EVIDentiary hearing
before the
CaliforniA energy resources conservation
and development commission

in the matter of:

Application for Certification for the
Imperial Valley Solar Project
(formerly known as SES Solar Two Project)
Imperial Valley Solar, LLC

Docket No. 08-AFC-5

California energy commission
second floor conference room
1516 ninth street
sacramento, california

Monday, july 26, 2010
10:11 a.m.

reported by:
peter petty

transcribed by:
diana sasseen
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Anthony Eggert, Commissioner

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Larry Silver, Esq., for Tom Budlong
Thomas Beltran, California Native Plant Society
Tom Budlong
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COMMISSIONER BYRON: Good morning, everyone.

This is Commissioner Jeff Byron, I'm a presiding member for the Imperial Valley Solar siting case, and I'd like to welcome you all this morning here in Sacramento for a continuation of the evidentiary hearing for this case.

First of all, we will get to everyone on the phone, but I just need to ask if you could just follow some basic instructions right up front.

Do not put us on hold, because if you do, we may get music that you don't -- that you're not aware of; or second, we may get a you're on hold message that interrupts proceeding. So we'll come back to the phone, folks, in a little bit, but I want to make sure you all understand we're trying to do this on both WebEx and a live phone system. Thank you for your help on that.

With me is my associate member for this case before the commission, Commissioner Anthony Eggert, his advisor Lorraine White, and my advisor Kristy Chew. I'm going to turn this over to our hearing officer, Raoul Renaud in just a moment.

I'd also like to check in with our public advisor, who I understand is in El Centro, and I hope she's there.

Ms. Jennings, are you on the line?
MS. JENNINGS: Yes, we're on the line. We didn't successfully come in via computer, but we're telephonic right now.

COMMISSIONER BYRON: Ms. Jennings has gone through some extraordinary efforts to try and make sure that we provide for public comment and interest in southern California, namely the El Centro area. And I'd like to just clarify why we are here in Sacramento and not down there.

And first of all, we apologize, because our intent was to be there, but we had to make a decision prior to July 1st with regard to the scheduling location for this continuation. And we had to make the decision to have it here in anticipation of not having a state budget closed by July 1st, which is indeed the case as we speak today. No budget means there's really no travel expenses for the staff. It's extremely important that we get evidentiary hearing on the record in a timely way. I was quite concerned about the technology, the challenges of phone lines and such and giving evidentiary hearings.

So that's why we are here; however, we do have public comment scheduled. I appreciate that Ms. Jennings is down there to help make sure that we can facilitate getting input from public and others that were unable to travel today.
We have a number of significant issues to still address. Let me just layout for you briefly the plan for the day. And this is subject to change, of course.

We started a little bit late at 10:00 because Monday mornings are very difficult for individuals, particularly if they try and travel to get here this morning. We hope that works for everyone. We have public comment scheduled for about 5:30. We will plan to take a lunch break in the noon to 12:30 range, and we will be reconvening tomorrow at 9:00 a.m.

We may go late this evening. We prefer to reserve tomorrow as the late evening, let's -- using those World Cup soccer terms, for overage time as necessary, but we'll sort of play that by ear today in terms of how much comment there might be and how late we might need to go this evening.

We have a number of significant issues that we need to address, it's not limited to, but we're principally concerned about addressing biological resources, land use, soil and water, and visual. Cultural resources, I don't think we're going to be able to address today, and we've got a tentative date scheduled that we're looking at for evidentiary hearing on that issue.

So before I turn it over to my hearing officer, let me ask Commissioner Eggert if he had anything he
wished to add.

    COMMISSIONER EGGERT: Thank you, Commissioner Byron, and good morning, everyone.
    I don't have much to add. I think you've laid out the plans for the day quite well. I would say having read through the materials that have come in over the last several weeks, I just want to say I want to thank all of the parties for their significant efforts. These are incredibly complicated cases, and it's clear that a significant amount of attention has been paid to providing the best available information, again, from all parties, with respect to the impacts of this project and the mitigation options.
    So I look forward to hearing the testimony throughout the hearing today. And I think we have a lot of work to do, so let's go ahead and get started.

    COMMISSIONER BYRON: Thank you, Commissioner. And I think, I'm just going to say this as well up front; Ms. Jennings, if you have any concerns or issues, I'd prefer that you speak up sooner rather than later, and we may check in with you periodically during the day to make sure that we still have our phone connection down there in El Centro.
    So I'm going to turn it over at this time to our hearing officer, Mr. Renaud.
HEARING OFFICER RENAUD: Thank you, Commissioner Byron.

I think maybe the first order of business will be introductions of the parties. Let's start with the applicant, please.

MR. THOMPSON: Thank you very much, and good morning.

My name is Allan Thompson. And seated next to me is Ella Foley Gannon, co-counsel from the Bingham McCutchen law firm. Behind me are an array of witnesses whom hopefully we will get to today, or possibly tomorrow, but the first panel are both from Tessera, Marc Van Patten, and Sean Gallagher.

Thank you for scheduling this, thank you for the offer of going forward. And, Raoul, I have a complete new appreciation for those of you who put together schedules.

HEARING OFFICER RENAUD: Well, and we have a great appreciation of the work that you and all the parties did in coordinating one another's witnesses. That really was a valiant effort, and well, it looks like it's going to pay off.

Let's hear from staff introductions next, please.

MS. HOLMES: Thank you. Caryn Holmes, staff counsel. With me is Christine Hammond, staff counsel; and Christopher Meyer, project manager; as well as several of
staff's witnesses.

HEARING OFFICER RENAUD: Good morning. And thank you.

Intervenor CURE.

MS. MILES: Good morning. I'm Loulena Miles, representing CURE. And we will have witnesses attending this afternoon.

HEARING OFFICER RENAUD: All right. Thank you. And Intervenor Budlong.

MR. SILVER: Larry Silver for intervenor Tom Budlong. Mr. Budlong is on the phone.

HEARING OFFICER RENAUD: Good. Thank you. And Intervenor California Native Plant Society.

MR. BELTRAN: Tom Beltran, California Native Plant Society.

HEARING OFFICER RENAUD: All right. Very good. Thank you.

Couple of just housekeeping matters, some of which you heard back in May but are probably worth repeating.

Today's proceeding is a formal evidentiary hearing conducted by the California Energy Commission to take in evidence into the record upon which a decision on the Imperial Valley Solar project will be based. The proceeding is being recorded stenographically and will be
transcribed into a written, typed booklet that will be
posted on our website and available for review.

Because of that, since it's going to be reduced
to writing, everything that you do or everything -- every
expression in here needs to be done verbally. Nods of the
head, shakes of the head, gestures, that sort of thing
will not show up on the record. So "yes", "no," "I don't
know" and so on will be best. If you're referring to a
document, please identify what it is.

And those of you on the phone, if you are
speaking or testifying, please make sure to identify
yourselves when you speak.

Now, back in May at the first session of these
hearings we did cover some material regarding the topics
that you have planned for today. We'll be listening with
great interest to what you have for us today, but we are
not interested in hearing anything repeated; we don't
really have time for that. So please try and keep your
presentations today to new material rather than re- -- and
avoid rehashing what we've already done.

Now, speaking of the phones, I won't normally
require everybody on the phone to identify themselves, but
I would like to ask if anybody is on the phone who would
like to identify themselves, and if you do, just go ahead
and speak.
MS. HARMON: Edie Harmon.

HEARING OFFICER RENAUD: Welcome, Ms. Harmon.

Thank you.

MS. TISDALE: Donna Tisdale.

HEARING OFFICER RENAUD: Thank you. Welcome.

MS. CONKLIN: Diane Conklin with Mussey Grade Road Alliance --

HEARING OFFICER RENAUD: Thank you. Next.

All right. The last person, would you please repeat? That didn't really come through clearly.

MS. CONKLIN: Yes. It's Diane Conklin with the Mussey Grade Road Alliance in Ramona, California.

HEARING OFFICER RENAUD: All right. Thank you for participating.

MS. CONKLIN: Thank you.

HEARING OFFICER RENAUD: All right.

MR. TAYLOR: This is Steve Taylor with San Diego Gas & Electric.

HEARING OFFICER RENAUD: Thank you, and welcome.

Anyone else? I know Mr. Budlong is there. And I see others who appear to be witnesses. Those of you participating by WebEx, if you're on the phone, great, just be on the phone, you don't have to do anything other than talk on the phone; although, if you don't want us to hear, if you want to make noise at your end, please mute
your phone, not place it on hold, but mute it. And if you
are making noise and we can't stop you, we're going to
mute you. So just bear in mind that to the extent your
phone is not muted, we can hear what is going on at that
end.

All right. Now, I've been following the parties'
efforts at refining the schedule, and I believe
Mr. Thompson submitted the latest version of that this
morning, not that long ago, maybe an hour and a half ago,
and it sounds like since then it may have changed. But it
appears to me from what I can determine that you're
planning to do air quality and land use this morning.

MR. THOMPSON: I would prefer that. If you want
my reasons, I'll go forward, if this is acceptable to
you --

HEARING OFFICER RENAUD: Is there anybody that
has a problem with that?

MR. MEYER: No, staff agrees.

HEARING OFFICER RENAUD: Okay. All right, then
that's what we'll do. And applicant has the burden, so
we'll start with the applicant's presentation.

MR. THOMPSON: Julie Mitchell from URS, are you
on the phone?

MS. MITCHELL: This is Julie Mitchell from URS, the
applicant's air quality consultant.
MR. THOMPSON: Mr. Renaud, Julie Mitchell has been previously sworn at our May proceeding. Do you want her sworn again?

HEARING OFFICER RENAUD: I think it would be best, just for -- just to be sure. I'm not certain myself whether or not her oath would survive two months. We might as well repeat it.

MR. THOMPSON: Ms. Mitchell, will you please stand up and raise your right hand and the reporter will swear you in in 30 seconds.

(Julie Mitchell sworn.)

THE REPORTER: Could you please state and spell your name for the record, and then consider yourself sworn.

MS. MITCHELL: My name is Julie Mitchell, J-u-l-i-e, last name, Mitchell, M-i-t-c-h-e-l-l.

MR. THOMPSON: Thank you. I would also like to offer Marc Van Patten. And his testimony covers a number of categories today. Right now I only want to address the diesel generator issue.

HEARING OFFICER RENAUD: All right. Let's swear in Mr. Van Patten, and that will be valid for today and tomorrow.

(Marc Van Patten sworn.)

THE REPORTER: Please state and spell your name
for the record.

MR. VAN PATTEN: Marc Van Patten, M-a-r-c V-a-n P-a-t-t-e-n.

THE REPORTER: Thank you. Please be seated.

HEARING OFFICER RENAUD: Excuse me. Ms. Holmes, would it make sense to have Mr. Walters available and do this in a panel type of thing? If you'd like, we could.

MS. HOLMES: Well, staff has its -- is prepared to respond to the applicant's testimony associated with the new diesel engines, so I think it would be more appropriate if it followed the applicant's testimony.

HEARING OFFICER RENAUD: Fine. That's fine. Thank you.

Anybody who does want to do a panel though at any time, please let us know, and we'll set that up for you.

MR. THOMPSON: Thank you. In our rebuttal testimony that was filed in July of this year, we have testimony, and then we have marked exhibits, but the testimony is not labeled with exhibit numbers. Would you prefer to take that testimony and attach new exhibit numbers to each of the pieces of the testimony?

HEARING OFFICER RENAUD: I think that would be best, yes.

MR. THOMPSON: There's two pieces in there. One is the prepared rebuttal testimony of Marc Van Patten. If
I could ask that that be marked as the next exhibit in order. And I think that would be 130, if I'm not mistaken.

HEARING OFFICER RENAUD: Okay. Thank you.

Marked for identification.

(Applicant's Exhibit 130 was marked for identification.)

MR. THOMPSON: And a couple -- and if you skip on it, you get to the prepared testimony of Julie Mitchell on air quality. If I could have that marked as Exhibit 131.

HEARING OFFICER RENAUD: All right. Thank you.

That's been marked.

(Applicant's Exhibit 131 was marked for identification.)

DIRECT EXAMINATION

MR. THOMPSON: Mr. Van Patten, let me turn to you, please. Would you please turn to what has been marked as Exhibit 130. In question 17 through 20 you describe the circumstances of the change in the project to the implementation of diesel electric generators on site. Would you give us about a two-minute explanation overview of why this was necessary?

MR. VAN PATTEN: We had initially contemplated going to IID for a back feed -- not close enough?

We had initially anticipated going to for back
feed power for station service construction and so forth, and in the investigation of that solution with IID, we found that although they could provide us with a solution, we didn't think it was timely enough for us to have back feed power get through the upgrades that would be necessary to ensure reliability in the area. And we looked at various other options, including timing of getting back feed through the IV substation, and found that it was most advantageous to have temporary generators used, Tier 4 generators, low emission for such an application.

We investigated that Tier 4 will be available September, October time frame in the California area, and we're going to pursue having those for the temporary generation needs for construction.

MR. THOMPSON: And in the remote possibility that those Tier 4 engines may not be available, what would you propose?

MR. VAN PATTEN: We would propose using what is available, the most environmentally --

MR. THOMPSON: Stringent.

MR. VAN PATTEN: -- stringent or appropriate generators, which I believe would be the Tier 3 generators, and operate those such that the emissions would be constrained to the low levels that would be
significant on the project.

    MR. THOMPSON: And, Mr. Van Patten, am I correct
that you then took this plan for the diesel generators and
asked URS to evaluate the air quality impacts?

    MR. VAN PATTEN: We did.

    MR. THOMPSON: That completes the direct of
Mr. Van Patten on the issue of diesel electric generators.

    MS. MITCHELL: Yes, I am.

    MR. THOMPSON: Your testimony has now been marked
as Exhibit 131. Do you have this front of you?

    MS. MITCHELL: Yes.

    MR. THOMPSON: Would you please give the
committee a brief overview of your activities with regard
to the evaluation of these generators?

    MS. MITCHELL: To examine the potential emissions
from these generators, I assumed that these generators had
the possibility of operating at the maximum capacity at
the maximum load for the -- for the entire daily duration
and monthly duration of the construction period for up to
one year and then estimated emissions based on that.

    As we all know, these generators may not operate
that much, but that's the most conservative way to
estimate potential emissions from these engines.

    MR. THOMPSON: And your conclusions?
MS. MITCHELL: My conclusion was that adding these generators for temporary power for the initial portion of the construction phase will not cause the federal conformity thresholds to be exceeded in that there will not be a significant impact, and that these engines themselves will be registered under the state PERP plan, and so they are permitted engines, and we'll be in compliance that way also.

MR. THOMPSON: I'm sorry, the state -- what term did you use?

MS. MITCHELL: Oh, Portable Equipment Registry Program.

MR. THOMPSON: I think we have a -- we have a problem in these hearings sometimes with acronyms, so that's great.

Finally, Ms. Mitchell, did you have any discussions with the local air quality management district regarding these engines?

MS. MITCHELL: Yes, I did. I spoke with them to ensure that -- that the assumptions that we just spoke about would be correct for bringing those engines on this facility, and they agreed they would -- the local air district, Imperial County Air Pollution Control District would like notification that the engines come on site. And aside from that, they're fine with the engines being
MR. THOMPSON: Thank you, Ms. Mitchell.

If I can bounce one more question back to Mr. Van Patten.

Ms. Mitchell testified that these diesel engines would be good for up to one year. How long does the project anticipate using these engines?

MR. VAN PATTEN: We anticipate needing engines until we can back feed power from the IV substation through our interconnection that we planned for the project to the IV substation, which we anticipate to be up to six months.

However, as Julie Mitchell explained, we looked at them for a year just in case there's any delay in the interconnection with the IV substation, we would have some latitude to use the generators a little bit longer.

HEARING OFFICER RENAUD: Anything else?

MR. THOMPSON: Our two-person panel on the air quality of the diesel engines is tendered for cross.

HEARING OFFICER RENAUD: Thank you.

Cross-examination by staff?

MS. HOLMES: Just one question.

CROSS-EXAMINATION

MS. HOLMES: Ms. Mitchell, can you hear me?

MS. MITCHELL: Yes, I can.
MS. HOLMES: Two questions.

The real question is what emission -- did you use the emission factors associated with Tier 4 engines or Tier 3 engines in your analysis?

MS. MITCHELL: I used the emission factors for the Tier 4 engines.

MS. HOLMES: Thank you.

HEARING OFFICER RENAUD: Cross by CURE?

MS. MILES: No questions. Thank you.

HEARING OFFICER RENAUD: Budlong? Mr. Silver?

MR. SILVER: No questions.

HEARING OFFICER RENAUD: All right. CNPS?

MR. BELTRAN: No questions.

HEARING OFFICER RENAUD: Thank you very much.

Questions by the committee?

Nothing?

COMMISSIONER EGGERT: No questions here.

COMMISSIONER BYRON: No questions. We were able to find the answer to the one question I had.

HEARING OFFICER RENAUD: All right. Good. Thank you very much.

So we'll proceed then with staff's air quality testimony.

MS. HOLMES: Thank you. I'd like to have the supplemental staff exhibit marked as Exhibit 302. I know
it's not the next in order, but we were planning to do
this by date, and we filed another exhibit in between the
staff assessment and the supplemental staff assessment
that we'll get to later. So for purposes of moving
forward, I'd like to have the supplemental staff
assessment marked as Exhibit 202.

HEARING OFFICER RENAUD: And would that be the
document that's dated July 7th?

MS. HOLMES: It would be.

HEARING OFFICER RENAUD: Good. Just to make sure
we're marking the right one. All right. That's marked.

(Staff's Exhibit 302 was marked for
identification.)

MS. HOLMES: And we would call William Walters,
who is on the phone and needs to be sworn.

MR. THOMPSON: And was that 302 or 202?

HEARING OFFICER RENAUD: 3.

MS. HOLMES: 302.

HEARING OFFICER RENAUD: And before you call
Mr. Walters, you reminded me of one housekeeping matter.

