add
14 that you explain the change that you see that has
15 re-raised your interest in the topic.

16 MS. MILES: Sure.

17 HEARING OFFICER KRAMER: Okay. Now, my last
18 question, I think, was to Mr. Edirisuriya. And maybe I'm
19 just remembering your testimony wrong, but you were
20 talking about making another change to one of the
21 conditions in response to, I believe it was about
22 paragraph D of Mr. Marcus' testimony. Do you recall what
23 I'm vaguely remembering?

24 MR. HESTERS: Paragraph D was the downstream
25 transmission upgrades. That's the big --

1 HEARING OFFICER KRAMER: Then it probably was the
2 paragraph after that then, perhaps.

3 MS. MILES: Just could I ask a clarification. If
4 I feel that there is a need for supplemental testimony,
5 because of a material change in the project description,
6 and potential new environmental impacts that flow from
7 that, I would like to also be able to submit that by
8 August 13th.

9 HEARING OFFICER KRAMER: Okay, certainly.

10 So Mr. Edirisuriya, do you understand what I'm
11 asking about?

12 MR. EDIRISURIYA: Yes, you are referring to the
13 TSE 5 that we are planning to include reactive support,
14 which is necessary for the system's stability, so we'll
15 include it into the TSE Section 5.

16 HEARING OFFICER KRAMER: Okay, then that's the
17 inclusion we spoke about a few minutes ago. Okay.

18 MR. EDIRISURIYA: The reactive support as it
19 relates to dynamic support is to be included in the TSE 5
20 Section.

21 HEARING OFFICER KRAMER: Okay, and that was the
22 change that Mr. Hesters was going to circulate.

23 MR. HESTERS: Actually not. They're slightly
24 different. One of them, the part that I talked about
25 earlier has to do with essentially reactive support or the

1 fact that the project appears to consume mega-VARs. And
2 so at the project switch yard, they're being required to
3 install 360 mega-VARs of reactive support.

4 What's discussed in E has to do with something
5 that shows up in the system impacts and facilities study,
6 where dynamic reactive support is required at the Pisgah
7 Substation for the interconnection of the 275 megawatt
8 phase one of the project.

9 My -- the only problem with adding that as a
10 condition is that's going to come through the LGIA and
11 some of that may -- Edison -- the LGIA basically says that
12 the right amount of reactive support will be required.
13 So -- to put a specific number on that as a Condition of
14 Certification doesn't seem reasonable at this time. The
15 LGIA will cover whatever that final amount is.

16 HEARING OFFICER KRAMER: But is that a
17 willingness to let the LGIA to specify that point
18 consistent with this motion of adding something that, in
19 the other addition, that the applicant claims the LGIA
20 will specify as well?

21 MR. HESTERS: Yes. The reason it's consistent is
22 because, this is actually dealing with changes -- system
23 problems that show up -- dynamic -- sorry. My mouth is
24 getting dry and my ability to speak is falling apart.

25 Essentially, it's a problem that shows up in the

1 system stability as a result of this project
2 interconnecting and then a downstream transmission line
3 outage or something else happening. This is required for
4 essentially supporting the transmission system.

5 The VAR support at the Calico substation is
6 required because the project itself consumes VAR.

7 MR. EDIRISURIYA: Consumes VAR to provide the
8 voltage regulations that is by the static VAR support. So
9 the system impacts study identified the 270 megavar
10 requirement, but it is not adequate enough. So applicant
11 should implement another 90 megavar support that would be
12 included in the final design phase.

13 HEARING OFFICER KRAMER: I feel as if you've, in
14 making your answer, you've assumed facts that you didn't
15 describe to me, because I'm -- I don't understand the
16 distinction.

17 MR. HESTERS: Okay, let me back off from this
18 one. Let me try again.

19 The requirement that shows up in mitigation -- in
20 Section E, which is the one that you were just asking me
21 about, shows up quite often in sort of standard power
22 plants. It has to do with system stability and
23 maintaining system stability under outage conditions.
24 They don't -- they often aren't -- I'll trying to think
25 about when the last time I've seen one.

1 But they're usually required at the
2 interconnecting substation or even sometimes downstream of
3 the interconnecting substation. And they basically help
4 the system maintain stability under certain conditions.
5 And they show up there, you know, standard output of a
6 System Impact Study or Facility Study. They are a
7 standard piece of equipment that is built
8 within -- usually within the footprint of an existing
9 substation.

10 That is different than what is being required nor
11 Calico Substation itself. That is something -- the Calico
12 Substation -- the VAR support that's required there is a
13 specific VAR support that's required because of the nature
14 of this power plant, which is different than other power
15 plants. That's why I think the VAR support requirement at
16 the Calico Substation should be included in a Condition of
17 Certification, where this dynamic support that's required
18 at the Pisgah Substation should not.

19 Does that help explain it?

20 One is thereto help deal with system problems.
21 The other is a specific characteristic -- dealing with a
22 specific characteristic of this particular power plant, as
23 it is different from other power plants.

24 HEARING OFFICER KRAMER: And the one that deals
25 with this difference is the one that you want to call out

1 specifically, is that right?

2 MR. HESTERS: Exactly.

3 HEARING OFFICER KRAMER: I think I have a few
4 hours of parsing words at some point down the road to try
5 to figure this out, but we won't belabor the point.

6 Thank you.

7 Do we have anything else on transmission system
8 engineering?

9 Okay, thank you everyone. We can at least finish
10 that topic for today. We might be talking about it some
11 more in various contexts.

12 And we can then move on to the topic of
13 alternatives. Susan Lee, is she there with you or is she
14 on the line.

15 MS. LEE: I'm on the line. I'm not in
16 Sacramento.

17 HEARING OFFICER KRAMER: And you just joined us
18 now, so you haven't been sworn as a witness, correct?

19 MS. LEE: That's correct.

20 HEARING OFFICER KRAMER: So if you would raise
21 your right hand.

22 (Thereupon MS. SUSAN LEE was sworn, by the
23 Hearing Officer to tell the truth, the whole
24 truth and nothing but the truth.)