Mr. Thompson, do you wish to move 130 and 131
into evidence?

MR. THOMPSON: I do. Thank you.

HEARING OFFICER RENAUD: Is there any objection
from the parties?
MS. HOLMES: No.

HEARING OFFICER RENAUD: All right. Those will be admitted then.

(Applicant's Exhibits 130 and 131 were received into evidence.)

HEARING OFFICER RENAUD: Then proceed, I'm sorry, with Mr. Walters.

MS. HOLMES: Staff would call Mr. Walters and ask that the court reporter swear the witness.

(William Walters sworn.)

THE REPORTER: Please state and spell your name for the record and consider yourself sworn.

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

DIRECT EXAMINATION

MS. HOLMES: Thank you.

Mr. Walters, did you prepare the air quality section of Exhibit 302, the supplemental staff assessment?

MR. WALTERS: Yes, I did.

MS. HOLMES: And was a statement of your qualifications included in Exhibit 302?

MR. WALTERS: Yes, they were.

MS. HOLMES: And do you have any changes or corrections to make to your testimony?

MR. WALTERS: Not specifically to that, no.
MS. HOLMES: Thank you.
Are the facts in your testimony true and correct to the best of your knowledge?

MR. WALTERS: Yes, they are.
MS. HOLMES: And do the opinions this your testimony represent your best professional judgment?

MR. WALTERS: Yes, they do.
MS. HOLMES: I think rather than have Mr. Walters give a summary of his testimony, we'll move to the issue that seems to be before us.

Mr. Walters, did you hear the testimony of Julie Mitchell and Marc Van Patten that was given a few moments ago with respect to the use diesel engines on site?

MR. WALTERS: Yes, I did.
MS. HOLMES: Can you tell me how you found out and when you found out that the applicant was proposing to use these engines?

MR. WALTERS: I found out when the docketed supplemental testimony from the applicant came to me late last week.
MS. HOLMES: Thank you.
And you've had a chance to review that testimony. Can you please summarize your conclusions with regards to the applicant's testimony on the impacts associated with
the operation of those generators?

MR. WALTERS: Yeah. I did review testimony. I also did a few of my own sample calculations. For Tier 4, I found that the assumptions being used and the numbers presented seem reasonable.

MS. HOLMES: Do you have a sense of whether or not your conclusions would change if they were to use Tier 3 engines?

MR. WALTERS: There is a possibility that there could be issues with Tier 3, considering the density of emissions would be quite a bit higher. I'm a little worried that we'd have problems with one hour NOx, so I would prefer and since the testimony from Ms. Mitchell has Tier 4, I would prefer that we have some sort of amended condition or new condition regarding these engines that specified either Tier 4 or required additional analysis for allowing Tier 3.

MS. HOLMES: Thank you.

And you also heard Ms. Mitchell testify that her analysis assumed that the engines would operate for one year. Would your conclusions change if the Tier 4 engines were to operate in excess of one year?

MR. WALTERS: No. No, they wouldn't.

MS. HOLMES: And I don't know whether you've had any conversations with the air quality management district
with respect to this question, but I'll ask you anyway.

Do you have a sense of whether or not the final
determination of compliance needs to be amended?

MR. WALTERS: I did not talk with district, but
if the engines are as they indicated to be in the PERP
program, then no, the FDOC should not need any changes.

MS. HOLMES: Thank you.

That concludes the staff's direct examination.

HEARING OFFICER RENAUD: Cross-examination by

applicant?

MR. THOMPSON: No.

HEARING OFFICER RENAUD: All right. CURE?

MS. MILES: No.

HEARING OFFICER RENAUD: Budlong?

MR. SILVER: No.

HEARING OFFICER RENAUD: CNPS?

MR. BELTRAN: I've got some questions.

HEARING OFFICER RENAUD: All right. Go ahead,

please.

CROSS-EXAMINATION

MR. BELTRAN: My name is Tom Beltran, California

Native Plant Society.

Mr. Walters, I read your write-up in the
supplemental staff assessment, and I noticed you were
concentrating on the PM-10 and the PM-2.5. What were --
you had mentioned one of the likely sources for the Colexico reading for the PM-2.5 was from idling trucks at the border.

What about at the other sites? What were the sources for the PM-2.5 at the other sites?

MR. WALTERS: Well, the district has indicated and some of the studies show that as you get away from the border and influence Mexicali, most of the particulate becomes more just native wind-borne-type particulate soil for the most part with obviously some secondary pollutant including organics and inorganics, sulfate, nitrate.

MR. BELTRAN: Well, I follow that, but your -- in air quality Table 5 in the PM-2.5 for 24 and -- for the 24-hour period and for the annual period, you're showing 77 percent and 73 percent of standard respectively. That's a basin-wide reading; is that correct, or average?

MR. WALTERS: No. It would be -- it would be based on the data on Table 4, and the data in Table 4 is noted that -- that I believe that the PM numbers are from the El Centro station.

MR. BELTRAN: On page C.1-12 under particulate matter and fine particulate matter section, you refer to the source of PM-2.5, quote, "is derived mainly from either the combustion of materials or from precursor gases."
Combustion of materials, would that include burning of agricultural materials?

MR. WALTERS: It would.

MR. BELTRAN: Would it also include the combustion of the agricultural equipment, such as tractors and trucks and those types of activities?

MR. WALTERS: It would.

MR. BELTRAN: Did you do an analysis to estimate what portion of these readings came from those sources?

MR. WALTERS: We looked at available information from ARB. And let me go back and take a look. There wasn't any testimony -- pre-testimony on this, so I wasn't prepared for this particular set of questions, so give me a moment.

MR. BELTRAN: Okay.

MS. HOLMES: Take your time.

MR. WALTERS: Okay. My testimony on page C.1-32 notes that --

MR. BELTRAN: Please repeat that page number again.

MS. HOLMES: Can you speak up and speak more slowly, please, Will?

MR. WALTERS: Okay. My testimony on page C.1-32 notes that from ARB resource available in 2005 that the primary, at least in Colexico, which as I have noted
elsewhere in my section, is highly influenced from Mexicali, had primary, secondary -- well, primary fine particulate from fugitive dust and combustion particulate. And the ammonium nitrate, ammonium sulfates were less than a quarter of the total.

MR. BELTRAN: At what station was that? Was that the Colexico?

MR. WALTERS: Right. This was readings -- readings taken for that particular study that ARB completed in 2005 at Colexico.

MR. BELTRAN: I'm concerned -- my question is, okay, so what you're saying is the Colexico station, part of the 2.5, the source is from Mexicali. It's also likely as you put in your section that it's from the idling trucks. And this comes from air resources board.

What about the upper part of the basin towards where this project is sited? There's a station at Ninth and Imperial, I believe.

MR. WALTERS: Yeah. And I wouldn't exactly call this in the upper part of the basin, it's still pretty close to the border, but it is quite a bit further west than Colexico and generally not in the predominant wind direction from Mexicali, it will have considerably less influence both due to distance and direction.

HEARING OFFICER RENAUD: Mr. Walters, you're
fading out. Please keep close to your phone.

MR. WALTERS: Okay. Let me do that again.

The site, I would not characterize as being in
the north part of the basin, it's still fairly close to
the border with Mexico, a little further north than
Colesxico, which is on the border, but is also considerably
more west. And so due to both distance and direction, the
direction not being a predominant wind direction from
Mexicali, it would experience considerably less influence
from Mexico.

In terms of available data, I don't have
available data from the project site area, and the study
that ARB did not have data for El Centro. I expect,
however, certainly at the site location, which I expect to
have considerably lower particulate values than in the
more developed area of the basin, would be more influenced
by fugitive dust than the other forms, but there still
would be a fairly sizeable fraction of both particulate,
organic fraction as well as some secondary from sulfate
and nitrate formation.

MR. BELTRAN: So basically you're speculating.
You don't have the data to show the sources, or you don't
have it available; is that correct?

MR. WALTERS: Correct. The data that was
available was Colesxico.
MR. BELTRAN: Okay. If this project were sited -- right now it's sited on an undeveloped desert creosote scrub with some washes. If it were sited on productive agricultural land and that were taken out of production and the burning were to cease, would you expect this to have a positive impact on the air quality in the basin?

MS. HOLMES: I'm just going to object to the question and ask about the assumption that there's ag burning.

If you could break that down into two questions so that your assumption is made clear, I think it would be easier for the witness to answer.

MR. BELTRAN: If agricultural land is taken out of production, assuming that this agricultural land contributes 2.5 particles, would it be reduced if -- would the PM-2.5 be taken out of -- would the PM-2.5 emissions be reduced if ag land is taken out of production?

MR. WALTERS: I think there are two ways to answer that question.

Number one, if you're going to be replacing an existing baseline emission source regardless of what that is, agricultural, industrial, and then reuse the land in another fashion, then you always can get some benefit of reducing that baseline, assuming -- and this is the second
part of the answer -- assuming that baseline doesn't move
to another location.

And, you know, there's really no way to be able
to say that if you were able to take agriculture out of
one location, it wouldn't come back into another and
essentially have the same emission profile.

MR. BELTRAN: Well, that's the second part. The
first part, more directly, is if agricultural land is
fallowed, will it reduce particle 2.5 emissions? I'm not
saying if it's moved or if it's put into production
someplace else. If it's fallowed, if we reduce
agriculture production, will it reduce particle 2.5
emissions?

HEARING OFFICER RENAUD: Emanating from that land
that was fallowed; isn't that what you really mean?

MR. BELTRAN: If the total acres of agricultural
are reduced because we fallow land, will it reduce PM-2.5
emissions?

HEARING OFFICER RENAUD: Can you answer --

MR. WALTERS: You know, I haven't really done a
study on that because there are pluses and minuses in both
directions. I think over the long term, you know, annual
basis, it probably would. But if you fallow land and
aren't careful to keep it well vegetated, you know, you
could increase temporary emissions during wind events
pretty significantly.

MR. BELTRAN: But wind events don't create 2.5 particles; is that correct?

MR. WALTERS: Oh, they create some.

MR. BELTRAN: Okay. Very good. Thank you.

HEARING OFFICER RENAUD: All right. Thank you.

Is there any redirect for Mr. Walters?

MS. HOLMES: One question.

HEARING OFFICER RENAUD: Thank you. Go ahead.

REDIRECT EXAMINATION

MS. HOLMES: Will, could you please explain why it is that you would expect that there is still, I believe you said, a significant fraction of the total particulate levels to be from combustion in the project area?

MR. WALTERS: It primarily would be transported from the west, from the San Diego air basin. But also, in the project area, you know, there is the I-8, which is a fairly significant emission source in terms of trucking, that would add to that total as well.

MS. HOLMES: Thank you.

HEARING OFFICER RENAUD: Okay. Mr. Walters, I have a question for you. This is Raoul Renaud, the hearing officer.

Ms. Mitchell's testimony basically is that it assumes a possibility, not likely, but a possibility that
Tier 4 engines were not available, and that if they had to use Tier 3 generators, the project would need to use either fewer than six or run them less to remain under the federal conformity threshold.

Do you agree with that testimony?

MR. WALTERS: Actually, I'm not sure where I'm seeing those assumptions in Mrs. Mitchell's testimony. I believe I heard something to that effect in the verbal testimony from Mr. Van Patten; I've actually not seen it in written in terms of her testimony.

HEARING OFFICER RENAUD: In her declaration that was submitted with the applicant's -- let's see, what's the title of this document? Supplemental or rebuttal testimony -- on July 21st, rebuttal testimony, second page -- I don't know if you have that in front of you, but I basically was reading it to you. If you'd like, I can read you the paragraph, if that would help you, and then ask you if you agree with it. Would that be helpful to you, or do you have it available?

MR. WALTERS: Oh, I see it now. Yes, okay --

HEARING OFFICER RENAUD: Question 8 and answer 8.

MR. WALTERS: Yeah. She was specifically talking about general conformity threshold and not necessarily about other possible impacts, including short-term NOx.

HEARING OFFICER RENAUD: All right. Do you agree
with her testimony; question 8, answer 8?

MR. WALTERS: Yes, in terms of the federal conformity threshold, I do.

HEARING OFFICER RENAUD: All right. Thank you.

Any questions from the committee?

COMMISSIONER BYRON: None.

HEARING OFFICER RENAUD: Further questions before we let Mr. Walters go? Anybody? All right. Good.

MS. HOLMES: One question.

HEARING OFFICER RENAUD: Ms. Holmes, please.

REDIRECT EXAMINATION

MS. HOLMES: Mr. Walters, could you explain what the concern would be if there were to be an exceedance of short-term NOx standard?

MR. WALTERS: Well, our findings in terms of significance are based on the fact that there are no exceedances of the NOx standard. So if we were to remodel with these new engines and find that there were exceedances, then we would have what staff would consider significant impacts under CEQA that we'd either try to mitigate in some manner or there would have to be some sort of override.

MS. HOLMES: Thank you.

HEARING OFFICER RENAUD: All right. Is that it?

MR. THOMPSON: That's it from applicant.
HEARING OFFICER RENAUD: All right. Good. I think we're done with air quality then. Thank you. Would you like to move on to land use?

MR. THOMPSON: We would. And we have Mr. Van Patten who's been previously sworn, but his testimony in the land use area is one part of one question and answer, one response in his Exhibit 130, and that is response 3A. I can put him on for that and then turn it over to staff for their land use expert, if that works for you.

HEARING OFFICER RENAUD: That works for us. Does that work for staff?

MS. HOLMES: I'd like to go back for a moment.

HEARING OFFICER RENAUD: To air?

MS. HOLMES: Yeah. I'd like to move my exhibit into evidence.

HEARING OFFICER RENAUD: Good idea. Thank you.

MS. HOLMES: The air quality portion of Exhibit 302. And --

HEARING OFFICER RENAUD: Could I possibly suggest modifying your motion to move the entire SSA into evidence, and then we won't have any problems with not doing part of it.

MS. HOLMES: Well, staff certainly will not object to that.
HEARING OFFICER RENAUD: All right.

Would anybody object to --

MR. THOMPSON: No objection.

HEARING OFFICER RENAUD: Any parties?

MR. SILVER: No.

HEARING OFFICER RENAUD: All right. No objections. The entire SSA is admitted, the one dated July 7th.

(Staff's Exhibit 302 was received into evidence.)

MS. HOLMES: Thank you.

And I'm sorry, Mr. Thompson, I didn't quite understand what you were saying about Mr. Van Patten's testimony. I was still finishing up with air. So if you could -- but a little bit more slowly for those of us who are slower than you are, I would appreciate it.

MR. THOMPSON: Done.

DIRECT EXAMINATION

MR. THOMPSON: Thank you. Mr. Van Patten, you've been previously sworn.

In the area of land use, would you describe which portions of your Exhibit 130 and attachments thereto you wish to put into the record in land use?

MR. VAN PATTEN: Yeah. We're submitting a couple of -- we're submitting a couple of options. One for 80 acres owned by the Burke family denoted as Double Eagle
in the option agreement with attached lease.

Another one for the Oatman and Miller families for 180 acres, plus another -- let's see, it's another -- I can't remember the acreage, but it's another private parcel within the project boundary which has an option agreement plus a lease, an attached agreed-upon lease.

And then the third one is for the Martinez family for a one-acre parcel, which is a purchase agreement.

MR. THOMPSON: And what was the purpose of including these options in your testimony?

MR. VAN PATTEN: To show that we have control over that land, site control.

MR. THOMPSON: Anything else?

MR. VAN PATTEN: It's not coming to me, Allan. So if there's something else, it's not coming to me.

MR. THOMPSON: Why is that important to the applicant?

MR. VAN PATTEN: Such that we can ultimately, once granted the right-of-way grant from the BLM, we can aggregate the private lands within the project site and develop the entire site contiguously.

MR. THOMPSON: Thank you. That completes our further direct on the subject of lands for this witness.

HEARING OFFICER RENAUD: All right.

Is there any cross?
MS. HOLMES: Just a couple of questions.

CROSS-EXAMINATION

MS. HOLMES: I wanted to confirm, so, Mr. Van Patten, is it your testimony that you have site control for 40 years as a result of these option contracts?

MR. VAN PATTEN: These option agreements allow us to sign a lease in two cases and to purchase the land in the other case where the initial lease term is 20 years with 10-year extensions.

MS. HOLMES: And under what circumstances -- let me ask that question a different way. Does the property owner have the ability to refuse to enter into the extensions?

MR. VAN PATTEN: No.

MS. HOLMES: And can you point to a particular section of the lease -- I'm sorry, the reason I'm asking these questions is I was confused about the 20 years and then the two 10-year terms. And so it would be helpful if we could look at those sections so that we can ensure that there's site control.

MR. VAN PATTEN: Do I need to do this this second, or are we going to spend too much time --

MS. HOLMES: No. I don't have any problem coming back to that.
MR. VAN PATTEN: Let me identify those in all contracts so we have exactly what the provisions are.

MS. HOLMES: That's fine. I don't even have an objection to that being submitted later today or tomorrow, but we would like to understand; it wasn't immediately clear to us.

MR. THOMPSON: Understand Mr. Van Patten is here for the duration. So we will put that --

MS. HOLMES: As are most of us.

HEARING OFFICER RENAUD: All right. Is there any cross-examination by CURE?

MS. MILES: No.

HEARING OFFICER RENAUD: All right. Budlong?

MR. SILVER: No.

HEARING OFFICER RENAUD: CNPS?

MR. BELTRAN: No.

HEARING OFFICER RENAUD: All right.

Mr. Thompson, just so I'm clear that we're all on the same page, Exhibit 130, the prepared rebuttal testimony of Marc Van Patten, was that submitted with the applicant's package of July 21st?

MR. THOMPSON: Yes, the submittal of rebuttal testimony, yes.

HEARING OFFICER RENAUD: All right. And does one of you have the pdf copy of that open on a computer? I
just want to know what page we're looking at. It's a
great big document, and it's got subparts.

Just page 19, all right. Thank you.