25 HEARING OFFICER KRAMER: Thank you.

1 Ms. Gannon did you want the present Ms. Bellows
2 first?

3 MS. GANNON: Yes.

4 Whereupon,

5 FELICIA BELLOWS

6 was called as a witness herein, and after
7 having been previously sworn, was examined and
8 testified as follows:

9 DIRECT EXAMINATION

10 BY MS. GANNON:

11 Mike down and close. We're back bellowing again.

12 MS. BELLOWS: Got it.

13 MS. GANNON: Ms. Bellows, have you had an
14 opportunity to review the staff supplemental assessment
15 with regards to alternatives?

16 MS. BELLOWS: I have.

17 MS. GANNON: And this morning you spoke a little
18 bit about the applicant's process that was utilized to
19 consider the siting of this project. Can you again speak
20 to the process that you used just in summary.

21 MS. BELLOWS: Just going back to that one more
22 time. In 2005, we went out with the BLM, and talked to
23 them about possible sites, talked to them about areas that
24 would make most sense for siting of the project, looking
25 at transmission, thinking about impacts on resources. And

1 with their help, we chose the site, which is current three
2 Calico Solar site.

3 MS. GANNON: And in addition to discussions with
4 BLM, did you explore any objections of the potential for
5 private lands?

6 MS. BELLOWS: We did look at private lands as
7 well and came across, as is typical, a number of obstacles
8 including, you know, transmission access, and the ability
9 to put partials together of various ownership to make a
10 site as large as the Calico Solar site.

11 MS. GANNON: And this -- in the Supplemental
12 Staff Assessment, they describe a number of off site
13 alternatives and describe for various reasons why these
14 alternatives may not be feasible. Have you had a chance
15 to review that testimony?

16 MS. BELLOWS: I did have a chance to look at that
17 testimony.

18 MS. GANNON: And do you concur with the approach
19 have the analysis and the conclusion?

20 MS. BELLOWS: I do concur with the approach and
21 the conclusions. Basically, they came to some of the same
22 conclusions that we came to in the sense of the sites that
23 were looked at had various problems that made them, in
24 terms of availability, and ability to work for is site
25 would not work for this particular -- for the project.

1 MS. GANNON: So would you say your real world
2 experience is consistent with the analysis that was
3 completed by staff with regards to off-site alternatives?

4 MS. BELLOWS: I would say that.

5 MS. GANNON: And with regards to on-site
6 alternatives, do you have any comments on the staff's
7 assessment?

8 MS. BELLOWS: You know, I think that, in general,
9 their view that the other alternatives -- the on-site
10 alternatives don't meet the overall goals of the project
11 is exactly where we come down to. Again, the -- if you
12 look at the goals and the contract that we have had
13 Edison, the other alternatives simply do not meet the
14 purpose of the project.

15 MS. GANNON: Thank you, Ms. Bellows.

16 She's available for cross-examination.

17 HEARING OFFICER KRAMER: Staff, any questions?

18 STAFF COUNSEL HOLMES: No.

19 HEARING OFFICER KRAMER: Defenders of Wildlife?

20 MR. BASOFIN: This is Joshua Basofin with
21 Defenders of Wildlife. I have a couple questions.

22 CROSS-EXAMINATION

23 BY MR. BASOFIN:

24 Ms. Bellows, you mentioned that you -- that early
25 on, you had met with representatives of BLM in scoping out

1 a site; is that correct?

2 MS. BELLOWS: That's correct.

3 MR. BASOFIN: Which representatives of BLM did
4 you meet with?

5 MS. BELLOWS: I was not with the Tessera Solar at
6 that point in time, so I'm not -- I don't know the answer
7 to that question.

8 MR. BASOFIN: Okay. At one time Tessera had a
9 right of way application pending for the Solar 3 site, is
10 that right?

11 MS. BELLOWS: That's correct.

12 MR. BASOFIN: And at one time, Tessera
13 relinquished that right of way application?

14 MS. BELLOWS: That's correct.

15 MR. BASOFIN: At any point before you
16 relinquished that application, did you consider the Solar
17 3 site as a potential alternative for the Calico project?

18 MS. BELLOWS: We did not. The Calico
19 Solar -- the Solar 3 site was sited for 500 megawatts, so
20 in terms of being able to -- ability to replace the 850
21 megawatt facility, it would not have been able to do so.
22 I think it was actually 550 megawatts as opposed to 500.

23 MR. BASOFIN: So you didn't consider any
24 alternatives that would have met a generating capacity of
25 less than 850 megawatts?

1 MS. BELLOWS: Again, as I testified before,
2 the -- it goes back to our Power Purchase Agreement,
3 because we did participate in a competitive bidding
4 process for supply of power to Edison, and won a contract
5 for 850 megawatts. That's what we did -- that was our
6 goal was to site a facility of 850 megawatts.

7 MR. BASOFIN: Does the PPA State 850 megawatts or
8 up to 850 megawatts?

9 MS. BELLOWS: It states 850 megawatts.

10 MR. BASOFIN: At any point, did you conduct
11 surveys on the Solar 3 site?

12 MS. BELLOWS: We did. We began surveying the
13 Solar 3 site.

14 MR. BASOFIN: What types of surveys did you
15 complete?

16 MS. BELLOWS: I just have to check -- I'll have
17 to think about that, but I know we did some cultural work.
18 I know we did some preliminary biology work, but we had
19 certainly not completed everything that we needed to do.

20 MR. BASOFIN: That's all I have. Thanks.

21 MS. MILES: No questions.

22 (Laughter.)

23 PRESIDING MEMBER EGGERT: Mr. Kramer, I can help
24 if you want to get a drink.

25 HEARING OFFICER KRAMER: Okay. Well, let's see,

1 I will. I'm okay.

2 So then next we have testimony from staff
3 witness.

4 MR. RITCHIE: Excuse me, Mr. Kramer. I had just
5 one very quick follow-up question. I know I didn't allot
6 any time, but I will be very brief.