MS. FOLEY GANNON: And there are -- the leases
that were referenced are actually exhibits to that
exhibit. So when we were submitting Exhibit 130, we were
including all the exhibits attached to that testimony.

HEARING OFFICER RENAUD: That's what I wanted to
make clear. All right. Good. Thank you very much.

All right. Further witnesses by the applicant on
land use?

MR. THOMPSON: No.

HEARING OFFICER RENAUD: All right. Staff?

MS. HOLMES: Thank you. Staff would call Negar
Vahidi. She needs to be sworn.

HEARING OFFICER RENAUD: Ms. Vahidi, you're on
the phone, I believe.

MS. VAHIDI: Yes.

I think Caryn's mic is off.

Hi. I think we need to be sworn in; is that
correct?

MS. HOLMES: Yes.

HEARING OFFICER RENAUD: Yes. And let me remind
you to speak right up to your phone so we can all hear you
very well.
MS. VAHIDI: Is that better?
(Negar Vahidi and Susanne Huerta were sworn.)

THE REPORTER: Could you please state and spell your names for the record and consider yourself sworn.

MS. VAHIDI: Yes. First name Negar, N-e-g-a-r, last name Vahidi, V-a-h-i-d-i.

MS. HUERTA: Susanne Huerta. First name S-u-s-a-n-n-e, last name H-u-e-r-t-a.

DIRECT EXAMINATION

MS. HOLMES: Thank you, Ms. Vahidi. Did you prepare the land use section of Exhibit 302?

MS. VAHIDI: Yes, I did.

MS. HOLMES: And was the statement of your qualifications included in that exhibit?

MS. VAHIDI: Yes, they are.

MS. HOLMES: And do you have any changes or corrections to your testimony?

MS. VAHIDI: No, I do not.

MS. HOLMES: And are the facts contained in your testimony true and correct?

MS. VAHIDI: Yes.

MS. HOLMES: Do the opinions in your testimony represent your best professional judgment?

MS. VAHIDI: Yes.

MS. HOLMES: Again, in the interest of time, I
think we'll skip the summary of the staff testimony.

Ms. Vahidi, are you familiar with the applicant's testimony on land use?

MS. VAHIDI: Yes, I am.

MS. HOLMES: And does it address two issues, zoning consistency, and setback requirements?

MS. VAHIDI: Yes.

MS. HOLMES: And did staff also consider a third issue in its analysis, that of site control?

MS. VAHIDI: Yes.

MS. HOLMES: Can you please very briefly explain what the staff -- in light of the testimony that you just heard from Mr. Van Patten, can you please explain what the staff position is on those three issues?

MS. VAHIDI: Yes. I will start with the issue of site control, because setbacks are somewhat related, and since Mr. Van Patten --

HEARING OFFICER RENAUD: Please speak right into your phone. You're pretty faint here.

MS. VAHIDI: Sorry. Okay. I'm going to start with the issue of site control.

Staff, as part of data adequacy requirements, we usually ask for information regarding any private parcels and the applicant's intent for acquiring and/or leasing those parcels. So this issue sort of -- we've been in
discussions with the applicant since the very outset of the project.

Regarding site control, we require that applicant's in compliance with the state Subdivision Map Act, show site control by either acquiring parcels in one of two ways -- or showing site control in one of two ways; either merging parcels or doing a lot line adjustment.

Now, the power of implementing the Subdivision Map Act is vested in the local agency. In this particular case the local agency is Imperial County, but we should note that Imperial County doesn't really have any specific requirements regarding lot mergers or lot line adjustments.

We had put in our typical condition of certification requiring the applicant to comply with the Subdivision Map Act by either doing a lot line adjustment or a parcel merger through the county; however, the applicant's not had a lot of luck getting a lot of confirmation out of the county, so they are requesting that the committee or we don't implement condition of certification land one, and they are requesting an override for compliance with the Subdivision Map Act.

Now, the reason the setback requirement is important is one of the reasons we require merging of parcels or a lot line adjustment is to allow the applicant
to be able to fully build out those private parcels by not having to comply with the county setback requirements for each parcel. But that would be yet another item that the applicant is asking the committee for an override on, is to basically override the local agency, i.e., Imperial County LORS regarding the setback requirements.

And the third issue regarding the project -- the portions of the project site on private lands that are within Imperial County and are located within the F-2 zone and the fact that siting the project as proposed within that Imperial County zoning designation would not be consistent based on the recommendations that even the county has made regarding use of a process, whereby they call it a similarity in use process because the project that the county of Imperial selected as the project that they would use as a similar use is nowhere near similar in its scale to Imperial Valley Solar Project.

And those are the main issues regarding land use at the moment.

MS. HOLMES: Thank you. Those are all my questions.

HEARING OFFICER RENAUD: Thank you. Cross-examination by applicant?

MR. THOMPSON: No, thank you.

HEARING OFFICER RENAUD: By CURE?
MS. MILES: No.

HEARING OFFICER RENAUD: All right. By Budlong?

MR. SILVER: No.

HEARING OFFICER RENAUD: CNPS?

MR. BELTRAN: No.

HEARING OFFICER RENAUD: All right. I do have a couple questions, if I may.

I guess we'll start with the last first on the similarity of use.

Ms. Vahidi, first of all, have you heard or are you aware of the county's position with respect to this similarity of use issue?

MS. VAHIDI: Yes. They've sort of, for lack of a better word, vacillated on their position a couple of times. In their comment letter on the staff assessment, they did -- the applicant and staff had a lot of discussions, or have attempted to have a lot of discussions with the county planning staff. They originally came out telling the applicant and staff that for the project to comply, that they -- that the applicant could go through this similarity of use finding and then the project would be consistent.

And since then, after much discussion, the applicant -- the county has come back actually and told us that they now agree with us, meaning staff, that the
project that they had brought up as the project that they
would have used as the similar use is nowhere near as far
as being similar to this project because that project is a
450 acre solar PV project.

So in the interest of looking at the Imperial Valley Solar Project as a whole and not just the, you know, 380 acres of private parcels, you'd have to look at the entire project in its entirety with regard to scale.

So they did -- the county did agree with us that they do not think that this would be a similar use any more than that maybe the applicant should pursue trying to get an override for that -- for that zoning inconsistency.

HEARING OFFICER RENAUD: All right. Thank you.

As far as your analysis that it's not a similar use, help me understand this. The amount of land that's under Imperial County jurisdiction at the site is 340 acres, correct?

MS. VAHIDI: Yes, thereabouts, yes.

HEARING OFFICER RENAUD: And the similar use project you looked at is 540 acres, correct?

MS. VAHIDI: Yes, about.

HEARING OFFICER RENAUD: So wouldn't you compare the 540 to the 340, rather than the 540 to the 6500?

MS. VAHIDI: Because I -- because when the project that's implemented, it's not just the 340 acres
getting implemented, even though the majority of the acreage is on BLM land. I'd have to look at the project as a whole as far as the scale of it goes. If we're trying to make a similarity in use finding based on the criteria that the county uses, you'd have to look at the project as a whole with regards to the impact and the findings that they would have to make.

HEARING OFFICER RENAUD: Okay. Thank you for that clarification.

Let's see. I'm looking at my next question, so just bear with me here.

MS. VAHIDI: Sure.

HEARING OFFICER RENAUD: All right. In your testimony, Ms. Vahidi, you talked about the current use of the site. And I'm looking at page C.7-8 particularly, of Exhibit 302. You estimated that 1038 acres of the site have been disturbed by off-highway vehicle use, and you base that on GIS data. What is -- could you describe more particularly for us that data is, GIS, what kind of data is it, where do you find it and so on?

MS. VAHIDI: Well, the GIS data -- and the applicant can jump in. GIS data, which is geographic information system data, was provided regarding on-site uses and existing conditions by the applicant in their AFC and subsequent filing.
The issue of OHV use was -- there was information provided by the applicant in a study called the "Baselines Conditions Report," and there was a map in there in addition to some descriptive data that showed the disturbance on site by OHV use.

HEARING OFFICER RENAUD: All right. And farther down in that page your testimony reads that -- or describes the site as highly disturbed from years of heavy and ongoing OHV use.

Is that consistent with the 1038 acres, or are you indicating to us that there is in fact more disturbance area than the 1038?

MS. VAHIDI: Well, yes, that's a very good question. As I'm sure BLM staff would testify to if they could, you will have on BLM land some designated open roads for OHV use, but the way OHV use usually occurs, a lot of times roads may not be necessarily discernible or someone, you know, one or two OHV users may veer off a designated road, and then it creates yet another road. So there are instances with some unauthorized use of other portions of land that are not designated for OHV use to occur.

So in other words, there is -- the site could be more disturbed than just the amount that is indicated.

HEARING OFFICER RENAUD: Okay. And then just to
confirm, I think what I'm reading, but I want to hear it
direct from you, with respect to the trail, the Anza
Recreation Trail, apparently cannot be discerned due to
the use of the site, current use of the site.

Are you aware of any efforts that have been made
by BLM or anybody over the years to protect that trail so
that it -- or the location of the trail so that it could
be discerned?

MS. VAHIDI: I do note that there was some --
that BLM had been working with the park service to try and
put up signage, but at this point, as the applicant can
also confirm, we really cannot tell where -- where the
trail is on site. And the efforts that are ongoing right
now to maybe help reestablish the recreational aspects of
the trail is to try and connect the two segments north and
south of the site, sort of due east of the site.

So national park service, as you know, based on
their comment letter, is attempting to do that along with
BLM. I don't have any, unfortunately since the
bifurcation of the staff assessment from the GIS, I don't
have a lot of information regarding the specifics of BLM
and national park service's ongoing coordination or
discussion regarding this particular issue.

HEARING OFFICER RENAUD: All right. Thank you
very much.
That's all the questions I had.
Committee? Anybody? All right.

MS. FOLEY GANNON: We have one follow-up question, if it's okay.

HEARING OFFICER RENAUD: Redirect from applicant, yes.

REDIRECT EXAMINATION

MS. FOLEY GANNON: In your testimony you were commenting on the fact that the project would not be consistent with the technical provisions of the Subdivision Map Act. What is the intent of those provisions as you understand them? I mean, what are they intended to accomplish?

MS. VAHIDI: Yes, again, the Subdivision Map Act and the intent of why the energy commission actually tries really hard to have applicants comply with that is to ensure that when there are private parcels, that the parcels -- you know, so that the applicant can show that they are going to be able to build the project on the site that they have proposed.

In other words, you don't want to have the commission license a power plant project and then not be able to site it where it -- where the applicant has proposed it because a property owner may say I no longer want to sell to you, or, I no longer want to lease the
land to you.

   MS. FOLEY GANNON: So would having control of the
site for the predicted life of the project address that
concern?

   MS. VAHIDI: Yes, it would.

   MS. FOLEY GANNON: And with regard to the
setbacks, what is the intent of the setbacks that the
county requires, as you understand them?

   MS. VAHIDI: Well, the kind of setbacks within
that particular zone is to ensure that it's safe. If
there's one -- say there are a number of private property
owners adjacent to each other; so when you build out your
parcel as a private property owner that you have -- and
this occurs in all local agencies, are setback
requirements. So that the local agency tries to ensure
that there's enough of a buffer between the two adjacent
uses or the adjacent uses on all these private parcels so
they're not building right up to the edge of the boundary
of the parcel.

   MS. FOLEY GANNON: And in a situation like we
have here where the private parcels are actually
surrounded by the use that's going to be the same as will
be done on the private parcels, do you think that there is
a need to protect that interest, or do you think those
setbacks are needed to accomplish the goals of the
setbacks?

MS. VAHIDI: No, not in this particular case, because, in fact, it would probably render some of the parcels not very useful if you can't build them out fully.

MS. FOLEY GANNON: Thank you.

HEARING OFFICER RENAUD: All right. Thank you.

Is there any further questions of this witness by any party?

MS. HOLMES: No.

MS. MILES: No.

MR. SILVER: No.

MR. BELTRAN: No.

HEARING OFFICER RENAUD: All right. Thank you.

Staff, do you have another witness to call? Or no?

MS. HOLMES: I don't believe so.

HEARING OFFICER RENAUD: Okay.

MS. FOLEY GANNON: For the rest of the day? You're done?

This is going to be a shorter time than we thought.

MS. HOLMES: Those are staff's witnesses on land use.

HEARING OFFICER RENAUD: That's it. All right.

Thank you very much.
MS. HOLMES: I would note that we did skip over project description and policy. I don't know if that was an intentional and I missed part of the discussion, or whether it was inadvertent.

HEARING OFFICER RENAUD: It was intentional because I heard from, I believe it was Mr. Thompson, that we thought we'd try to do air quality and land use first thing.

MS. HOLMES: That's fine.

MS. FOLEY GANNON: I think, yeah, we thought that they were discrete issues, and the rest of the issues were more connected and would make more sense to have them be heard sequentially and to have these discrete issues handled this morning.

HEARING OFFICER RENAUD: Well, okay. That's good. I think that concludes the land use then.

MS. FOLEY GANNON: That does conclude the land use.

HEARING OFFICER RENAUD: Thank you very much. What's now --

MS. FOLEY GANNON: We will now turn to that not inadvertently skipped section, the policy and overview, and we will call -- we'll have Marc Van Patten stay as a witness, and call Sean Gallagher.

THE REPORTER: Mr. Gallagher, could you stand up
and raise your right hand, please.
  (Sean Gallagher was sworn.)

THE REPORTER: Please state and spell your name for the record.

MR. GALLAGHER: Sean Gallagher, S-e-a-n, Gallagher, G-a-l-l-a-g-h-e-r.

THE REPORTER: Thank you. Be seated.

MS. FOLEY GANNON: Sorry. I noticed the chair I was sitting in was broken, so I wanted to have Mr. Thompson take over that chair for the rest of the day.

HEARING OFFICER RENAUD: Well, we hope you're happy with the furniture arrangements now; if not, we'll try to accommodate you.

MS. FOLEY GANNON: I appreciate that.

DIRECT EXAMINATION

MS. FOLEY GANNON: Mr. Gallagher, are you the same Sean Gallagher who has given testimony in the previous oral proceedings as well as written testimony?

MR. GALLAGHER: Yes.

MS. FOLEY GANNON: And are you the author of the testimony, rebuttal testimony that was submitted on July in 2010?

MR. GALLAGHER: Yes.

MS. FOLEY GANNON: And we would like to have Mr. Gallagher's testimony marked as the next exhibit,
which will be Exhibit 132?

HEARING OFFICER RENAUD: That would be the next number, yes.

(Applicant's Exhibit 132 was marked for identification.)

MS. FOLEY GANNON: Mr. Gallagher, do you have any corrections, revisions to make to your previous testimony?

MR. GALLAGHER: Yes, I do. The testimony that we filed last week includes an error on page 8 in the bullet related to condition, worker safety 7. My testimony cites some language from the SSA, but the language cited is from the wrong paragraph in the SSA. So that reference should be stricken from my testimony. It does not change the conclusion of my testimony however.

MS. FOLEY GANNON: I'm sorry, we're on page 8, and it was the language that was cited with regard to which provision?

MR. GALLAGHER: Worker safety 7.

MS. FOLEY GANNON: Okay.

HEARING OFFICER RENAUD: All right. Just so I'm clear, we're again referring to the supplemental testimony that was filed on July 21st.

MR. GALLAGHER: Correct.

HEARING OFFICER RENAUD: And we're at page 8 --
MR. GALLAGHER: Correct.

HEARING OFFICER RENAUD: -- of the Sean Gallagher declaration.

MR. GALLAGHER: That's correct.

HEARING OFFICER RENAUD: All right.

MR. GALLAGHER: And there's a second bulleted paragraph on page 8 that has to do with condition worker safety 7.

HEARING OFFICER RENAUD: Yes.

MR. GALLAGHER: The one, two, three, four, fifth line of that paragraph includes -- fifth and sixth lines include some quoted language from the SSA, and that quoted language should be stricken; however, it does not change the conclusion of my testimony at this point.

HEARING OFFICER RENAUD: The language beginning with the word "incidence."

MR. GALLAGHER: Correct.

HEARING OFFICER RENAUD: All right. Striking it, not replacing it.

MR. GALLAGHER: I think what I'll do is replace it orally --

HEARING OFFICER RENAUD: With something --

MR. GALLAGHER: Yes.

HEARING OFFICER RENAUD: -- that's coming.

All right. Thank you.
MS. FOLEY GANNON:  Do you have any other corrections or revisions to this testimony submitted?

MR. GALLAGHER:  No other corrections, but one addition.

Our testimony did mention condition VIS 6, however, my testimony didn't mention one additional concern with VIS 6 that we'd like to raise today and one additional change to VIS 6 that we'd like to request today.

And I can either discuss that change now or when we go through.  I think we'll just --

MS. FOLEY GANNON:  We can do it when we get to discussing the nature of the conditions that you wish to provide comments on.

Overall, Mr. Gallagher, what is the purpose of your testimony here today?

MR. GALLAGHER:  Overall, I'd like to discuss the evolution of the project in response both to agency concerns and our own learnings.  I'd like to discuss our response to some of the most serious conditions that we have changes to request, and I want to discuss the basis for the override where an override is going to be necessary.

MS. FOLEY GANNON:  And I know we are not -- we're working very hard to avoid repeating anything that we have
put in previously, but to set up and understand, as you call it, the evolution of the project, the project was -- the AFC was submitted in 2008; is that correct?

MR. GALLAGHER: Yes. The AFC was submitted in June 2008. And since then our experts, as they'll testify later today and tomorrow, have spent thousands of hours studying and assessing the site's resources and have also spent hundreds or thousands of hours discussing the proposed project with federal and state natural resource agencies and permitting agencies and trying to respond to concerns.

And the reason I bring it up is that I'm going to in a few minutes complain about some of the project -- some of the conditions of certification in the SSA, and I want to make it clear to the committee that we've done a lot of work to improve this project over the past two years, and there's many, many conditions that we agree with.

And I don't want you to get the impression or the misimpression that we're simply -- we're simply complaining about some of the issues here. We want to make sure that you understand there are many, many things that we've done to try to improve this project that have the agreement of the agencies and there are many, many conditions that have been suggested in the SSA with which
we agree as well.

    MS. FOLEY GANNON: And as I understand it, the
site investigation began prior to the AFC, and there were
probably even changes prior to the AFC?

    MR. GALLAGHER: That's right. The project as it
was originally proposed was a 900 megawatt project on 7600
acres of land, and the initial studies, even before the
AFC was filed in June 2008, found that there were
potentially significant impacts to environmental
resources, cultural resources in particular on the eastern
end of the project site.

    And as a result, even before the project was
filed in June 2008, the project was -- the scope of the
project was reduced from 900 megawatts to 750 megawatts,
and the acreage was reduced from 7600 acres to about 6500
acres.

    Now, just as an aside, I'll say when I was still
at the Public Utilities Commission when that change was
made and when it came across my desk, I, frankly, was
impressed that the applicant was taking a responsible
approach to permitting the project.

    MS. FOLEY GANNON: And have there been other what
you would consider significant changes that have been made
in response to agency concerns or the results of studies
conducted by your consulting team?
MR. GALLAGHER: Yes. And the biggest one that I'd like to mention are the changes that have been made in response to the Army Corps of Engineers and working with the Army Corps of Engineers on the 404B-1 permit under the Clean Water Act that the army corps must permit.

We've been working with the corps for months, and the project has been redesigned or modified substantially in response to concerns articulated by the corps. As originally proposed, the project would have been 750 megawatts and would have impacted 177 acres of the waters of the United States and would have had additional indirect and temporary impacts.

And as currently proposed and as modified, we've worked hard to figure out how to maximize reduction of those impacts to waters of the United States while still having a project that's buildable, that's practicable logistically and cost-wise to build.

And where we are now, and the corps has preliminarily onto this -- in their preliminarily least environmentally damaging practicable alternative analysis as modified, the project reduces the permanent direct impacts to 38.2 acres, that's about 75-percent reduction from the original proposal, and it reduces the temporary and indirect impacts as well.

We also, as going through this, we lost some
acres and we lost some megawatts. The project is down to 709 megawatts now as a result of those changes, but it's buildable at that size. And there's been a number of changes that have been made to achieve those reductions to the project, including changing the way the roads are laid out, changing the width of the roads, and many, many other project changes that are described in my testimony.

MS. FOLEY GANNON: And does the -- does the LEDPA have any impact on the potential impacts to listed species?

MR. GALLAGHER: Well, the LEDPA has reduced impacts on species because the LEDPA has reduced impacts on the dry washes on the project site which are -- and I'm not a biologist, but the better habitat for the species such as big horn sheep in particular. The washes on the site is where the marginal big horn sheep foraging habitat is located. And as a result, the mitigation that's been proposed by the corps to mitigate for impacts to waters of the United States is also -- would also have significant benefits for the big horn sheep.

And so as I will discuss a little later, we've got a mitigation proposal on waters of the United States that also addresses impacts to big horn sheep.

MS. FOLEY GANNON: And has there been any other changes made to the project that you think significantly
reduce impacts?

MR. GALLAGHER: Well, the only other one I'd mention now is another -- is another change to avoid cultural resources on the site. We've agreed in consultation with the BLM and the other parties to the programmatic agreement to create environmentally-sensitive areas within the project site, within the remaining project site to avoid high environmentally-sensitive areas with a minimum buffer of 100 feet and to avoid other identified environmentally-sensitive areas with a buffer of 50 feet.

MS. FOLEY GANNON: And just to clarify -- I think you did say you were not a biologist. I think you maybe misspoke in saying that the LEDPA, according to your testimony, reduces impacts to Flat-tailed Horned Lizards and not to the big horn sheep?

MR. GALLAGHER: Sorry, yes. Well, yes, significantly reduced impacts on the Flat-tailed Horned Lizards as well.

And one of the main things is that the LEDPA, as it's currently proposed, takes the project equipment out of many of the dry washes, including the main and only, as I believe, only current movement corridor for Flat-tailed Horned Lizards across the site. There's a culvert under I-8 at one point that goes through a wash that then flows
through the site, and we've created an avoidance corridor all the way through that wash.

MS. FOLEY GANNON: Thank you.

Are there any other changes that you think should -- are significant enough to discuss with the commission briefly today?

MR. GALLAGHER: There are a couple of others changes that we made that we have summarized in a document that I think we wanted to introduce as an exhibit today, but I'm not sure they -- they warrant further discussion.

I suppose we could talk about the water changes.

MS. FOLEY GANNON: We have an exhibit here which we have prepared which we would like to offer into evidence and we will distribute now. We ask that that be -- everyone can look at it and see if they have any objections, but it would be Exhibit 133. And we will pass that out now.

Essentially it is providing a summary of the major project changes and the reasons for them.

(Applicant's Exhibit 133 was marked for identification.)

MR. GALLAGHER: There will be a lot of changes on -- a lot of testimony on water supply I think over the next two days; but the one point I think I'd make is that the project as currently proposed will use treated
wastewater as its primary water supply. That's a change from the original project design where we would have obtained water from the Imperial Irrigation District as summarized as part of the documents being distributed now as well.

MS. HOLMES: Ms. Foley Gannon, may I ask a clarifying question?

MS. FOLEY GANNON: Yes, please.

MS. HOLMES: When you talk a summary of project changes, are you talking about -- over what time period and reflected in what documents?

MS. FOLEY GANNON: It's the document that's being handed out right now.

MS. HOLMES: Right. And I'm asking the changes that are identified in here, are these -- where are these -- are these changes all identified in one single piece of testimony? I'm just puzzled as to what this is.

MS. FOLEY GANNON: This is a summary of the applicant's view as the significant project changes and explaining the reasons for them. So there would be a number of different reference documents that have been submitted. All of these changes are been documented in the record at some place. This was trying to give another view of these changes.

HEARING OFFICER RENAUD: All right. Well, we
have a question about the document.

Is this somebody's testimony?

MS. FOLEY GANNON: This is Mr. Gallagher's testimony.

HEARING OFFICER RENAUD: All right. So the document you just distributed, which is one, two, three -- three typed pages entitled "Imperial Valley Solar Project Changes," is intended to be part of Mr. Gallagher's testimony today.

MS. FOLEY GANNON: Correct.

HEARING OFFICER RENAUD: All right. Well, I think you probably better have him adopt it on the record, and then we'll see if there are any objections.

Mr. Gallagher, did you author what we have just distributed and preliminarily entitled as Exhibit 133?

MR. GALLAGHER: Yes.

MS. FOLEY GANNON: And you testified to the veracity of this document?

MR. GALLAGHER: Yes, to the best of my knowledge.

MS. FOLEY GANNON: Thank you.

MS. JENNINGS: Excuse me, Hearing Officer Renaud.

HEARING OFFICER RENAUD: Yes, I'm listening.

MS. JENNINGS: This is Jennifer Jennings. We would like a copy of that document to be e-mailed down to us.
HEARING OFFICER RENAUD: Okay.
Do you have that capability, applicant?
MS. FOLEY GANNON: We do. And where would you
like to have at that e-mailed?
MS. JENNINGS: To desertharmo@gmail.com.
D-e-s-e-r-th-a-r-m-o-n at gmail.com. I have Internet
access on, open right now.
MS. FOLEY GANNON: Okay.
Do you want us to take a moment here and mail it
right now before we continue discussing it?
HEARING OFFICER RENAUD: If you can --
MS. JENNINGS: That would be great.
HEARING OFFICER RENAUD: -- that would be good.
MS. JENNINGS: Thank you.
MS. FOLEY GANNON: I'm sorry. It was
d-e-s-e-r-t-h-a-r-m-o-n@gmail.com; is that correct?
MS. JENNINGS: Yes.
MS. FOLEY GANNON: Is there anyone else that is
in El Centro that wants it e-mailed?
MS. JENNINGS: We'll share here.
MS. FOLEY GANNON: Okay.
MS. JENNINGS: Thank you.
MS. FOLEY GANNON: We'll send it right now.
MS. JENNINGS: Thank you.
COMMISSIONER BYRON: If I may, Mr. Gallagher,
while you're sending that, it looks as though this summary includes changes that the applicant has made prior to the AFC being filed, and I'm just wondering why that's relevant to this committee.

MR. GALLAGHER: Well, again, Commissioner, what we have tried to describe throughout the case is an approach to permitting that attempts to be responsive to both agency concerns and to the facts. And so one of the big changes to the project was made even before we filed the project because, you know, we had, for example, filed for an interconnection agreement with SDG&E for 900 megawatts and had found land that we thought would support a 900-megawatt project. But in the initial investigations it was determined that part of that land was so sensitive that it would be very problematic to try to permit. And so rather than trying to fight that fight, we simply cut that part of the land out of the project. And so we wanted to ensure that as part of the context for -- for permitting the case, that that's understood.

HEARING OFFICER RENAUD: All right. Thank you.

MS. FOLEY GANNON: Hearing officer, there are -- let's see, one, two, three, four, five, six -- six other exhibits which we are going to be offering as part of Mr. Gallagher's testimony. The five of them are proposed revised condition language. It was referenced in his
submittal rebuttal testimony, which is marked as Exhibit 132, that we would be submitting them today.

And some of these conditions are also conditions which were revised in the staff's rebuttal and errata which was issued last week. And so we are going to be submitting -- asking those to be taken into evidence as well.

We can just take that now and give numbers to all of them and distribute them, and then we can discuss them as we're going through it substantively, if that makes the most sense --

HEARING OFFICER RENAUD: Yes.

MS. FOLEY GANNON: -- so that we don't have to keep breaking up and jumping up and down, if that makes most sense.

HEARING OFFICER RENAUD: Yes. I'll tell you, you know, the committee, we really do set out these schedules for exchange of documents in advance so that everybody knows what's coming, and we're not particularly, what, friendly toward last-minute submissions. But when it comes to conditions of certification on a highly-contested project, we understand that there's a lot of back and forth going on, and, in fact, we very much appreciate bringing written copies or any copies of the latest versions so everybody can see it. But certainly it will
be good to get those in people's hands --

    MS. FOLEY GANNON: Okay.

    HEARING OFFICER RENAUD: -- as soon as we can.

    MS. FOLEY GANNON: Why don't we distribute those
    now.

    As I said, the five of them are our proposed
    language for revised conditions; the other one is a -- a
    matrix of the conditions which we are asking changes for
    as well as the conditions we are not asking changes for,
    so it's all in one place. And it doesn't have any other
    commentary other than that; it's just a list of this is
    what we're -- this is what we're talking about, and this
    is what we're not talking about, essentially.

    So I can help you hand those out, and then we
    can --

    MS. JENNINGS: And excuse me, Jennifer
    Jennings --

    MS. FOLEY GANNON: And we e-mail all of those to
    you as well in El Centro.

    MS. JENNINGS: Thank you.

    MR. BUDLONG: This is Tom Budlong here.

    I'm wondering if you could send them, e-mail them
    to me, also.

    MS. FOLEY GANNON: Okay. Can you give us your
    e-mail address?
MR. BUDLONG: Yeah, Tom Budlong, just like it sounds, at roadrunner.com.

MS. FOLEY GANNON: At roadrunner.com?

MR. BUDLONG: Yes.

MS. FOLEY GANNON: I could suggest, shall we go off the record for like five minutes while we hand these out and get these e-mailed out and then continue the discussion?

HEARING OFFICER RENAUD: Sure. All right.

(Recess.)

HEARING OFFICER RENAUD: We've -- just for the record, we've just been handed a number of documents, the bulk of which are proposed revised conditions of certification. And as I indicated earlier, we understand that working out conditions of certification is an ongoing process, and, in fact, we've heard while we were off the record that these are in response to staff's rebuttal testimony, which it's got to be part of our process, there's no way around that.

Having said that, it's always better if we can get materials like this in advance so that people can look at them and be prepared. I'm not sure much more needs to be said about that, though if there is a need to study these and respond to them, I think probably we'll have to address that in the form of briefs. That's probably --
that's about the only way I can see to do it unless we can
catch up with it over night and do it tomorrow.

MS. MILES:  Hearing officer?

HEARING OFFICER RENAUD:  Listening, yes.

MS. MILES:  I have a question as to whether --

I'm sorry, I can't look at you and talk to you at the same
time. I have a question as to whether I can get an
electronic copy and parties can get an electronic copy of
this now so that I could submit it to my expert for
review, my biological expert, for example, the one related
to plants and --

MS. FOLEY GANNON:  Absolutely. I believe that we
are having someone from URS distribute it to the whole
docket list as soon as we can.

MS. MILES:  Okay. Thank you.

MS. FOLEY GANNON:  Yeah, if you give your e-mail
right now, Angela can send it to you right now.

HEARING OFFICER RENAUD:  Everybody's on the
service list.

MS. FOLEY GANNON:  But the problem is since we're
here, we don't have that that accessible to us at this
moment. We can get someone back at URS to do it soon, but
she was just saying if you want to send it to her this
minute, we can do that.

HEARING OFFICER RENAUD:  Ms. Miles, do you have
e-mail access here?

    MS. MILES: Yes, I do.

    HEARING OFFICER RENAUD: You get it, you can
forward it. That will work.

    All right. Well, let's proceed. Maybe the first
order of business will be to mark these --

    MS. FOLEY GANNON: Shall we give exhibit numbers?
Yeah. Okay.

    HEARING OFFICER RENAUD: And I'll leave it to you
to tell us the order. The last one we have is the -- is
133, the changes.

    MS. FOLEY GANNON: Right, and we would do the
Imperial Valley Solar Project conditions of -- SSA's
conditions of certification of exhibit as Exhibit 134.
We'll do the red line version of Bio 10 as Exhibit 135.
The red line version of Bio 17 as Exhibit 136. Red line
of Bio 19 as 137. Red line of Soil and Water 7 as 138.
And Worker Safety 7 as 139.

    HEARING OFFICER RENAUD: Okay. They've been
marked for identification.

    (Applicant's Exhibits 134 through 139 were marked
for identification.)

    MS. FOLEY GANNON: Okay. Turning back to you,
Mr. Gallagher, it's just come up that you've referenced
the fact that there are a number of conditions that we
will want to discuss with the commission and with staff, the basis for them, or to suggest changes; but overall, can you give us a view of your overall approach to the conditions and your assessment of them?

MR. GALLAGHER: Yes. And I'll say that I'm sponsoring Exhibit 122 that was filed last week. That proposes modifications to most of the conditions with which we have issues.

As I mentioned earlier and as you have now in one of the exhibits that was just marked, there's 133 conditions with which we have no objections at all. There are several other conditions with which we have modest or what we think are uncontroversial proposed changes. Most of them were filed last week with our rebuttal testimony. And many of those are in the nature of changing a requirement, something be prepared 90 days prior to ground disturbance to 30 days prior to ground disturbance.

And then there are five sort of big-ticket items that we wanted to discuss with you today. And most of those were the documents that were handed out to you just a moment ago. All of the substance of the proposed changes to those conditions were described in our testimony that was filed last week on time; some of the details we weren't able to provide until we spent hours and hours and hours going through the very detailed
conditions. So that's why the actual -- the written
proposed changes to some of these conditions you're just
receiving now.

And I would add that for Bio 10, Bio 17, and
Bio 19, which are three of the documents you've just been
handed, staff made additional revisions to their proposed
conditions in staff's supplemental testimony filed last
week, and so had we filed language on those last week, we
would have had to change them again, or we would have had
to work on them again.

MS. FOLEY GANNON: So turning to what you've
identified as the five sort of substantive big changes
that we would like to -- that you would like to discuss
with the commission, or the committee, the first one is --
references Bio 9 -- Bio 10. Can you describe overall your
concerns with the conditions?

MR. GALLAGHER: Yes. Bio 10 is a major change in
the mitigation approach and the mitigation dollar amounts
for mitigation for Flat-Tailed Horned Lizard. And our
concerns relate to the approach and to the dollars
associated with this condition.

In December of last year we received a letter
from the BLM --

MS. HOLMES: Excuse me, excuse me. I'm going to
interject an objection at this point.
Staff had prepared a panel of biological resources experts who will be available, who will be listening to biological resources tomorrow. They include representatives from the RIAT agencies. And I think it's important that testimony on biological resources be given when those parties have the opportunity to listen and respond when they in turn have the opportunity to testify.

So I'm not -- I'm not objecting to them discussing this change and why they believe it's appropriate, but I do believe that the other witnesses ought to have the ability to hear this testimony in order to be able to respond to it.

HEARING OFFICER RENAUD: All right. Let me, from our perspective, it appears to us that this topic currently is project description and policy. And you know, I can see biology or any of them being involved in some sort of a very high-level way, but not at this level of detail. And I'm wondering if you could respond to Ms. Holmes suggestion, which sounds like a good one.

MS. FOLEY GANNON: The intent was to give an overview, and the objections that are -- were going to be addressed by Mr. Gallagher were the bigger picture, not the details about, you know, what is the specific impact to a Flat-Tailed Horned Lizard or what mitigation is needed to specifically offset those impacts. It was to
discuss the overall approach.

If you can give me a moment, I think we may not object to -- to having Mr. Gallagher discuss these particular conditions in detail tomorrow, and we can go on with the other conditions, as Mr. Gallagher is going to be present. I mean, we -- we -- when we were setting up our witnesses we were trying to get our technical biological people in a panel. Those panels are getting pretty big and somewhat unruly, so we were just trying -- we were thinking about this, we were breaking this down as overview, bigger picture sort of how we were thinking about this as that the major concern and issues and then leaving the details to the detail people. If there's a desire to have all of that discussed in one day, we can do that.

HEARING OFFICER RENAUD: I really think we prefer not to separate things like that. If it's biology, let's do all of this tomorrow. Mr. Gallagher's going to be here tomorrow. Jumping back and forth is, I think, potentially confusing, and I think also it might be something said that a staff or a party witness would like to hear.