7 HEARING OFFICER KRAMER: Go ahead.

8 CROSS-EXAMINATION

9 BY MR. RITCHIE:

10 So, Ms. Bellows, I just wanted to confirm one
11 thing in your last testimony that I didn't think -- I
12 think this is a very simple one word answer. Did Tessera
13 consider any facility less than 850 megawatts when they
14 were siting the project?

15 MS. BELLOWS: No.

16 MR. RITCHIE: Thank you.

17 HEARING OFFICER KRAMER: Ms. Holmes, do you have
18 direct testimony from Ms. Lee?

19 STAFF COUNSEL HOLMES: We do. I think we'll just
20 cut to the chase, since it's getting late-ish this
21 evening.

22 Whereupon,

23 SUSAN LEE

24 was called as a witness herein, and after first
25 having been duly sworn, was examined and

1 testified as follows:

2 DIRECT EXAMINATION

3 BY STAFF COUNSEL HOLMES:

4 And I'll simply ask Ms. Lee to repair -- or to
5 present a very brief summary of how staff conducted its
6 alternatives analysis and the conclusions that it reached.

7 MS. LEE: Okay. This is Susan Lee. In the
8 Supplemental Staff Assessment, we looked ultimately at 24
9 alternatives to the Calico Solar Project, and three of
10 these are ones that we decided to analyze in detail. The
11 additional 21 alternatives are analyzed in -- and
12 considered but not carried forward for detailed analysis.

13 The three that are analyzed in detail are the
14 reduced acreage alternatives, which is the 275 megawatt
15 alternative and sized as we were hearing earlier in the
16 transmission system engineering discussion, to be a
17 project that would accommodate the existing transmission.

18 The second alternative is the private land
19 alternative, which would be located on private land,
20 mainly agricultural land in an area east of the city of
21 Barstow.

22 And the third one is the no project alternative.

23 One thing that's important to understand in the
24 way the alternatives sections is set up, in this document,
25 which started as a Draft EIS, is that the Impact Analysis

1 for the reduced acreage alternative and the no project
2 alternative is presented in each author's separate
3 testimony. And the Impact Analysis for the private land
4 alternative is presented in the alternatives section.

5 So the overall conclusions of the analysis for
6 the alternatives that are retained, the reduced acreage
7 alternative would reduce the impacts of the project,
8 certainly because it's a quite a bit smaller project and
9 because it was designed to avoid the areas with the most
10 dense biological resources, and there's most dense
11 cultural resources. It would not, however, eliminate the
12 significant impacts that have been identified for this
13 project.

14 The private land alternatives would avoid and
15 reduce the effects, particularly with respect to
16 biological resources and cultural resources, because it is
17 located on almost entirely disturbed land. It would
18 create a new significant impact, which would be the loss
19 of agricultural land, because some of that land is
20 productive agriculture. And it also would require the
21 acquisition of land from almost 50 separate landowners.

22 And thirdly, we looked at the no project
23 alternative, which concludes that if this project were not
24 constructed, these impacts would be shifted to other
25 areas, because there is the need for large renewable

1 energy projects in California to meet the RPS goals.

2 I won't go over the other 21 alternatives that
3 are there, but they include other site alternatives as
4 were previously mentioned, other solar technologies, other
5 renewable technologies including wind, geothermal,
6 biomass, other conventional generation technologies, and a
7 brief description of conservation and demand management.

8 That's it.

9 STAFF COUNSEL HOLMES: Thank you. The witness is
10 available for cross-examination.

11 HEARING OFFICER KRAMER: The applicant, any
12 questions?

13 MS. GANNON: Applicant has no questions.

14 HEARING OFFICER KRAMER: Defenders of Wildlife?

15 MR. BASOFIN: Joshua Basofin, Defenders of
16 Wildlife. I have one to four questions.

17 (Laughter.)

18 MR. BASOFIN: And wary to strictly quantify them,
19 so I gave a range.

20 CROSS EXAMINATION

21 BY MR. BASOFIN:

22 Ms. Lee, good evening.

23 MS. LEE: Evening.

24 MR. BASOFIN: I believe at one point in your
25 analysis of the alternatives in the SSA, you describe the

1 reduced acreage alternative as potentially feasible; is
2 that correct?

3 MS. LEE: That's correct.

4 MR. BASOFIN: Can you explain what potentially
5 feasible means in relation to feasible?

6 MS. LEE: Yes. The feasibility concern under
7 CEQA, we're looking at a project that is constructible,
8 both in terms of technology and also in terms of economics
9 and cost.

10 We don't doubt that it's technologically possible
11 to build a 275 megawatt project. Clearly, Tessera has
12 built a 1.5 megawatt project, so small projects are
13 buildable. The question that is unresolved for us is the
14 economic feasibility. And I know there's been a fair
15 amount of discussion about that.

16 We don't have data that allows us to conclude,
17 one way or the other, whether this project, at a smaller
18 size, would be economically feasible.

19 MR. BASOFIN: Thank you. I believe in your
20 testimony, you state that without further evidence from
21 the applicant that you have found that the reduced acreage
22 alternative is not cost prohibitive but may cost more; is
23 that correct?

24 STAFF COUNSEL HOLMES: I'm sorry. We're having
25 trouble hearing you, Mr. Basofin. Could you speak up a

1 little bit and slow down a little bit.

2 MR. BASOFIN: Yes. I believe that in the
3 alternatives section, Ms. Lee, you stated that the reduce
4 acreage alternative would potentially be more expensive,
5 but that there hasn't been evidence from the applicant
6 that it would be cost prohibitive; is that correct?

7 MS. LEE: I actually don't think we even went
8 that far. I think realty testimony is just that we don't
9 have data that gives us the information to define whether
10 it would be cost prohibitive.

11 MR. BASOFIN: Do you have your -- do you have the
12 Staff Assessment in front of you, Ms. Lee?

13 MS. LEE: I do.

14 MR. BASOFIN: I'm going to direct your attention
15 to B.2-86. At the top of the page it's the end of the
16 paragraph that runs from the previous page.

17 MS. LEE: Right.

18 MR. BASOFIN: Can you read that last
19 sentence -- the last two sentences.

20 MS. LEE: The one starting with, "A detailed",
21 that one?

22 The last sentence to that paragraph that
23 parse --

24 MR. BASOFIN: I'm sorry, it's the two sentences
25 in that paragraph.

1 MS. LEE: Okay. The last two sentences are,
2 "While the applicant provided examples of how a 275
3 megawatt project might be more expensive on a per megawatt
4 basis than the proposed 850 megawatt project, it did not
5 provide concrete evidence that the alternative is
6 financially infeasible. A detailed financial analysis for
7 a reduced size project would be required in order to
8 determine the economic feasibility of this alternative."

9 MR. BASOFIN: Thank you. And it's your testimony
10 that that -- that evidence of economic infeasibility has
11 not been provided thus far; isn't that correct?

12 MS. LEE: That's correct.

13 MR. BASOFIN: Thank you.

14 HEARING OFFICER KRAMER: Secure?

15 MS. MILES: No questions.

16 HEARING OFFICER KRAMER: I think that exhausts
17 the direct and cross-examination. Did anybody wish to ask
18 any redirect questions?

19 MS. GANNON: None from the applicant.

20 STAFF COUNSEL HOLMES: None from staff.

21 HEARING OFFICER KRAMER: Okay, thank you very
22 much Ms. Lee.

23 MS. LEE: You're welcome.

24 HEARING OFFICER KRAMER: You're now free on
25 Friday.

1 MS. LEE: Wonderful. I appreciate it.

2 HEARING OFFICER KRAMER: Okay, well, we could
3 take care of the uncontested topics if -- and those are
4 noise, public health, greenhouse gases, compliance and
5 closure, facility design, socioeconomics, and waste
6 management.

7 Do the parties object to the Committee taking the
8 testimony as it's been identified by the staff and the
9 applicant and others in -- into evidence and we'll deal
10 with the specific exhibit numbers again at the end of our
11 time here this week -- but taking in the testimony on
12 those topics without any direct or cross-examination?

13 STAFF COUNSEL HOLMES: Staff has a comment about
14 that. I believe that based on our experience at least
15 week's Imperial hearings, noise may become an issue. With
16 respect to biological resources, also the applicant has
17 proposed a change to Condition of Certification that staff
18 does not agree with.

19 So if the Committee wants to hear any sort of
20 testimony about that, it probably wouldn't be appropriate.
21 So if either of those issues are likely to come up, the
22 need for testimony about the Condition of Certification
23 and the noise impacts associated with biological
24 resources, it may not be prudent to introduce noise at
25 this time.

1 HEARING OFFICER KRAMER: Okay. Well, that might
2 be something that we can take care of this evening. It is
3 our assumption that the noise effects on biological
4 resources will be discussed during the biology discussion
5 tomorrow. So we can push that to that part of our agenda.

6 Can somebody point me to the proposed condition
7 change.

8 STAFF COUNSEL HOLMES: It's in Exhibit 82,
9 Attachment A of the applicant.

10 HEARING OFFICER KRAMER: Okay, I heard the 2 but
11 the first part disappeared on me.

12 STAFF COUNSEL HOLMES: 82.

13 HEARING OFFICER KRAMER: 82, okay. I'll have
14 that up in a minute. But first and before we -- we will
15 separate noise, does anybody have any objections to
16 bringing in all the other topics I just read, without any
17 further testimony or cross-examination?

18 Seeing none, that is what we will do with those.

19 So was that 82A?

20 STAFF COUNSEL HOLMES: Attachment A. It's on
21 page 28.

22 MS. GANNON: If I may, Hearing Officer Kramer,
23 exchange the intent of the proposed revisions?

24 HEARING OFFICER KRAMER: And this is to Noise 6?

25 MS. GANNON: It's to Noise 6 and it's just to add

1 a simple way of defining what noisy construction means.
2 The condition had originally as drafted by staff said
3 heavy equipment operation, including pile driving and
4 noisy construction. Work relating to any project features
5 and then had restrictions on the timing of that.

6 We were just trying to put something in. And if
7 staff has a different suggestion for a definition for
8 noisy, we're happy to hear what that is. We were just
9 trying to suggest something, so that we would be able to
10 understand what the restriction is. Then the second
11 change that is proposed is the recognition that these
12 prohibitions on the construction schedule, which say that
13 there should be no construction allowed a Sundays or
14 holidays, we just want to have a clarification that if
15 there was a variance granted, we could have construction
16 on those days.

17 HEARING OFFICER KRAMER: What do you mean by a
18 variance.

19 STAFF COUNSEL HOLMES: Yeah that's my question is
20 who would grant the variance?

21 MS. GANNON: The CPM. Sorry CBO. And that can
22 be with consultation with the county.

23 HEARING OFFICER KRAMER: Well, that -- if that
24 was going to be the means of granting it, I think the
25 condition should be clear about who would grant it, so

1 you'd need to add that.

2 MS. GANNON: We certainly can do that, if there's
3 agreement on the approach, we can certainly revise the
4 language.

5 HEARING OFFICER KRAMER: Now, variance is a
6 technical term to a land use lawyer like me, means a lot
7 more than a phone call. So I wonder if there's a better
8 adjective.

9 MS. GANNON: Though usually for the noise
10 variances for construction work, that usually is the
11 mechanism, is that you do get a variance -- I mean, when
12 there isn't a CC granting authority, it is usually a
13 county variance, as I understand it.

14 HEARING OFFICER KRAMER: I mean a full blown
15 variance with findings that, you know --

16 MS. GANNON: Not usually taking Board action. I
17 mean it's usually a rather simplified procedure that is
18 specified in an ordinance.