So to the extent you can just stick to project description and policy, we'd appreciate that. That's what's listed and that's what parties -- that's what we're prepared to hear and parties are prepared for cross.
MS. FOLEY GANNON: Then he can defer discussion of the other two conditions.

MR. GALLAGHER: I guess what I would like to be able to say on Bio 10, 17, 19 is that the SSA represents a major departure in the approach from the SA, and that's what my testimony was intended to address rather than the specifics of the impacts. And very large changes in the conditions which are very impactful to the project and to the economics of the project and with which we have significant concerns, and we've tried to productively propose revisions to those conditions in a way that would both be responsible and would allow the project to be built.

MS. HOLMES: Staff would be happy to provide a response with its biological resources witnesses tomorrow about why there were changes between the staff assessment and the supplemental staff assessment.

HEARING OFFICER RENAUD: Yeah, I think we really ought to discuss all of that tomorrow. It would just be better to have that all in a package, and it will give people time to review this new material between now and tomorrow. So let's proceed with something else.

MS. FOLEY GANNON: Okay. So we won't actually discuss the proposed changes, we will discuss them in the appropriate subject matter in more detail; but at the end
of his testimony, we will be asking to move them into evidence so we don't have to go through this again.

Turning now to the conclusions regarding significant impacts associated with the project, after reviewing the staff assessment, do you agree with the staff's conclusion that there may be significant and unmitigable impacts?

MR. GALLAGHER: We -- I think the short answer is yes and no. There are several areas that will be discussed by substance experts later in the testimony where we disagree with staff's conclusion that after mitigation there remain significant impacts. There are at least two areas where we agree. One is visual. We agree that there will be a significant impact. And we have in my prior testimony requested an override. And the second is on the setbacks issue that was discussed earlier this morning, we have again requesting an override on that point.

And I think the point of my testimony is we'll try to establish later in the hearings that on the other issues, that mitigation will reduce the impacts to less than significant; but to the extent that the committee doesn't accept that evidence, then we would request an override on each of those points where mitigation does not reduce the impact to less than significant.
MS. FOLEY GANNON: And does your earlier testimony reflect the reasons why you believe the override for either LORS noncompliance or substantive impacts would be appropriate in this case?

MR. GALLAGHER: Yes, it does. My testimony from the May hearing addresses those points.

MS. FOLEY GANNON: Is there anything you wish to add to that?

MR. GALLAGHER: I don't think so.

MS. FOLEY GANNON: I wasn't leading you actually. That was fine; I wanted to know. Are you requesting that an override be taken by the commission if there are significant impacts?

MR. GALLAGHER: Yes, on visual on the setback issue and on any other areas in which the commission concludes that significant impacts remain after mitigation.

MS. FOLEY GANNON: And one other point of clarification. Earlier in the beginning of your testimony you stated that the applicant was now pursuing the 709 megawatt alternative or what you described as the LEDPA, the least environmentally damaging practicable alternative. Are you requesting the commission approve that project at this time?

MR. GALLAGHER: Yes, we are. We're requesting
that the committee and the commission approve the project
as modified consistent with what the corps has
preliminarily determined to be the least environmentally
damaging practicable alternative.

MS. FOLEY GANNON: Does this conclude your
testimony?

MR. GALLAGHER: No. We should probably talk
about VIS 6 and Worker Safety 7.

MS. FOLEY GANNON: They don't want to talk about
conditions.

MR. GALLAGHER: You don't want to talk about
those either? Okay.

MS. FOLEY GANNON: They want to talk about
conditions in the substantive matter. And we can have you
back up in each one of those to talk about the overall
policy issues associated with them.

HEARING OFFICER RENAUD: It does appear we have
time for visual and for worker safety scheduled, so none
of these are going to be orphans with no place to go.

MS. FOLEY GANNON: That's correct.

HEARING OFFICER RENAUD: So let's do them when we
get to those topics.

MR. GALLAGHER: Then yes, that concludes my
testimony.

HEARING OFFICER RENAUD: Cross-examination.
MS. HOLMES: I don't have cross-examination, but I want to make a statement for the committee a global statement, and that is that the applicant has requested that the commission approve what's been referred to as the LEDPA, despite our dislike of acronyms. Staff has not analyzed the LEDPA. Staff saw the draft LEDPA on the 21st of July. Staff has analyzed the project as originally proposed and a series of alternatives.

There may be a number of times during these hearings when the question of impacts associated with the LEDPA or potential amelioration of effects associated with the LEDPA come up. Staff cannot testify to any of that. Staff has not examined the LEDPA.

If the committee wishes staff to examine the LEDPA and reach conclusions as to whether or not they're significant impacts, either new significant impacts or existing impacts that we've identified that are reduced, we can do so, but it will take additional time.

HEARING OFFICER RENAUD: All right.

Cross-examination by CURE?

MS. MILES: I do have cross-examination questions for Mr. Gallagher, but they are related to biology, so I will withhold those until tomorrow.

HEARING OFFICER RENAUD: Thank you.

MS. MILES: And I have a similar concern
regarding the LEDPA analysis. I just wanted to highlight the fact that it is a draft document, and it will be circulated in the FEIS by the BLM, and there will be public comment taken on that. I mean, we cannot assume that it will remain in its present form.

HEARING OFFICER RENAUD: I understand.

Cross by Budlong?

MR. SILVER: No cross by Mr. Budlong, based on the assumption that there will be opportunities for him to cross-examine witnesses in the particular subject matters that we earlier identified.

HEARING OFFICER RENAUD: Yes, indeed.

And CNPS?

MR. BELTRAN: No.

HEARING OFFICER RENAUD: No cross. All right. On this issue of the LEDPA, just to make sure we have the record clear, the -- there is no official LEDPA yet, correct?

MR. GALLAGHER: That's correct.

HEARING OFFICER RENAUD: There has been one submitted by applicant, which the corps is evaluating.

MS. FOLEY GANNON: It's further along than that. If you look at the -- and we will have a witness testifying about the process tomorrow, Mike Fitzgerald. If you look in this -- that was an attachment to
Mr. Fitzgerald's testimony.

The corps has taken what we submitted, made their own preliminarily draft document, which says this is the corps's preliminary conclusion, it is no longer our document, it is now authored by the corps, it's been changed and modified by the corps to reflect their own independent analysis. That is the document that is going to be concluded in the Final Environmental Impact Statement, which is scheduled to be published by the BLM this Friday. There will be public comments on that, but it is not -- it's -- in terms of corps permitting processes, it's actually very far along the way.

HEARING OFFICER RENAUD: That's -- you anticipated my question, which is, you know, how far along are they and when can we anticipate that. And you gave us --

MS. FOLEY GANNON: You're very far along the way.

HEARING OFFICER RENAUD: Thank you very much.

Okay. Good.

MS. FOLEY GANNON: And we'll -- again, we'll be providing expert testimony with the people who have been involved directly in that permitting process tomorrow so that can be discussed as of the basis for those assertions.

HEARING OFFICER RENAUD: Great. Great.
And so those of you who are interested in the LEDPA, based upon what we've just been told, you might want to start making an assumption that the preliminary result may be exactly or close to or similar to the final and preparing your testimony, your experts and so on on that. All right. Good.

Do we have anything further on this topic, project description policy from applicant?

MS. FOLEY GANNON: We have nothing further.

HEARING OFFICER RENAUD: All right.

MS. FOLEY GANNON: We would like to move the exhibits which have been identified for identification purposes as exhibits -- what are we through? 133, -- oh sorry, 132 through 139.

HEARING OFFICER RENAUD: All right. Does anybody object to that?

MS. HOLMES: No objection.

MS. MILES: No objection.

MR. SILVER: No.

MR. BELTRAN: No.

HEARING OFFICER RENAUD: Okay. Those will all be admitted. Thank you.

(Applicant's Exhibits 132 through 139 were received into evidence.)

MS. FOLEY GANNON: Thank you.
HEARING OFFICER RENAUD: All right. Now, under this topic staff indicated direct examination of Mr. Meyer for ten minutes.

MS. FOLEY GANNON: Actually, the applicant indicated direct examination of Mr. Meyer.

HEARING OFFICER RENAUD: Oh, well, okay.

MS. FOLEY GANNON: I don't know that anybody has any questions; and if they don't, I'm sure he'd be happy to not testify.

HEARING OFFICER RENAUD: I guess I should say that more clearly.

Applicant indicated that staff indicated, but if you -- do you have any direct examination of anybody on this topic?

MS. HOLMES: No.

HEARING OFFICER RENAUD: All right.

CURE, direct examination of anybody?

MS. MILES: I have one random question for Mr. Meyer.

MS. HOLMES: So perhaps we should have him sworn; then he can answer the random question.

MS. MILES: Sorry.

MS. FOLEY GANNON: And we have one random question for him, too.

HEARING OFFICER RENAUD: All right.
THE REPORTER: Stand and raise your right hand.

(Christopher Meyer was sworn.)

THE REPORTER: Would you state and spell your name for the record.

MR. MEYER: Christopher Meyer.

C-h-r-i-s-t-o-p-h-e-r, last name M-e-y-e-r.

THE REPORTER: Thank you.

COMMISSIONER EGGERT: I have just a quick question on the items that were just brought. The track change legend, is it the case that green is applicant, red is staff, and does that carry through?

MR. GALLAGHER: Yes, this is correct. The red is the staff changes filed last week, and the green is our suggested changes.

COMMISSIONER EGGERT: That's for all documents?

MS. FOLEY GANNON: Yeah.

COMMISSIONER EGGERT: Okay.

DIRECT EXAMINATION

MS. HOLMES: Mr. Meyer, was the supplemental staff assessment prepared by you or under your direction, including the project description and introduction?

MR. MEYER: Yes, it was.

MS. HOLMES: Was a statement of your qualifications included in the supplemental staff assessment?
MR. MEYER: Yes, it is.

MS. HOLMES: Are the facts contained in the supplemental staff assessment true and correct to the best of your knowledge?

MR. MEYER: Yes, they are.

MS. HOLMES: And do the opinions in Exhibit 302 represent your best professional judgment?

MR. MEYER: Yes, they do.

MS. HOLMES: Thank you.

Rather than summarize, let's just move directly to cross-examination questions.

HEARING OFFICER RENAUD: Very well.

Applicant?

CROSS-EXAMINATION

MS. FOLEY GANNON: Mr. Meyer, I guess we can't actually say it's a random question, it's a pretty critical question to us.

Are you recommending approval of this project?

MR. MEYER: Staff is making a recommendation of drainage avoidance alternative number one for the project.

MS. FOLEY GANNON: And you have identified some unavoidable and unmitigable impacts. Are you recommending overrides?

MR. MEYER: Staff has presented overrides to management, which we believe management will be filing an
override testimony on this. We were hoping to have that very soon, if not by tomorrow.

MS. FOLEY GANNON: And your recommendation of drainage avoidance alternative one, and we will obviously get into the details of this with the technical experts, but from the executive summary it appeared that that was really focused on reducing impacts to aquatic resources. Is that your understanding?

MR. MEYER: Not primarily. That is, the genesis of that alternative was based on avoidance to aquatic resources, but it goes far beyond that.

MS. FOLEY GANNON: What is most significant from the executive summary, big policy picture, the significant differences in impacts with drainage avoidance alternative one versus the proposed project?

MR. MEYER: Aquatic resources, biological resources in general; but it also gets into many others including cultural, visual, land use.

MS. FOLEY GANNON: Okay. No further questions.

HEARING OFFICER RENAUD: Okay. Thank you.

CURE questions?

CROSS-EXAMINATION

MS. MILES: I'm glad, actually, that you weren't just sworn in for this question.

But my question is how often does the -- do you
know how often that the trains go by the project site --

MR. MEYER: My understanding on this project --

MS. MILES: -- if it's an active --

MR. MEYER: -- it's a very rare occurrence. It's
not a main line.

MS. MILES: Uh-huh.

MR. MEYER: So it -- when I've worked out there
in the past, it was a rare occurrence to see a train on
that track adjacent to the project site.

MS. MILES: Okay. Thank you.

MR. MEYER: But unfortunately I do not have any
information on what the frequency is.

MS. MILES: Thank you.

No further questions.

HEARING OFFICER RENAUD: I'd like to ask a
question. Maybe I'll let Ms. Foley Gannon see if that's
my question.

MS. FOLEY GANNON: It probably isn't because it
was something I was just thinking.

HEARING OFFICER RENAUD: Is it about trains?

MS. FOLEY GANNON: No, it's not about trains.

HEARING OFFICER RENAUD: Well, mine's about
trains, so I'm going to ask it.

MS. FOLEY GANNON: Okay. You want to go -- you
talk about trains since we were talking about trains.
HEARING OFFICER RENAUD: All right.

When you refer, Ms. Miles, to trains, the trains, I take it you're referring to the rail line that I think it runs right next to Plaster City or even through it?

MS. MILES: That's correct.

HEARING OFFICER RENAUD: All right. Just to make sure. I seem to recall there was one down by the freeway also, but maybe that's the same one.

CROSS-EXAMINATION

MS. FOLEY GANNON: My question was related to, and this goes to sort of the other witnesses that we have coming up over the next -- this afternoon and tomorrow. You had said sort of preliminarily that the difference in impacts from an overview standpoint with drainage alternative one in the proposed project was related to aquatic resources, bio, cultural resources, visual, and land use. I know we're going to be discussing water this afternoon, aquatic resources, and bio tomorrow, VIS tomorrow, cultural resources at a future date. Land use we've already done. And I'm just scratching my head trying to think of what's the difference in impacts with VIS -- for visual with drainage alternative one versus the proposed project.

MR. MEYER: It's not going to be a change between significance and insignificance. It's just a lot of -- as
you talk about the difference between a 6500 acre project
and you start -- any time you're reducing impacts, it's
going to have a change. When -- land use, in particular,
one of the things they were talking about is loss of
area -- I'm sorry, let me clarify. I was thinking of some
of the other reduced acreage alternatives. I'm sorry.

MS. FOLEY GANNON: Okay.

MR. MEYER: The drainage avoidance alternative
one kept the same footprint in some of the earlier talks
about leaving some of the areas open, which would have
decreased the amount that was taken out of public use was
to reduce it; but you're right, drainage avoidance
alternative one, the determination by the agencies was to
leave the fence line intact so that there wouldn't
actually be the incursion potential by OHV users and the
sort into the area so that there actually would be a
protection of biological resources, which then eliminated
any potential benefits from a recreation standpoint.

MS. FOLEY GANNON: Okay. So there really isn't a
land use difference between proposed project and --

MR. MEYER: No, not as currently proposed for the
fence lines.

MS. FOLEY GANNON: Okay. All right. So then we
can address the other ones. I just wanted to make sure
that I understood what we needed to discuss.
Thank you very much.

HEARING OFFICER RENAUD: Cross by Budlong?

MR. SILVER: No.

HEARING OFFICER RENAUD: CNPS?

MR. BELTRAN: No.

HEARING OFFICER RENAUD: All right. Then no further questions for Mr. Meyer. All right.

Does CURE have any testimony to present in this topic area?

MS. MILES: No, we do not.

HEARING OFFICER RENAUD: Okay. Budlong?

MR. SILVER: Let me just ask --

HEARING OFFICER RENAUD: Other than the specific topics that we've -- getting into the specific topics which we talked about earlier.

MR. SILVER: If I may, I just wanted to ask Mr. Budlong whether he did have any examination of Mr. Meyer with regard to the revised staff assessment.

MR. BUDLONG: No, I don't.

HEARING OFFICER RENAUD: All right. Thank you.

CNPS?

MR. BELTRAN: No.

HEARING OFFICER RENAUD: All right. Good.

So we're concluded with that topic.

And we've done air quality and land use.
What would be next? Would it be water supply?

MS. FOLEY GANNON: Yep.

HEARING OFFICER RENAUD: All right. Well, I think that might mean it's a good time for a lunch break, unless anybody has a witness sitting on the phone ready to go right now and you want to go. But since that will probably be a big topic; probably a good time for our break. All right?

MS. FOLEY GANNON: Agreed.

HEARING OFFICER RENAUD: All right. Let's be back here at 1:15.

(Lunch recess.)

HEARING OFFICER RENAUD: We'll go back on the record.

When we were ending the last session, I believe we determined that the next topic would be water supply. Am I correct about that? Or water in some aspect.

MS. FOLEY GANNON: I'm sorry.

HEARING OFFICER RENAUD: Next topic? What is the next topic going to be? Water?

MS. FOLEY GANNON: Yes. So what we would propose to do is to break it up really into two different discussions; one would be water supply, and then one would be related to sedimentation and more water quality impacts. Does that make sense? I think otherwise our
panels might get vague and the discussion might get kind
of difficult to go through in a reasonable fashion. Does
that make sense to the other parties?
    MS. HOLMES: It does to staff.
    MS. MILES: We have no objection.
    HEARING OFFICER RENAUD: All right. It looks
like everybody's okay with that. Makes sense to us.
    While we're setting up for that, let me just ask
by phone, Public Advisor Jennings, are you there?
    MS. JENNINGS: Yes, I am.
    HEARING OFFICER RENAUD: All right. And that
means our link is still going, which is good.
    MS. JENNINGS: Yes. And I have a request that
people identify themselves when they're speaking. It's
getting a little hard to follow.
    HEARING OFFICER RENAUD: All right. You mean
people here in the room, not just the ones on the phone?
    MS. JENNINGS: Yes.
    HEARING OFFICER RENAUD: All right. We'll do the
best we can.
    MS. JENNINGS: Thank you.
    MS. FOLEY GANNON: Ella Foley Gannon for the
applicant.
    In terms with water supplies, we have it
witnesses that we would like to put forth for initial
direct testimony and then cross-examination by the other
parties. Marc Van Patten, who has been previously sworn
in as a witness and Mr. Robert Scott, who needs to be
sworn in.

THE REPORTER: Stand and raise your right hand,
please, Mr. Scott.

(Mr. Scott sworn.)

THE REPORTER: Could you please state and spell
your name for the record. Be seated.

MR. SCOTT: Robert K. Scott. R-o-b-e-r-t K.
S-c-o-t-t.