19 HEARING OFFICER KRAMER: Okay, but it's a noise
20 variance as opposed to a --

21 MS. GANNON: It's a noise variance.

22 HEARING OFFICER KRAMER: Let me ask Mr. Brizzee
23 if he knows. Does the county have such a process?

24 MR. BRIZZEE: It's a term I'm not familiar with,
25 butt I can certainly look into it.

1 MS. GANNON: Yeah, there is a county noise
2 variance, and we can bring in -- we can bring in evidence
3 on that on Friday o give it to people tomorrow and we can
4 talk about it tomorrow, if that seems appropriate?

5 STAFF COUNSEL HOLMES: Yeah, I think staff has
6 some concerns, because we believe that it's appropriate to
7 not have construction on Sundays and holidays. We don't
8 have an interest in being unreasonably inflexible, but
9 this doesn't seem to provide any sort of standards or
10 process or -- anything of that nature, I think we do have
11 a concern about the concept that the county would grant a
12 variance to a CEC condition. That doesn't seem right to
13 us.

14 So I guess we'd have a lot of concerns about how
15 this would actually work and what standards would be
16 applied.

17 We also do have an alternative suggestion to
18 the -- than the greater than 75 dba, which we don't think
19 is appropriate.

20 So I don't know the best way to proceed with this
21 Hearing Officer Kramer.

22 HEARING OFFICER KRAMER: Well, let's put
23 everybody's thoughts out on the table. Commissioner
24 Eggert had another question that --

25 PRESIDING MEMBER EGGERT: Well, I guess just

1 straightforward one hopefully is what's the purpose of the
2 condition for disallowing on Sundays and holidays?

3 What's the basis of it or what's it's -- what --

4 STAFF COUNSEL HOLMES: You know noise gone home
5 at this point. And I presume we could bring them back at
6 some point. But this is what I was concerned about and
7 why I was suggesting that perhaps noise was not a
8 appropriate for coming in without -- coming in on
9 declaration. I think that these are questions that I
10 would prefer to have the noise experts address. I know
11 what they've told me, but I think that they're in a better
12 position to answer specific questions.

13 HEARING OFFICER KRAMER: Women they be here for
14 biology tomorrow anyway?

15 STAFF COUNSEL HOLMES: During the day a
16 apparently.

17 HEARING OFFICER KRAMER: Okay. Well, then maybe
18 we can have a little breakout to deal with this at that
19 point.

20 STAFF COUNSEL HOLMES: If we could pick a time
21 that would be really helpful.

22 HEARING OFFICER KRAMER: Well, let's see, did we
23 have -- no, that was on Friday we had somebody calling in
24 at 11 right?

25 Do you prefer morning or afternoon or do you want

1 to start with them?

2 STAFF COUNSEL HOLMES: Morning, I think.

3 HEARING OFFICER KRAMER: You want to start with
4 them at 9 o'clock? You probably can't reach them. Homes
5 I probably can't. I will do my best to ascertain their
6 availability and if it's not going to work at 9, we'll let
7 you know at 9.

8 HEARING OFFICER KRAMER: Okay, and then another
9 question on the table to refrain Commissioner Eggert's
10 question. This isn't an area, it's not a residential
11 area, so what's the point of protecting -- assuming the
12 workers are willing to work on the Sabbath, who
13 exactly -- who's Sabbath are we protecting with the Sunday
14 prohibition? Because this project doesn't seem to have a
15 lot of neighbors.

16 MS. GANNON: There are no sensitive receptors
17 identified in the noise section of the Supplemental Staff
18 Assessment.

19 HEARING OFFICER KRAMER: So pass that on, and
20 we'll -- when you let us -- find out when they can be with
21 us tomorrow and we'll try to work it out then.

22 STAFF COUNSEL HOLMES: Thank you.

23 HEARING OFFICER KRAMER: Okay, well I think we've
24 run out of business for today. Thank you, everyone for
25 being efficient with your questions and yielding your time

1 when you can. And let's hope we can make the same sort of
2 progress tomorrow on our 16 hour project.

3 MR. BASOFIN: Mr. Kramer?

4 HEARING OFFICER KRAMER: Mr. Basofin.

5 MR. BASOFIN: I just have a point of order. Will
6 we be scheduling witnesses for tomorrow because one of my
7 witnesses has some particular scheduling constraints?

8 HEARING OFFICER KRAMER: Okay, who is that and
9 what are the constraints.

10 MR. BASOFIN: Well, assuming he'll be testifying
11 it's Jim Andre.

12 HEARING OFFICER KRAMER: Okay, we will rule upon
13 that -- well, we could discuss that motion this evening if
14 you're willing. Okay so we'll do that in a moment.

15 And then what is his constraint?

16 MR. BASOFIN: He won't be available tomorrow. I
17 think through evening. Even by phone

18 HEARING OFFICER KRAMER: He's not available all
19 day?

20 MR. BASOFIN: Right.

21 HEARING OFFICER KRAMER: That would have been
22 really good to know last week.

23 MR. BASOFIN: Well, he is available all day on
24 Friday.

25 HEARING OFFICER KRAMER: Well, but when did you

1 find this out?

2 MR. BASOFIN: I think I mentioned last week that
3 he was unavailable most of Wednesday and Thursday.

4 MS. MILES: As a clarification --

5 HEARING OFFICER KRAMER: Well, Wednesday is now.
6 And that's why we put it on Thursday. Are you sure you're
7 not confusing today with tomorrow?

8 MR. BASOFIN: I'm pretty sure.

9 HEARING OFFICER KRAMER: Okay, so it was by phone
10 on the 4th for the 5th though, we had phone availability.
11 And now you're saying that he's not even available on the
12 phone?

13 MR. BASOFIN: I think he can be available at some
14 parts in the evening tomorrow by phone.

15 HEARING OFFICER KRAMER: Well --

16 MR. BASOFIN: But he has some constraints.

17 HEARING OFFICER KRAMER: And he I gather is
18 you're key witness, correct?

19 MR. BASOFIN: Right.

20 HEARING OFFICER KRAMER: And well we're just
21 going to have to work as best you can to make him
22 available at some point tomorrow. And when he is
23 available, question -- you know, we can take him up
24 immediately.

25 MR. BASOFIN: Okay.

1 HEARING OFFICER KRAMER: But it is our fervent
2 hope that, A, we come in under 16 hours, and not just by
3 one or two percent, and we're done tomorrow with biology.

4 So we're really not -- you know, we planned it to
5 have the whole day and at this point in time, we just
6 can't rearrange things. That would be horribly disruptive
7 to a lot of people. But we'll try to get him in when we
8 can.

9 So as far as his ability to testify, we've read
10 the filings from the applicant and from you, Mr. Basofin.
11 And I -- I guess I was hoping to be able to ask this of
12 Mr. Andre, but he -- or you attribute to him the following
13 information, that all he did, all he claims to have done
14 for the applicant was to have addressed some of their, I
15 guess, their survey workers in general terms about the
16 techniques and you know tricks of the trade of conducting
17 biological surveys.

18 Is that what you believe he would tell us if he
19 were here? In other words, he was just giving
20 instructions about how to do the work, and he did not do
21 any of the work himself.

22 MR. BASOFIN: I think that's roughly correct.
23 And I'll just elaborate and try and clarify a little bit.
24 He engaged in what he refers to as orientation, which is
25 where we goes and works with survey workers and orients

1 them to particular species, in this case Penstemon
2 Albomarginatus, which is the whitemargin beardtongue,
3 which according to Jim, many of the surveyors were not
4 familiar with.

5 And so his role was to orient them to the
6 species, inform them about the species, and teach them how
7 to identify the species.

8 HEARING OFFICER KRAMER: And is that consistent
9 with the number of hours that he billed?

10 MR. BASOFIN: I'm in the sure how many hours he
11 billed.

12 MS. GANNON: It was attached to our motion, the
13 exhibit that showed the number of hours that he had billed
14 on the project.

15 MR. BASOFIN: Let me clarify, he didn't bill any
16 hours, because he didn't actually have a formal contract.

17 MS. GANNON: But he was on the contractor who he
18 was working for and with his name listed with hours with
19 per diem requests, mileage requests. I mean, we have the
20 documentation. I have other copies here, if you don't
21 have them.

22 MR. BASOFIN: Which is a contract that he did not
23 execute, which is basically a work order with his name on
24 it.

25 MS. GANNON: I believe the question was about the

1 hours that were billed and paid for.

2 MR. BASOFIN: Why don't -- I can't answer the
3 hours that were billed or paid for.

4 MS. GANNON: But assuming that this is accurate
5 the documentation, this is --

6 MR. BASOFIN: I don't know that that's accurate.

7 MS. GANNON: Okay, but assuming that this is
8 accurate, do you believe that a 40 hour amount of work
9 would be consistent with what you have had described to
10 you.

11 MR. BASOFIN: I can't answer that question,
12 because I can't speak to whether that's accurate.

13 PROJECT MANAGER MEYER: Are we still connected?

14 (Laughter.)

15 HEARING OFFICER KRAMER: Yeah, we're whispering
16 and deliberating.

17 MS. GANNON: We do have one additional piece of
18 evidence which we have obtained since we submitted our
19 motion on Tuesday. And that was going back through the
20 documentation that was submitted as a result of the
21 surveys that were conducted on the site. Each
22 surveyor -- and again, unfortunately, Mr. Andre is not
23 here or may not be here, but each surveyor who does these
24 contracts under URS does GIS tracking and so we get a log
25 that shows where they were on a particular day and where

1 they were walking. And I have an exhibit here which
2 shows, which we can pass out to the parties -- can you
3 distribute those -- which shows at least on one day when
4 he was out doing surveys with a GIS tracking, where he
5 walked on that particular day. And it shows a survey
6 plot, which was, you know, part of the survey protocol of
7 where they would be completed.

8 So he was walking the transects that would you
9 anticipate in a survey, and this was the documentation
10 that he submitted as part of his work.

11 PRESIDING MEMBER EGGERT: So I'm going to play
12 dumb and why is that relevant?

13 MS. GANNON: Because, apparently in the motion
14 that was submitted, he said he did not do any survey work
15 on the site and that does not seem to be consistent at all
16 with the records that we have and for the work that we
17 paid for.

18 PRESIDING MEMBER EGGERT: But in terms of with
19 respect to his either testimony or answering of questions,
20 I guess I'm just still curious why -- I mean, he can
21 testify to that point or not. Is there something specific
22 that you're concerned about his participation in the
23 hearing?

24 MS. GANNON: There is a general non-disclosure
25 agreement that was -- that the company he was working for

1 had signed with URS and had agreed not to disclose any
2 information that they obtained through the work that was
3 paid for as part of these efforts. So we feel like it's
4 inappropriate for him to be testifying with regard to
5 these surveys that he conducted on the site as part of the
6 contract with the applicant.

7 MR. BASOFIN: Commissioners, as this point, I'm
8 very concerned. You've now received two so-called
9 exhibits that relate to -- supposedly relate to Mr. Andre,
10 neither of which were signed by Mr. Andre. Both of
11 which --

12 MS. GANNON: We have a declaration though.

13 MR. BASOFIN: -- both of which -- you have a
14 declaration of Mr. Andre?

15 MS. GANNON: We have a declaration from the
16 people who were there working.

17 MR. BASOFIN: But nothing that you have -- I mean
18 this is -- basically, what you have here is a matrix of
19 people and hours --

20 ASSOCIATE MEMBER BYRON: Counselors, I don't
21 really think we need to get into this argument any deeper
22 than we have. There's some simple questions that I think
23 we need to ask Mr. Andre, who can represent himself, and
24 we'll be able to determine pretty quickly whether or not
25 we're going to let his testimony in.