THE REPORTER: Thank you, sir.

DIRECT EXAMINATION

MS. FOLEY GANNON: Mr. Van Patten, I'd like to
start talking with you about the water supply for the
project, and I would note that in your -- in Exhibit 130,
which we submitted earlier this morning, I believe you
address some of the water supply issues; is that correct?

MR. VAN PATTEN: That's correct.

MS. FOLEY GANNON: Do you have any corrections or
additions to make to your earlier testimony regarding
water supply that's included in Exhibit 130?

MR. VAN PATTEN: I just have one point of
clarification I'd like to make. In question -- or answer
to question 8, we mention that there is --
MS. FOLEY GANNON: And which page is this on, just for clarity?

MR. VAN PATTEN: I'm on page 3 of my testimony.

MR. MEYER: Does someone have a --

MS. FOLEY GANNON: I'm sorry, we do not have consecutive page numbering in it. It is -- he is the --

MR. MEYER: Page 19.

MS. FOLEY GANNON: No, there is not consecutive page numbering in our rebuttal testimony. So you just need to go to Mr. Van Patten's testimony, it's his second testimony in our July submittal. So Sean Gallagher's goes up to page 12, and then the next page is Marc Van Patten's testimony.

Has everyone found it, or who would like to find it has found it? Yes? Okay.

So I'm sorry. What page is it, Mr. Van Patten?

MR. VAN PATTEN: Third page of my testimony.

HEARING OFFICER RENAUD: Of the pdf.

MR. VAN PATTEN: Top of the page, answer to question 8 says 51 acre feet per year is the demand projection. That assumes a worst-case scenario of seven days per week. However, I just wanted to clear that we intend to work six days a week. This is just a maximum number. If it were six days a week as we planned, it's really 42.4 acre feet per year.
And that also applies to the answer to question 10 on the same page down below where we talk about our construction is expected to average 51 acre feet per year. That's the only clarification I wanted to make.

MS. FOLEY GANNON: Thank you, Mr. Van Patten.

Turning now to the question of the water supply for the project, what does the applicant anticipate to be the long-term water supply for this project?

MR. VAN PATTEN: We anticipate using the Seeley Wastewater Treatment Facility water for the long-term water supply for the project. That's for construction and operation.

MS. FOLEY GANNON: Have you read the supplemental staff assessment's discussion of water and soils impacts?

MR. VAN PATTEN: Yes.

MS. FOLEY GANNON: And do you have any comment on their conclusions regarding the availability of Seeley to the project?

MR. VAN PATTEN: We believe and we have no reason not to the believe that the Seeley Wastewater Treatment Facility water will not be available, meaning we have no reason to believe it won't be available for us to use. Hopefully that's a correct conjugation of English.

MS. FOLEY GANNON: That's called a double negative.
MR. VAN PATTEN: We have every reason to believe it will be available for us in a timely manner for construction, operation of the project.

MS. FOLEY GANNON: And on what basis is that conclusion made?

MR. VAN PATTEN: We have every reason to believe that their EIR, which is currently in process, will be adopted by the Seeley County Water District in November of this year, and the construction of their upgrades should be able to begin a month later in December and be done or concluded four to six months afterwards with the upgrades, and the water would then be available for us at that time.

They have to do this upgrade regardless of whether this project is going to move ahead or not. They're in violation of their NPDS right now; that's on the record.

And David Dale, who's the contract engineer for the Seeley County Water District, has stated that they would move ahead with upgrades to the project regardless of if our project were to be approved or not, and would search for funds to do that through other means, should they need to do that.

MS. FOLEY GANNON: So again, in terms of the applicant's planning purposes, when do you anticipate that you will be able to utilize the Seeley water?
MR. VAN PATTEN: I think, aggressively, it would probably be first quarter of 2011; worst-case scenario we believe would be second quarter 2011.

MS. FOLEY GANNON: First or second quarter of 2011. So there will be an interim period where you will need a water supply.

What is the water supply you're intending to use in that period?

MR. VAN PATTEN: For any interim period up until we have access to the Seeley County Water District water, we plan to utilize the Dan Boyer well in Ocotillo.

MS. FOLEY GANNON: And you provided earlier testimony I believe in the earlier hearings regarding the Boyer well. And at that period, you gave some discussion about the current condition of the well and the county's permit. Is there any additional information that you have to date regarding the condition of the well and the permit --

MR. VAN PATTEN: Since the May hearing --

MS. FOLEY GANNON: -- or the license. I'm sorry.

MR. VAN PATTEN: The well registration?

MS. FOLEY GANNON: Registration.

MR. VAN PATTEN: County well registration?

Since the May hearing, the county has issued a letter to Dan Boyer Water Company indicating that his well
is in conformance with all conditions contained within the
county well registration.

MS. FOLEY GANNON: Was that letter attached to
your testimony?

MR. VAN PATTEN: It is. And it is Exhibit 125.

MS. FOLEY GANNON: So it's 125 to -- just for
clarity, it's Exhibit 125 to Exhibit 130. I like to make
things simple for people.

So it is your understanding that the well is
currently in terms of the county's permitting processes,
allowed to operate and to extract what amount?

MR. VAN PATTEN: Up to 40 acre feet per year.

MS. FOLEY GANNON: How much of the water from
this well are you intending to use for the project?

MR. VAN PATTEN: We have -- we understand that
Dan Boyer Water Company had supplied water to other users
other than industrial or commercial users that may be
personal users in the area. Estimate that Dan Boyer has
made as to that usage has been roughly a third of an acre
foot per year. We have -- we can agree to use not the
entire amount of the 40, but less one half acre feet per
year in order to still continue to allow Mr. Boyer to
provide that third acre foot per year to other users in
the area, and we are proposing that we be able to use 39.5
acre feet per year for our uses.
MS. FOLEY GANNON: To be clear, the half acre that you're referring to, that is the calculation provided by Boyer that that's the amount, maximum amount of residential usage that's regularly been used or served by this well?

MR. VAN PATTEN: Yes. He has --

MS. FOLEY GANNON: And I believe that you had a declaration from Mr. Boyer that you have submitted?

MR. VAN PATTEN: We have a declaration that --

MS. FOLEY GANNON: Is attached to your --

MR. VAN PATTEN: -- we submitted --

MS. FOLEY GANNON: -- testimony?

MR. VAN PATTEN: -- that as Exhibit 126 to my Exhibit 130 where he has stated and declared that he has estimated that it would be less than half an acre foot per year of usage by other folks in the area.

MS. FOLEY GANNON: In the supplemental staff assessment the staff makes a conclusion that there are currently up to six acre feet a year which are utilized by residential users. Do you have any comment upon that analysis?

MR. VAN PATTEN: We don't agree with the analysis. There was some assumptions that were made by the staff as to where that number would be computed. One of those assumptions was that water in a particular time
of the year, let's say February, might have been attributable to personal users versus let's say a commercial user if dust control was not required at that time of the year. And then for conservatism, that number was doubled and coming up with six.

And there was another methodology for coming up with six acre feet per year for personal users, which we don't agree with the methodology and the presumptions around it or assumptions used.

And we believe highly in the testimony of Mr. Dan Boyer, who has actually had purchases with payment received by personal users in the area. And he estimates his volume to be, you know, a third of an acre foot, certainly less than half an acre foot per year.

MS. FOLEY GANNON: And the applicant does not object to reducing its use by the amount of established residential users; is that right?

MR. VAN PATTEN: We have no objection.

MS. FOLEY GANNON: So you would be willing to utilize 39 -- limit your use to 39.5 acre feet a year.

MR. VAN PATTEN: That's correct.

MS. FOLEY GANNON: And that raises an issue about the demand from the project, both in terms of construction and operation; and maybe we can start walking through some of that.
You clarified earlier this morning that the amount of water would be demanded during construction would be -- I'm sorry, could you repeat that number again?

MR. VAN PATTEN: Conservative value in my testimony is 51, but provided we do a six-day work week, it's really 42.4 acre feet per year under that scenario.

MS. FOLEY GANNON: And in the 42.4 acre feet per year, what are the water uses that are needing to do during construction?

MR. VAN PATTEN: When I looked at the detailed estimate on which we based our estimated needs for the project which were provided to us by RMT, the EPC contractor, the numbers come out right at about 60 percent is used for dust control. The rest of it is used for road work or miscellaneous. It's primarily the other big use is road work on the project site and some miscellaneous things like foundations, the fence line, things like that. But it is 60 percent dust control.

MS. FOLEY GANNON: And it's been pointed out that the numbers that you're providing, whether it be the 51 or the 42.4 that you've highlighted for us this afternoon, have changed since the original filing in the AFC. Can you speak to why that changed?

MR. VAN PATTEN: I can only say that in the initial AFC, there were engineering estimates that were
made which were given to us by the engineers that helped us to prepare the AFC, and they did a good job of trying to estimate what our water needs would have been. At that time we didn't have a working facility like we do right now with the Maricopa facility. They were trying to be conservative in our water needs and not to underestimate and try to reflect a reasonable number.

And since then, we have Maricopa's facility in Phoenix to judge our water needs from an operation point of view. We have construction use of water over there as well that helps us to understand that. And we have an EPC contractor that we've engaged for construction of the balance of plant on the project, and they have specifically given us what they think their water needs will be. That has helped us to identify a pretty substantial reduction in our water needs to what we had in the AFC.

MS. FOLEY GANNON: Based on your experience and your best professional judgment, what is your level of confidence in these numbers?

MR. VAN PATTEN: I'm very confident that the folks from RMT who do construction every day in this environment and in other environments would have a very good handle on what their water needs would be. And I feel very good that this is what they'd be able to work
with.

MS. FOLEY GANNON: And there have been issues raised, obviously, that if you were utilizing the Boyer well, which in your calculations you would be having -- I think you said 39.5 acre --

MR. VAN PATTEN: Correct.

MS. FOLEY GANNON: -- feet a year available to you, taking into the account for the potential residential uses. What happened to the difference? 42.4 is what you need and 39.5 is what you have.

MR. VAN PATTEN: Yeah. The difference is 2.9 acre feet per year. What that would, in fact, do is either make RMT ration their water such that they could accomplish the same things with less water. I would assume they would at least try, but I don't know if they would be successful.

And secondly, what could happen is they'd have to delay their construction schedule by some amount proportionate to the 2.9 acre feet per year usage that they would have otherwise needed. So there may be a schedule impact.

MS. FOLEY GANNON: And you said the 42.4 was based upon the six-day work week?

MR. VAN PATTEN: Correct.

MS. FOLEY GANNON: What if you were at a five-day
work week?

MR. VAN PATTEN: If you were in a five-day work week, you'd need approximately 35.3 acre feet per year.

MS. FOLEY GANNON: So that would be within the Boyer -- so the Boyer well's supply should be sufficient to supply for a five-day --

MR. VAN PATTEN: Right, or a little bit more, yes.

MS. FOLEY GANNON: Maybe even five and a half.

HEARING OFFICER RENAUD: What was the figure again? 32?

MR. VAN PATTEN: I calculate 35.3 acre feet per year for a five-day work week.

HEARING OFFICER RENAUD: Thank you.

MS. FOLEY GANNON: Turning towards the operation numbers, how much water demand will be needed once the plant is in operation?

MR. VAN PATTEN: It's been calculated as roughly 33 acre feet per year.

MS. FOLEY GANNON: Okay. And again, what are the primary demands that are inclusive in that figure?

MR. VAN PATTEN: Do we have Waymon Votaw on the phone? Because I can't --

MS. FOLEY GANNON: Oh, you will not be able --

Waymon Votaw will be --
MR. VAN PATTEN: I did not prepare that testimony.

MS. FOLEY GANNON: I'm sorry. He is -- he will be testifying tomorrow to plant reliability and to the operational issues. So I will -- I can raise that issue with him. I know that the water people will be here today, but he can -- if there are questions about the specific uses within operations, he will be able to answer those, though I believe you can answer the general concepts regarding the water uses in operations, Mr. Van Patten?


MS. FOLEY GANNON: Do you have any other testimony that you would like to give about the water demands for the project --

MR. VAN PATTEN: Nothing I can think of.

MS. FOLEY GANNON: -- the water needs of the project?

So we can -- we can either move on to cross on that subject matter and then talk about the groundwater supply issues, or we can do those together now, whichever the parties -- I mean, there's lots of ways to break this issue up; and so I'm -- whatever works best for other people, we can certainly do.
HEARING OFFICER RENAUD: Well, from what I know, the Boyer well sounds like its own little issue, maybe not so little, but so I would suggest we do cross on that right now.

Does anybody have a different idea?

MS. FOLEY GANNON: Well, this is not -- we will have testimony about the use of the Boyer well and the impacts on groundwater, but there have been -- I know that there has been testimony by some of CURE's experts about water use amounts --

HEARING OFFICER RENAUD: Just the sufficiency.

MS. FOLEY GANNON: The sufficiency.

HEARING OFFICER RENAUD: Yes.

MS. FOLEY GANNON: So that seemed like sort of a separate issue to me.

HEARING OFFICER RENAUD: All right.

MS. FOLEY GANNON: But again, we can wrap it in, whatever people want to do.

MS. HOLMES: I have a question.

Is Dan Boyer available for cross-examination? We have hearsay evidence, and I'm wondering whether or not we can have evidence that's not hearsay regarding historical water use.

HEARING OFFICER RENAUD: You have a declaration I believe, or is it a letter?
MS. FOLEY GANNON: It's a declaration.

HEARING OFFICER RENAUD: Has that been offered in evidence?

MS. FOLEY GANNON: It has been.

HEARING OFFICER RENAUD: It's part of the testimony?

MS. FOLEY GANNON: It is, yes.

HEARING OFFICER RENAUD: All right. Well, would you like to get him -- do you think he could be made available for cross-examination?

MS. FOLEY GANNON: Can we just have one moment for a second?

HEARING OFFICER RENAUD: Please.

MS. FOLEY GANNON: We believe that he's not traveling, that he is somewhere where we may be able to reach him, so we can see if we can get him on the phone.

HEARING OFFICER RENAUD: All right.

Ms. Holmes, there is a declaration from Mr. Boyer in the record. Did you wish to cross-examine him about that declaration or --

MS. HOLMES: I did. And let me offer a little bit of foundation for that.

At the hearings in El Centro in May, we heard the representative of the county say that at that time the well registration had not been approved and that Mr. Boyer
did not have a right to use water from the well; and so I'm curious about how much water was, in fact, being used legally or illegally. We've got testimony in the -- we've got a statement in the declaration about residential use. I'm curious about other types of uses since it obviously has an impact on baseline issues, issues of impacts to the groundwater basin. But I'm prepared to go forward as well if that would make things easier.

HEARING OFFICER RENAUD: All right. I think it's a fair request, and if he's available we ought to do it.

MS. FOLEY GANNON: If I could ask for some clarification.

We do have a letter from the county, which is the one who makes the determinations about the compliance with the registration terms, and they have stated that he is in compliance. So I'm not sure what else Boyer can add about that other than, yes, the county told me I'm in compliance.

MS. HOLMES: We're a little bit curious about the water use before he was in compliance. So this is the question. Are you talking about the historical use having been .5 acre feet or .3 acre feet a year in the last six weeks since the county gave its --

MS. FOLEY GANNON: I'm not sure what the relevance of Boyer's legal or maybe not permitted or how
it was permitted use when it was not to our project.

    MS. HOLMES: I think it goes --

    MS. FOLEY GANNON: -- and was not part of this project. I mean, I'm just -- I'm hesitant. He is not a party to this proceedings. He has given us a declaration which he has sworn to --

    HEARING OFFICER RENAUD: We understand your concern.

    MS. FOLEY GANNON: -- you know, so put him on, get him on the phone, ask him to get on the telephone to say have you been -- can you say under testimony, swear that you've been illegally using water. I'm not sure that I want to do that --

    HEARING OFFICER RENAUD: Ms. Holmes --

    MS. FOLEY GANNON: -- or if it's relevant.

    HEARING OFFICER RENAUD: -- maybe you could explain the relevance.

    MS. HOLMES: I believe it goes to his credibility. We have information from the county indicating that prior water use would have been illegal prior to the registration. There is a current registration, I don't think there's any dispute about that. I would have --

    HEARING OFFICER RENAUD: I don't know about --

    MS. HOLMES: My line of questions would be very
simple. One would be is the historical water use that's
identified in his declaration based on the very short
period of time since the registration has become valid or
is it based on something prior to that, in which case, as
I said, I think that there -- there is an issue of
credibility associated with that.

HEARING OFFICER RENAUD: I don't know about the
credibility issue, but the fact is that the state of the
evidence at this point is that we're hearing today .5
residential, staff's analysis I believe said six
historically.

MS. FOLEY GANNON: Right.

HEARING OFFICER RENAUD: And the concern was that
the -- whether or not there is a potential for an impact
to current and/or future residential users of this well.
And so we need to know whether or not it's .5 always or is
it now or what?

MS. HOLMES: Well, I think we need to know if the
.5 is a legitimate number. As I said, I think the
question of potential violation of a county ordinance is
something that goes to a witness's credibility. And I
think that since, as you're aware, the commission has a
regulation that states that hearsay evidence is admissible
but that it's not available to support a finding of fact
absent other corroborating evidence that's probably
introduced into the record.

HEARING OFFICER RENAUD: All right. Well, if we can make the witness available, we'll try to keep the questioning to this very limited narrow scope that you've described about the present and historical residential water use.

MR. SILVER: Mr. Renaud, Mr. Budlong joins in this request. And I believe there is evidence that is either in the record already or that will be introduced by Mrs. Harmon indicating that the Bookman Edmonston study done for the U.S. -- for the U.S. Gypsum project does indicate, I think, that there was service to Painted Gorge, and I think there's a number in there of something maybe less than six, but much more than what this witness has testified.

HEARING OFFICER RENAUD: I've indicated what we'd like to do, and let's proceed in that fashion, please.

MS. HOLMES: So would you like me to proceed with my questions for Mr. Van Patten at this time?