1 The question is whether or not you can find time
2 that he's going to be available tomorrow for him to
3 testify.

4 HEARING OFFICER KRAMER: I was hoping that there
5 might be a simple dispositive bit of facts or two, but it
6 sounds like we are going to have to speak with him.

7 Just to let you know one question I will have
8 then is, so what if he walked to site? As part of your
9 duties to -- or the information you have to provide to the
10 Commission and to the other parties for the consideration
11 of your application, you have to provide the very data
12 that somebody who walked the site and conducted a survey
13 would have accumulated.

14 In either training people or walking the site and
15 actually conducting part of the survey, I'm not seeing the
16 State secrets that --

17 MS. GANNON: It's not State secrets.

18 HEARING OFFICER KRAMER: -- need protections.

19 MS. GANNON: I mean, we think this is unethical
20 for a consultant to be working, particularly under the
21 terms of his employer. He signed a non-disclosure
22 agreement and then to go and testify in a proceedings
23 regarding, partially at least, the information that was
24 received. I mean, and we will talk in detail if he
25 testimonies tomorrow about how this goes towards, I think

1 many of the ethics of his testimony. However we
2 just -- we just feel that it is unethical.

3 And again, then we were surprised when we read
4 the motion by Sierra Club, which then made assertions,
5 which we found -- you know, which we presume must have
6 been obtained from Mr. Andre, which flatly contradict
7 information which we had.

8 HEARING OFFICER KRAMER: I understand. We will
9 not decide this today, because we want to hear from Mr.
10 Andre. But I think at least you -- you know what our
11 concerns are, and you are of course free to raise these
12 ethical issues if byway of impeachment of his testimony.

13 Although, we don't want that to take all day
14 certainly. And I think it's pretty clear also to us, that
15 we are not the ethics police. That may have to be left
16 between Mr. Andre and his -- well, whatever his --

17 MR. BASOFIN: Mr. Kramer, I'd just like to add a
18 couple points here. You know, there's this continual
19 effort impute a non-disclosure agreement with Mr. Boreman
20 on to Mr. Andre. And I think there's really no legal
21 basis for that. And it's essentially an attack from the
22 applicant in and attempt to quash information that the
23 legitimate information that's being submitted by someone
24 whose a well recognized expert in the field. And I
25 frankly I think it's rather malicious in the charge of you

1 know some sort of ethics violation is ridiculous.

2 I would also note that in the recent Ivanpah
3 proceeding, Mr. Andre essentially performed the same
4 duties for the applicant there, and was allowed to testify
5 in that proceeding. So you know there is a precedent for
6 this sort of thing happening. And when Mr. Andre is able
7 to speak with you, I think he can comment to that.

8 HEARING OFFICER KRAMER: Okay. So we will
9 postpone this -- or continue this discussion tomorrow when
10 Mr. Andre is able to be with us. Is there anything else
11 we can conduct by way of business this evening?

12 I'll seeing no indication.

13 MR. LAMB: One thing quickly, Mr. Kramer. If
14 it's possible, tomorrow when we do biological resources,
15 after the applicant and the staff testimony, since I have
16 a very brief, and I believe, very non-controversial cross,
17 if that could go early, because I have my witness here
18 live. And if someone does want to cross him, he'll be
19 here.

20 I notice that I happened to be at the very end,
21 if that works. If it doesn't, we'll be here. I just want
22 to raise that.

23 HEARING OFFICER KRAMER: So you -- he would not
24 stick around unless necessary?

25 MR. LAMB: We will be here till the bitter end if

1 that's your desire, sir. But we'd prefer to go earlier.

2 HEARING OFFICER KRAMER: Okay, and that was
3 again, Mr. --

4 MR. LAMB: It's Mr. Phillips.

5 HEARING OFFICER KRAMER: Okay.

6 STAFF COUNSEL HOLMES: Can I ask which party was
7 just speaking.

8 MR. LAMB: BNSF.

9 HEARING OFFICER KRAMER: That was Mr. Lamb.

10 STAFF COUNSEL HOLMES: Thank you.

11 HEARING OFFICER KRAMER: Okay.

12 MS. GANNON: Hearing Officer Kramer, that raises
13 one other issue. If there's -- I mean we had talked about
14 dividing up between plants and wildlife and possibly
15 taking Desert Tortoise out from the other wildlife. It
16 might be helpful, since it's earlier than any of us
17 anticipated, to talk about order of witnesses tomorrow,
18 and how we want to approach that.

19 HEARING OFFICER KRAMER: Good idea.

20 MS. GANNON: And with also -- I don't know when
21 the staff -- or when the agency panel is going to be
22 available, just so we can all have our witnesses available
23 when it's most appropriate.

24 HEARING OFFICER KRAMER: And then trying to
25 figure out how long it's going to take.

1 MS. GANNON: Yeah.

2 HEARING OFFICER KRAMER: Yeah, I think people
3 need to be on-call all day, I would say.

4 MS. GANNON: They'll be on call, but I'm just
5 saying to think through how we want to be presenting the
6 testimony, I think -- Ms. Miles had pointed out, thinking
7 through the questions we want to have prepared, etiquette
8 might be helpful to have that set forth.

9 HEARING OFFICER KRAMER: Okay. Does anybody
10 disagree with the three way split between plants, Desert
11 Tortoise and other critters?

12 STAFF COUNSEL ADAMS: This is Steve Adams for
13 staff. I guess I'm unclear whether you're talking about
14 running through staff and government panel on plants only
15 and then circling back for tortoise?

16 MS. GANNON: I mean, the way we had done it in
17 the other proceedings, was we had a separate panel with
18 the government agencies, and we were dividing up for these
19 subject matters for the parties' witnesses, not for the
20 government's panel, which I think made sense.