HEARING OFFICER RENAUD: Yes. And let's keep doing something while we try to find Mr. Boyer.

MS. FOLEY GANNON: And Mr. Van Patten will have to be the one who calls Mr. Boyer because he is the -- he would be the person who contacts him.

HEARING OFFICER RENAUD: All right. Okay.
MS. FOLEY GANNON: So we could do this, and then we could -- I mean, I think we have enough water issues and I think we're going to be talking about the Boyer well for a while --

HEARING OFFICER RENAUD: Of course.

MS. FOLEY GANNON: -- that we probably can --

HEARING OFFICER RENAUD: At some point we'll get Mr. Boyer.

Go ahead.

CROSS-EXAMINATION

MS. HOLMES: Good afternoon, Mr. Van Patten. Do you have any evidence of the historical water use associated with the Dan Boyer well other than the declaration of Mr. Boyer?

MR. VAN PATTEN: Yes. I've looked at many documents that he's provided to us on historical water use.

MS. HOLMES: Did not staff ask for objective evidence provided at the May hearing and -- I believe we did; is that correct?

MR. VAN PATTEN: I actually don't recall. It may be correct, but I don't recall.

MS. HOLMES: Hearing Officer Renaud, that's information that we requested at the May hearing. This is the first we've heard of its existence.
HEARING OFFICER RENAUD: You're heard it -- all he said is that he looked at historical water use.

MS. HOLMES: He said there was additional objective documentation.

HEARING OFFICER RENAUD: Well, we don't know what it is yet. May be -- why don't you bring that up.

MS. HOLMES: We had asked that it be provided at the May hearing.

HEARING OFFICER RENAUD: Well, you need to find out if it was available.

MS. HOLMES: Have you provided this information to staff?

MR. VAN PATTEN: I'm checking.

What are we calling this? The May supplement?

MS. FOLEY GANNON: Yeah, that was previously submitted into the evidence.

MR. VAN PATTEN: There was a May supplement previously submitted into the evidence that contained historical water use.

MS. HOLMES: So this is a document that's called "Supplement to the Imperial Valley Applicant Certification," Volume II of two, May 2010, and is referencing Appendix D, which has some groundwater evaluation reports as well as I believe the documentation about -- the document we had about sales; is that correct?
MR. VAN PATTEN: That's correct.

MS. HOLMES: This, I believe, is Mr. Scott's document actually,

MR. SCOTT: Yes, it is. It's in Appendix B of Appendix D to the supplemental.

MS. HOLMES: Then perhaps you could -- would it be appropriate -- you've been sworn. Would it be appropriate for you to describe what that evidence is?

MR. SCOTT: Well, the evidence is water sales history from the Westwind Water Company.

MS. HOLMES: Is this the same information that was included in the file that the county provided at the hearings in --

MS. FOLEY GANNON: I don't recall it was in the county's file at the hearings.

MS. HOLMES: This is the information that went from 19- -- 1970-something to 2004?

MR. VAN PATTEN: This is -- yeah, this is 1990 to 2004.

MS. HOLMES: Okay, thank you very much.

So the information that you're referring to has nothing to do with Dan Boyer sales?

MR. VAN PATTEN: Yeah, the historical documents, not the recent one since he's been the owner of Westwind.

MS. HOLMES: Right. And I apologize for the
confusion. My question went to whether or not you have any independent evidence of the statement that's been made by Mr. Boyer about his water sales.

   MR. VAN PATTEN: I have not seen anything.

   MS. HOLMES: In his declaration he refers to providing no more than a half an acre foot for domestic uses. Do you know if there's been water provided for other uses?

   MR. VAN PATTEN: According to Dan Boyer there has been.

   MS. HOLMES: Do you know how much?

   MR. VAN PATTEN: I don't know how much.

   MS. HOLMES: Thank you.

   Do you know how many years the Seeley Wastewater Treatment Plant has been in violation of its waste discharge requirements?

   MR. VAN PATTEN: I don't know that, but maybe someone -- do you know?

   MS. HOLMES: Do you know whether or not the violations are recent or whether they're longstanding?

   MR. VAN PATTEN: Don't know that either.

   MS. HOLMES: Thank you. That's fine.

   MR. VAN PATTEN: But maybe someone knows that.

   MS. FOLEY GANNON: We broke this out to sedimentation; we have a water quality expert who will
testify.

        MS. HOLMES: That's fine.

        Lastly, you talked about reducing your water use to less than 40 acre feet per year by moving to a five-day a week construction schedule. Did I hear you correctly?

        MR. VAN PATTEN: Or five plus, I mean, it's not six. It's a 2.9 acre foot per year difference.

        MS. HOLMES: And is it -- would it be fair to say that that would postpone the completion date of the various portions of the project proportionally?

        MR. VAN PATTEN: Only during the time in which you're using the Dan Boyer well, but not the project overall, because you're able to accelerate the construction once you have access to the Seeley water, you get back on schedule.

        MS. HOLMES: When do you need to be online for our power purchase agreement?


        MS. HOLMES: And is it your testimony that moving to a five-day construction schedule does not jeopardize that online date?

        MR. VAN PATTEN: Our schedule assumes that we would be using Dan Boyer water for six months; and if we were to use Dan Boyer water for six months with a 2.9 acre foot yearly in a reduction, it would not appreciably
impact our construction schedule.

MS. HOLMES: Did you do an analysis to determine what would happen to your schedule if the Dan Boyer well needed to be relied upon for a period of time greater than six months?

MR. VAN PATTEN: We did not do a very detailed analysis, but back of the envelope analysis that we did do would indicate that we could use the Dan Boyer well for up to a year and not miss our contract COD date with SDG&E.

MS. HOLMES: When you say you could use the Dan Boyer water, does that mean you're talking about something between a five- and a six-day construction schedule for that period --

MR. VAN PATTEN: Correct.

MS. HOLMES: -- for that year?

Okay. Thank you.

I think those are all my questions.

HEARING OFFICER RENAUD: All right. Thank you.

Questions by CURE?

CROSS-EXAMINATION

MS. MILES: My first question is are you willing to stipulate to a five-day work week for as long as you are relying on the Dan Boyer well?

MR. VAN PATTEN: No.

MS. MILES: Are you willing to stipulate to a
six-day work week as long as you're relying on the Dan Boyer well?

MR. VAN PATTEN: Yes.

MS. MILES: Regarding the Seeley Wastewater Treatment Facility --

MR. VAN PATTEN: Let me be clear on my answer too.

MS. MILES: Okay.

MR. VAN PATTEN: As long as we're using the Dan Boyer well for construction water needs.

MS. MILES: So you're saying that you wouldn't stipulate to that regarding operation water needs that might overlap with construction water needs.

MR. VAN PATTEN: What I'm saying is if there were -- what I don't want to get into a situation of is Seeley water becomes available, we're in transition, we have plenty of water, we're using a little bit of Dan Boyer water maybe, but we have plenty of water from Seeley, and all of a sudden I'm stuck with a six-day work week -- I'm sorry, yeah, six-day work week, but I need to catch up on my schedule, and maybe we're going to schedule a couple of full weekends. I don't want to be arbitrarily restricted on construction when there's obviously tons of water available for construction from our intended source.

MS. MILES: That's understandable.
MR. VAN PATTEN: That's just a technicality I'm trying to avoid.

MS. MILES: With regard to the six-day work week, would you have enough water then from the Dan Boyer well if you only had access to the Dan Boyer well?

MR. VAN PATTEN: Can you ask that again?

MS. MILES: Would you have a sufficient water supply if you are restricted to a six-day work week?

MR. VAN PATTEN: If we were restricted to a six-day work week, what could end up happening is we would obviously be a little bit short, because I stated that it would be 2.9 acre feet per year short if we were on average year. What it doesn't mean to say that we wouldn't work one week five days to store water for a six-day work week in which we had certain things planned. So I could work full six-day work weeks depending on what I'm doing and scheduling my work.

MS. MILES: So you're saying that you believe you could operate or you could construct under a six-day work week using only the Dan Boyer well based on changing your construction schedule.

MR. VAN PATTEN: No. There will be schedule impacts, as I've stated previously, if we are restricted to the 39.5.

MS. MILES: Are you actively seeking additional
water supply?

MR. VAN PATTEN: No.

MS. MILES: Why not?

MR. VAN PATTEN: Because we believe strongly that the Seeley Wastewater Treatment Facility will be upgraded and we'll have access to that water, which is our primary water supply source, and Dan Boyer's merely a temporary stopgap measure.

MS. MILES: Regarding the Seeley Wastewater Treatment Facility, do you know if they had any funding to do their upgrades prior to your offer of funds?

MR. VAN PATTEN: I don't know specifically if they've had any offers of funds, access to funds. I have attended their monthly board meetings in which I've overheard them speaking of what they would pursue for funds, you know, for various projects that they have. So I know that they have access through their own means, whether we were there or not, but whether they've actually gotten funds or would have -- or were in the process of getting funds, I don't know.

MS. MILES: So just so that I understand you, in these meetings have you heard they have secured some funding at this point?

MR. VAN PATTEN: I have not. I've just overheard speaking of things that they would try to look for funds
through other means.

   MS. MILES: Do you have any reason to believe that they would be able to acquire funding if you did not provide funding?

   MR. VAN PATTEN: I don't have any knowledge that would help me to understand whether they could or could not or what specifically they could get or from where.

   MS. MILES: Are there any other permits that the Seeley County Water District would need to acquire other than completing the EIR process and approving the EIR before they could operate?

   MR. VAN PATTEN: I'm not familiar with any.

   MS. MILES: So you're not familiar with a change of use permit that would be required from the state water resources control board?

   MR. VAN PATTEN: I don't recall that permit.

   MS. MILES: My understanding is that it has not been applied for yet, so my follow-up question was, you know, why are you not pursuing that at this time.

   MR. VAN PATTEN: I don't remember that one. It's not ringing any bells.

   MS. FOLEY GANNON: If you don't remember, you don't remember.

   MS. MILES: Okay. Are you aware that the county -- let me find my note here.
Are you aware that the county strongly recommended to the energy commission to take into consideration historical users of the Boyer well as well as on-site water needs at the Westwind parcel?

MR. VAN PATTEN: Yes, I'm familiar with that.

MS. MILES: I'm not sure if this is in evidence, I don't think it is, but I brought the letter. This is the Imperial County Planning comment letter on the staff assessment draft EIS, and so unless someone tells me that it's already in evidence from another party, then I'm going to submit this into evidence now. I believe it would be 499N at this point. Yes. So I'd like to move that into evidence.

HEARING OFFICER RENAUD: As far as I can tell, that has not been submitted by any other party.

MS. HOLMES: Is this the May 27th, 2010, letter?

MS. MILES: Yes, it is.

MS. HOLMES: Thank you.

HEARING OFFICER RENAUD: All right. And what was the number you had for it again?

MS. MILES: 499N.

HEARING OFFICER RENAUD: Okay.

(Intervenor CURE's Exhibit 499N was marked for identification.)

HEARING OFFICER RENAUD: Any objection to that
being admitted into evidence?

    MS. FOLEY GANNON: No objection.

    HEARING OFFICER RENAUD: Anybody?

    MS. HOLMES: No objection.

    MR. SILVER: No objection.

    HEARING OFFICER RENAUD: All right. That will be admitted then.

    (Intervenor CURE's Exhibit 499N was received into evidence.)

    MS. MILES: So and I would also just like to say that I think this also lays the basis for relevance as to looking at the historical use of the well to the extent that Dan Boyer is aware of the historical use of the well, because this is something that -- the county strongly recommended that the energy commission take that into consideration as well as on-site water needs. And I haven't actually read anything -- I don't know, can you speak to whether you know of what the on-site water needs are for that parcel?

    MR. VAN PATTEN: I can only speculate that he has a home there and he would need to flush toilets and take a shower.

    MS. MILES: Not really interested in speculation, but thank you.

    And are you certain that the letter from
Mr. Boyer represents -- the letter that you submitted that stated --

HEARING OFFICER RENAUD: Do you have copies for us up here?

Yes, thank you.

MS. MILES: -- his estimate of historical water use? Are you certain that that letter represents the historical residential water use prior to the past two years? I know it only is standing for the past two years, but would you -- could you speak to whether it represents anything before that?

MR. VAN PATTEN: He's only testified or declared to the well usage since he's had control over it. That's the only thing he's testifying to that I'm aware of.

MS. MILES: Okay. So can you speak to any historical water use besides what he's submitted in his declaration?

MR. VAN PATTEN: Only what's been already entered into testimony.

MS. MILES: Right. Okay. And how long has Mr. Boyer been owner of the well?

MR. VAN PATTEN: I don't think it's been over two years. I think it's right at around two years is my recollection, but I -- I'm not positive.

MS. MILES: Okay. I have a question.
Also I noted in your testimony you mention the
that -- I don't think if it was the RMT study or the RMT
firm that has been working with you --

MR. VAN PATTON: RMT is the contractor whose been
engaged for the balance of the plant installation, which
would include construction of the facility.

MS. MILES: And you mentioned that there was an
estimate that 60 percent of the water use would be for
dust control measures?

MR. VAN PATTEN: When I looked at their detailed
estimate, that's what it showed to me. It was probably
59.-something, roughly 60.

MS. MILES: That's fine. I'm just wondering
whether that information is in the record.

MR. VAN PATTEN: Not the detailed breakdown, just
the total water supply needs of our RMT is what we offered
in the past.

MS. MILES: And why did you not offer the
breakdown into the record?

MR. VAN PATTEN: I didn't know that it was
relevant in that the total water need is what the relevant
number is, as I understand it.

MS. MILES: Well, it's definitely been difficult
for us to evaluate whether you're going to have an
adequate water supply when we can't get a breakdown of
what your water needs are on the project site, so that's why I'm asking that question.

Can you submit the RMT study into the record or the RMT information that you're referring to regarding the 59.-something dust control?

MS. FOLEY GANNON: We have replied to all data requests that we received in a timely fashion. We don't believe that there's any need to submit this.

MS. MILES: Well, I believe that the time for data -- the data adequacy -- not the data adequacy -- the time for data request closed prior to the information being put into the record as to the Boyer well, and so this is relevant to new information.

HEARING OFFICER RENAUD: What would be applicant's objection to submitting the requested material?

MS. FOLEY GANNON: We don't see the relevance of having to submit this. And the problem is --

HEARING OFFICER RENAUD: Why? What's not relevant about it? That's what I'm -- I'm trying to get it as specific --

MS. FOLEY GANNON: The need -- the water need, the total number of the water need is what we think is the relevant consideration.

HEARING OFFICER RENAUD: Rather than the
breakdown of the various uses?

    MS. FOLEY GANNON: The breakdown of specific --
how much is used for dust control and how much is used for
roads, how much is --

    HEARING OFFICER RENAUD: All right.
Excuse me. Why does CURE need that?

    MS. MILES: Well, we have been trying to actually
evaluate whether the water needs are correctly calculated,
and we have submitted testimony that the water has not
been accurately calculated, the water needs.

    HEARING OFFICER RENAUD: All right. So what is
the objection to the breakdown? I think she's made a good
case for her wanting to see that information, unless
there's some reason you can't produce it, which you
haven't told me yet? Is it an extensive document?

    MS. FOLEY GANNON: It's an extensive document,
but it has other information included in it.

    HEARING OFFICER RENAUD: All right.

    MS. FOLEY GANNON: We did not have anything
prepared specifically for sharing with the public or
submitting to the commission.

    HEARING OFFICER RENAUD: Can you pull out the
part that has the information they're requesting?

    MS. FOLEY GANNON: I mean, what we would need to
do is to go back and probably ask RMT to provide the
summary numbers, because again, there is some information
that may be confidential information --

HEARING OFFICER RENAUD: I understand. So see if
you can do that, please.

MS. FOLEY GANNON: We can provide something which
gives a more general breakdown without having to get into
our specific engineering and building plans in detail that
is not relevant to this issue.

HEARING OFFICER RENAUD: Right.

MS. FOLEY GANNON: If that makes sense.

MS. MILES: Well, I'm not sure that it makes
sense considering that you said this wasn't relevant at
all, but if you're accepting that it is relevant, then we
are interested in --

HEARING OFFICER RENAUD: Listen, we don't need
that kind of commentary. We've said it's relevant.

MS. MILES: Okay, thank you.

MS. FOLEY GANNON: Yeah, doesn't matter.

HEARING OFFICER RENAUD: Please provide the
summary that you indicated.

MS. FOLEY GANNON: Yes, we will.

HEARING OFFICER RENAUD: Carry on.

MS. MILES: I appreciate that. Thank you.

Moving on, I have a question related to the dust
and testimony. Have your experts compared the conditions
at the Maricopa site and the expected conditions at the 
Imperial site relating to dust, particularly accounting 
for the difference in soil types and baseline dust 
conditions?

MR. VAN PATTEN: There's been discussions between 
Mortenson and RMT regarding all aspects of construction of 
the Maricopa site, in that it was a Mortenson project with 
SES installation of the SunCatchers. There's been a lot 
of sharing of data to try to get their head around not 
only the construction aspects of it but also the operation 
aspects of it.

MS. MILES: Because I understand, I believe, 
correct me if I'm wrong, the Maricopa site is like a 
previous agricultural land?

MR. VAN PATTEN: That's correct.

MS. MILES: And it's near a power plant --

MR. VAN PATTEN: That's correct.

MS. MILES: -- or another industrial facility?

MR. VAN PATTEN: That's correct.

MS. MILES: And it's a much smaller site. And so 
I'm -- reason that I'm asking this is because I'm 
wondering, the Imperial site seems very different to me in 
terms of the soil types and the amount of dust you're 
likely to have and desert pavement and things you wouldn't 
have as functions. So I'm wondering can you provide that
information if that is in the documentation that, you
know, you are already going to be excerpting for us?

MR. VAN PATTEN: These not part of any
documentation that I have. It's discussions that go on
between the various parties.

MS. MILES: So you don't have anything -- you've
not submitted anything into the record relating to the
amount of dust compared to the Maricopa facility that
you're going to have to deal with?