21 HEARING OFFICER KRAMER: Would staff prefer that
22 to have the government witnesses just go once?

23 Mr. Adams?

24 STAFF COUNSEL ADAMS: Oh, I'm sorry. Yeah, that
25 would be fine.

1 HEARING OFFICER KRAMER: Okay then we'll -- so
2 let me write this down. So we've got plants. This isn't
3 necessary the order, but we have Desert Tortoise, and then
4 we have other animals.

5 MS. GANNON: And one other item, not that I want
6 to keep offering other items, but we had intended today to
7 give an overview of the changes in the biological
8 conditions which by proposed. So in terms of the
9 applicant putting on our case, we would like to start out
10 with that, so it doesn't fit into any one of those
11 categories precisely, but it's more of a -- the proposed
12 mitigation approach that we have submitted in our revised
13 conditions today.

14 MS. MILES: And actually I'd just like to respond
15 to that, because in the Imperial proceeding, it was done
16 that way, but it did seem odd to go through conditions
17 before we had evaluated the impacts.

18 And so I would propose that the conditions be
19 evaluated after we go through the Impact Analysis.

20 HEARING OFFICER KRAMER: That does make more
21 sense.

22 MS. GANNON: That's fine.

23 HEARING OFFICER KRAMER: Okay. We don't know
24 when Mr. Andre is going to be available. And he's on
25 plants, correct, not tortoise or --

1 MR. BASOFIN: No, that's correct. His testimony
2 is entirely on botany.

3 HEARING OFFICER KRAMER: Okay.

4 MR. BASOFIN: Lets me see if I can clarify a
5 little bit. My understanding at the prehearing conference
6 last week, was that you would be available Wednesday and
7 Thursday at some point on the phone. I found out, I think
8 yesterday or the day before, that tomorrow is actually his
9 worst day. He was -- he could have been available on the
10 phone on Wednesday. Tomorrow is a bad day for him. There
11 is some times perhaps in late evening, but Friday he is
12 available all day.

13 So I guess I would ask the Committees's
14 discretion if we're not able to get him tomorrow night, to
15 have him first thing Friday morning.

16 HEARING OFFICER KRAMER: We'll see what we can
17 do. How long is he going to take?

18 MR. BASOFIN: His direct testimony will probably
19 be -- I think I'm signed up for 20 minutes for his direct
20 testimony. And that will probably be around those
21 parameters.

22 HEARING OFFICER KRAMER: Okay. We'll have to see
23 what we can do. So then -- but would you guess he's more
24 like -- well, you said he'd be available late in the
25 evening. We might as well do plants last then. Does that

1 inn convenience anyone else?

2 MS. GANNON: That's fine with the applicant.

3 HEARING OFFICER KRAMER: Okay, so first Desert
4 Tortoise, then the other animals, and then plants. And
5 the government panel -- Mr. Adams, are they -- their
6 probably across all three; is that correct?

7 STAFF COUNSEL ADAMS: Yeah, I think so.

8 HEARING OFFICER KRAMER: So we'll do them how
9 about after the other animals? And that would probably be
10 early afternoon somewhere in there. That's only a guess
11 of course. So it's Desert Tortoise, other animals,
12 government panel, and then plants.

13 Are any of the -- Mr. Adams, are any of these
14 panel witnesses coming from the east coast or calling in
15 from the east coast?

16 STAFF COUNSEL ADAMS: No. I don't know of any of
17 the government -- the agency representatives who are not
18 in California. There will be at least one here in the
19 room in Sacramento with us. I think most of them will be
20 calling in, and there may be one who shows up down in at
21 you're location.

22 I guess I'm a little confused with the -- it
23 sounds like you're contemplating running through tortoise
24 issues, other animals, government panel sort of as its own
25 free-standing block and then plants. But I think there

1 are going to be issues that come up for example on Desert
2 Tortoise that people are going to have questions of the
3 government panel for.

4 So I'm wondering if it doesn't make more sense
5 just to --

6 HEARING OFFICER KRAMER: Blend them in with the
7 others?

8 STAFF COUNSEL ADAMS: Yeah, to integrate them. I
9 know they're available at 9.

10 HEARING OFFICER KRAMER: Okay, that works fine
11 for us.

12 STAFF COUNSEL ADAMS: And we may -- toward the
13 end of the day, we may, you know, as we go into the
14 evening hours, Fish and Game witnesses have indicated they
15 are not free in the evening. So we may lose some, but,
16 you know --

17 HEARING OFFICER KRAMER: And Fish and Game
18 focuses more on the species other than plants, correct?

19 STAFF COUNSEL ADAMS: Well, they -- no, they have
20 jurisdiction over plants as well.

21 HEARING OFFICER KRAMER: Okay. Well, we'll do
22 the best we request, but we will integrate the Government
23 panel then.

24 Okay, so then Desert Tortoise, other animals,
25 plants, and after that, we'll -- then we'll specifically

1 focus on the applicant's proposed changes to the
2 conditions.

3 MS. GANNON: Well, if we're going through these,
4 we may just put them in the section at the end of each
5 section. I mean there's Bio 17, which is Desert Tortoise.
6 We might as well speak about it when we're talking about
7 Desert Tortoise.

8 HEARING OFFICER KRAMER: Okay, that works for us.
9 Anything else about the order?

10 Okay, thank you everyone for productive day and
11 we'll see you here tomorrow at 9 a.m.

12 Did you want to say anything before we close?

13 PRESIDING MEMBER EGGERT: Get some sleep.

14 (Laughter.)

15 (Thereupon the Calico Hearing recessed at
16 8:27 p.m.)

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1 CERTIFICATE OF REPORTER

2 I, TROY RAY, an Electronic Reporter, do hereby certify
3 that I am a disinterested person herein; that I recorded
4 the foregoing California Energy Commission Evidentiary
5 Hearing; that it was thereafter transcribed into
6 typewriting.

7 I further certify that I am not of counsel or attorney
8 for any of the parties to said hearing, nor in any way
9 interested in outcome of said hearing.

10 IN WITNESS WHEREOF, I have hereunto set my hand this
11 10th day of August, 2010

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TROY RAY

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AAERT CER**D-369

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