MR. VAN PATTEN: I'm not aware of anything like
that --

MS. MILES: Okay.

MR. VAN PATTEN: -- anything written down or
offered in testimony.

MS. MILES: That's all -- oh, actually I have one
last question.

And I understand you have a power purchase
agreement for this project.

MR. VAN PATTEN: We do.

MS. MILES: And how many megawatts has SDG&E
committed to purchase in the power purchase agreement
excluding options and rights of refusal?

MS. FOLEY GANNON: I thought this discussion was
about water supply.

MS. MILES: Well --
MS. FOLEY GANNON: And just so we can have rebuttal that follows testimony. I mean, does this relate to water supply?

MS. MILES: Well, Mr. Van Patten will be testifying again at a time when I can ask a question --

MS. FOLEY GANNON: He will be.

MS. MILES: -- relating to --

MS. FOLEY GANNON: Yep.

MS. MILES: Will he be testifying when I can ask a question relating to the power purchase agreement?

MS. FOLEY GANNON: There will be. Plant reliability might be a place that would be more reasonable than water supply, I would think, to ask that question. Because we haven't offered any initial testimony on this subject, and so we can have rebuttal that's related to the initial testimony.

MS. HOLMES: As an item of clarification, staff also had questions to ask of Mr. Van Patten about the power purchase agreement. And we were planning to ask him when he testified about alternatives. So I don't know what the appropriate place is --

MS. FOLEY GANNON: That's fine. We can do it during alternatives.

HEARING OFFICER RENAUD: I think it's pretty clear it's not water. So good.
MS. MILES: Okay. Thank you. No more questions.

HEARING OFFICER RENAUD: All right. Questions by Budlong?

MR. BUDLONG: Yes.

This is Tom Budlong. I have questions with respect to some data that appear in the staff assessment. And maybe you can guide me as to when I should ask those and to whom.

HEARING OFFICER RENAUD: On what topic, Mr. Budlong?

MR. BUDLONG: Water usage and construction water.

HEARING OFFICER RENAUD: I'd say we're there.

MR. BUDLONG: Dust control water and construction water.

HEARING OFFICER RENAUD: That's I think where we are now.

Go ahead.

MR. BUDLONG: And this is in the SSA.

CROSS-EXAMINATION

MR. BUDLONG: In the water section on page C.7-17 and I think on the next table it talks about using 5,000 gallons per day for dust control. And if I work that down to human figures, using a little bit of arithmetic, I get that for every square yard, if you consider the 200 acres need dust control, that's all out of the 6,000, that
you're allocated something like a half liter, which is one of those little bottles that you buy in the 7-Eleven store for every square yard of ground that needs to be dust controlled per month. And that sounds to me like a very small amount of water required for dust control.

How did you arrive at that small amount of water required for dust control?

MS. HOLMES: Let's first of all confirm that these numbers that are in the staff assessment are based on information provided by Tessera.

MS. FOLEY GANNON: Yeah, that's what we were just trying check.

I'm sorry, Mr. Budlong, can you say which table you're looking at again, which you say it was on 6-7.7?

MR. BUDLONG: The table starts on C.7-16, Table 3. And the data are actually on C.7-17. It splits to the next page.

MS. HOLMES: And the source is listed as SES 2008A, which I think is the application for certification.

HEARING OFFICER RENAUD: Ms. Holmes, I'm not sure your mic is on.

MS. HOLMES: It is. I'm not often accused of not speaking loudly enough. I apologize.

HEARING OFFICER RENAUD: No accusation meant, just a question.
MR. VAN PATTEN: The table that you're referring to is in operations, water demand table.

MR. BUDLONG: Yes, it is. Yes.

MR. VAN PATTEN: And I don't have -- I have not testified to operations water use or numbers, Waymon Votaw has provided numbers and could testify to that.

MS. FOLEY GANNON: Yeah, we apologize again. There's some overlap on different panels, but we can make a note that when Waymon Votaw's testifying tomorrow in plant reliability he can answer this question specifically again with relation to water operations. And we apologize, he was not able to be here due to some obligations, but will be on the phone tomorrow.

MR. BUDLONG: All right. So that's a Raymond Votaw question?

MS. FOLEY GANNON: Waymon, W-a-y-m-o-n.

MR. VAN PATTEN: Votaw, V-o-t-a-w.

MS. WHITE: Can you please make sure you're speaking close to the microphone? It's very difficult to hear you sometimes.

HEARING OFFICER RENAUD: Yeah, it's really quite faint. Put it right up to your mouth.

MR. VAN PATTEN: Like right here?

HEARING OFFICER RENAUD: Yes, please, that's the way to do it. Put it on top of your papers if you need
to. We need to hear you clearly.

    MR. VAN PATTEN: All right. I'll do it.

    HEARING OFFICER RENAUD: Thank you.

    MR. BUDLONG: I have another question, and that is that in that same Table 3, essentially what is specified there is that the construction will use 166 acre feet to install 30,000 SunCatchers. And if I compare that to Calico, which is very similar, and I look in the Calico supplemental staff assessment, which is a July document, I find that Calico will use 600 acre feet to install a few more SunCatchers, 34,000 instead of 30,000. So we're using 166. If you divide it out, it comes out to be for Calico, 17 and a half acre feet per thousand SunCatchers; and for Imperial, five and a half acre feet per thousand SunCatchers. I'm wondering if you're able to describe why Imperial can be so much more efficient than Calico in installing these things.

    HEARING OFFICER RENAUD: Mr. Budlong, this is Hearing Officer Renaud. You're referring still to Table 3, correct?

    MR. BUDLONG: Yes.

    HEARING OFFICER RENAUD: And that's about operations. And as I understand your question, your question is about construction.

Excuse me while I get my notes in order here.

MS. FOLEY GANNON: I think Mr. Budlong might be on page C.7-16 under the narrative under construction water.

Is that what you were looking at?

MR. BUDLONG: Yes, I think that's what it is, yes, not in the table. Yeah. Down in the construction water towards the bottom, it says 166 acre feet, total construction water use approximately 54 million gallons, 166 acre feet, which works out substantially less than what it talks about in Calico.

MR. VAN PATTEN: Well, in regards to differences between the two projects --

HEARING OFFICER RENAUD: Microphone, please.

MS. FOLEY GANNON: Lean in, lean in, lean in.

MR. VAN PATTEN: I'm sorry. Thank you.

HEARING OFFICER RENAUD: You might just move it up to you, and then you don't have to lean forward.

That's it. Thank you.

MR. VAN PATTEN: In regards to the differences between Calico and Imperial Valley Solar water, there are several reasons that are specific to the projects that include things as far as earth work that needs to be done on each project is different.

In the case of Calico, there's a large bridge
facility with embankments, and a lot of grading has to be
done, a long entrance road, much more distance than at
IVS. There's different soil types at both projects, and
the different soil types require different amounts of
water, either for dust control or what have you.

At IVS, is more of a -- as I understand it from
the engineer, it's more of a silty sand, holds a lot more
moisture than the soils out at the Calico project, and so
they have to use a lot more water up there in their
estimates. It's a coarser sand, with silt; but,
nonetheless, it doesn't hold as much water and the water
is able to evaporate.

MS. JENNINGS: Excuse me. Could we ask who was
just testifying?

MR. VAN PATTEN: This is Marc, this is
Marc Van Patten with Tessera Solar.

And in the case of Calico, there are detention
basins required, and more water's required for that. And
in the case of IVS, they've been removed. When we've
asked the question as to the differences internally, those
were the answers we got from the engineers.

MR. BUDLONG: Okay. All right. Thank you.

HEARING OFFICER RENAUD: Thank you.

MR. BUDLONG: Those are my questions.

HEARING OFFICER RENAUD: You're done?
MR. BUDLONG: Yes.

HEARING OFFICER RENAUD: Good. Thank you.

Cross-examination by CNPS?

MR. BELTRAN: No.

HEARING OFFICER RENAUD: Any redistrict?

MS. FOLEY GANNON: Just a couple of points for clarification.

REDIRECT EXAMINATION

MS. FOLEY GANNON: To understand, and I know we will have a technical expert speaking later in afternoon about how the BMPs for dust control have been developed and studied, but to the best of your knowledge, were the dust control BMPs and measures developed looking at Maricopa?

MR. VAN PATTEN: As far as for this project?

MS. FOLEY GANNON: Right.

MR. VAN PATTEN: No.

MS. FOLEY GANNON: Were the dust control measures based upon the actual site conditions here?

MR. VAN PATTEN: Absolutely.

MS. FOLEY GANNON: Thank you.

And with regard to Seeley, is Tessera Solar getting permits for Seeley?

MR. VAN PATTEN: No, we're not getting any permits for Seeley.
MS. FOLEY GANNON: So Seeley is responsible for getting any and all permits that are necessary for carrying out its upgrades or taking care of different uses and things like that; is that correct?


MS. FOLEY GANNON: So the relationship between the IVS project and Seeley is what? With regards to the upgrades? What is IVS's role in the upgrades?

MR. VAN PATTEN: We have agreed to pay for any upgrades should they, in fact, move ahead with the upgrades.

MS. FOLEY GANNON: Very good.

And then you just provided us some information on Calico, and I think you answered this question that came up in my mind.

Have you worked on the Calico project?

MR. VAN PATTEN: I have not.

MS. FOLEY GANNON: So you don't have any personal knowledge about how calculations were done by engineers working for the Calico project or the specific soil conditions or things like that?

MR. VAN PATTEN: No.

MS. FOLEY GANNON: All right. That's very helpful. Thank you.
HEARING OFFICER RENAUD: Any questions from committee members?

Yes, Ms. Holmes?

MS. HOLMES: One recross question?

HEARING OFFICER RENAUD: Sure.

RECROSS-EXAMINATION

MS. HOLMES: Mr. Van Patten, does the project need to obtain any kind of a permit other than the CEC permit in order to use the water that it receives from the Seeley Wastewater Treatment Facility?

MR. VAN PATTEN: The only one that I'm familiar with is the extension of service implication to LAFCO.

MS. HOLMES: And is that in process?

MR. VAN PATTEN: Yes.

MS. HOLMES: Thank you.

HEARING OFFICER RENAUD: Any further questions? I have a couple, but anyone else? All right.

Mr. Van Patten, you said that you -- and I don't recall your exact words, but you're very confident that the Seeley wastewater treatment upgrades will be constructed and make that water available. What's the basis for thinking that as of today?

MR. VAN PATTEN: Because they have indicated -- well, first of all they are in violation of their NPDS. I understand that the agencies that govern that permit
require them to upgrade or face fines and other enforcement actions, and which would indicate to me that they would be looking for every and all solutions to getting out of a situation where they're constantly in violation and having to pay fines and nothing's being upgraded.

There are, I understand, from -- like I said, I've overheard them speaking in the past at some of their board meetings where they talk about what access to funding they have at that level given that they're a very low-budget city water department. And they're exploring -- and they would be exploring any way possible to get that upgrade done, whether we were there or not. And with us having offered to pay for those upgrades, should we have access to that water, I have no reason to believe they wouldn't get that permit to construct and that they would ultimately implement it.

HEARING OFFICER RENAUD: Okay. But I guess I wasn't quite specific about what I had in mind, which is that they're going through an EIR process.

MR. VAN PATTEN: Correct.

HEARING OFFICER RENAUD: Do you have any information about the anticipated outcome of that, when and how?

MR. VAN PATTEN: We do have an anticipation of
how that would come out in that they did go through --
testimony has already shown they've started out with an
MND, Mitigated Negative Declaration, and in that Mitigated
Negative Declaration, they've identified the issues
surrounding the project. And there are probably others
better suited to testify in more detail if you'd like, but
that showed what might be impacted by the upgrades.

And these were -- as I recall, they were all
things that were not -- at the end of the day, they could
not be mitigated to less than significant. And with the
EIR process, those things could be shown with significant
levels of detail, such that it gave Tessera Solar no cause
for concern as to their ability to come to the end of that
with a very supportable EIR document that would then be
able to be adopted without any significant challenge.

HEARING OFFICER RENAUD: All right. And is that
what you just said your opinion, or is that based on
information you -- or opinion you received from others?

MR. VAN PATTEN: The opinion I received from
others, and now it's an opinion that I share.

HEARING OFFICER RENAUD: And do you have -- is
your background, education, experience such that you
can -- that could form the basis for an opinion like this,
to support an opinion like this?

For example, do you have experience or education
in the area of EIRs for wastewater treatment facility upgrades?

MR. VAN PATTEN: I have never participated in an EIR for a waste treatment facility.

HEARING OFFICER RENAUD: All right.

MR. VAN PATTEN: However, I've spent the last 15, 20 years developing power plants around water systems with many, many different types of water supply requirements and water-related permitting of all types, and have a good feeling as to how things are being conducted and what probable outcomes would be. But that's based purely on a power plant and water-resource needs perspective and not from a biological perspective or specific wastewater treatment permitting perspective.

HEARING OFFICER RENAUD: All right. Thank you. And something else. Talking about the half an acre foot a year of residential use on the Boyer well. Do you have any knowledge -- I just don't know these figures, they're probably somewhere, but how many gallons is half an acre foot?

MR. VAN PATTEN: Half an acre foot?

HEARING OFFICER RENAUD: Or what's a whole acre foot, and then we can split it, but whatever.

MR. VAN PATTEN: Well, an acre foot is 325 -- 325,851 gallons.
HEARING OFFICER RENAUD: Okay. So and how many gallons does a residence -- I mean, there's a huge span here, but sort of typical, three-bedroom, two-bath family-of-four residence use in a year?

MR. VAN PATTEN: A couple thousand gallons a year.

MR. SCOTT: There have been some studies in southern California --

HEARING OFFICER RENAUD: Please state who you are for the record.

MR. SCOTT: This is Mr. Scott.

And there have been some studies throughout the state, and in southern California in the urbanized areas, a residential city lot uses about a half of an acre foot a year. In these areas, there's generally no irrigation of the properties, and so I would anticipate that the use, annual use would be somewhat less than a half an acre, maybe a quarter or a third.

HEARING OFFICER RENAUD: Does the Boyer well have any steady residential customers at this point? I don't see that in his declaration, and I just wondered if you might know.

MR. VAN PATTEN: Forgive me; I didn't hear that.

HEARING OFFICER RENAUD: Does the Boyer Water Company have any steady regular residential customers now?
MR. VAN PATTEN: He has mentioned to me in conversation that he does have some, like the ones referred to earlier in Painted Gorge. There are some seasonal and some permanent residents there that periodically stop by and purchase water.

HEARING OFFICER RENAUD: Okay.

Go ahead.

Ms. White has a question.

MS. WHITE: So is he permitted to be a public water supply? Is he permitted to be a supplier of water?

MR. VAN PATTEN: He's permitted to supply it to 40 acre feet per year.

MS. WHITE: Okay. Question back to the wastewater treatment plant.

Are there any downstream users of the discharge from the wastewater treatment plant?

MR. VAN PATTEN: None that I'm aware of.

MS. WHITE: Okay. Thank you.

HEARING OFFICER RENAUD: Commissioner Eggert?

COMMISSIONER EGGERT: This is more of a question of curiosity.

So 40 acre feet a year is maybe about enough to support about 20 acres of alfalfa, I think, approximately, and right next -- fairly nearby we have the irrigation district, Imperial Irrigation District, which pumps over
two million I think, acre feet a year.

What was presented -- was there anything preventing you from going to secure a source within the IID?

MR. VAN PATTEN: Yes. We initially started this project prior to submitting the AFC I believe, or maybe -- I don't remember, it might have been with the initial AFC, it might have included IID as a water solution. And we subsequently found out that IID's service territory includes a portion of the project. It was a part of the 900 megawatt project to the east near Dunaway Road that the IID service territory touched.

And even if we hadn't removed that part for cultural resource or environmentally-sensitive area reasons, we still would not have been able to use that water for the rest of the project, and, therefore, it was not an appropriate solution for the entire project because we would have been restricted to using IID water on that portion of the project, unless we were able to get an extension of service from IID service territory through the federal government, which we found would probably take too long.

COMMISSIONER EGGERT: Okay. Thanks.

HEARING OFFICER RENAUD: All right. Before we move on this water part two, any other questions from
anybody?

    All right. Go ahead. Yes.

    MR. SILVER: Yes, I have a question.

    RECROSS-EXAMINATION

    MR. SILVER: Are you aware that U.S. Gypsum was able to obtain in connection with its expansion project water from IID by reason of an expansion of the service area?

    MR. VAN PATTEN: No, I'm not aware of that.

    HEARING OFFICER RENAUD: All right. Let's proceed.

    MS. FOLEY GANNON: One other question.

    REDIRECT EXAMINATION

    MS. FOLEY GANNON: If you were using IID water, would the water that you would be using be potable water?

    MR. VAN PATTEN: I believe so, but I'm not familiar enough with the IID water to know that answer.

    HEARING OFFICER RENAUD: Okay. Let's move on to the next aspect of water, please.

    MS. FOLEY GANNON: Okay. Would you -- are you interested in us trying to get Boyer on the well before -- not the -- Boyer on the line, I'm sorry -- before we start talking further about the Boyer well, or should we try to see if we can get him, or just any time is fine because there's limited questions for him?
HEARING OFFICER RENAUD: We just -- mainly, yes. We wanted to keep moving though, we don't want to sit and wait for the phone call to go through. So if that could be done while we're doing something else, great; otherwise, let's just --

MR. VAN PATTEN: Does someone have the call-in information handy so I can write it down and give it to him quickly? Anyone?

MS. FOLEY GANNON: Allan can get it for you.

MR. VAN PATTEN: Okay.

MS. FOLEY GANNON: We can turn now and talk about the -- further about the Boyer well and the potential impacts associated with relying on the Boyer well. And for this we would like to turn to Mr. Scott.

DIRECT EXAMINATION

MS. FOLEY GANNON: Mr. Scott, have you had a chance to -- you've submitted previous testimony, I believe, in our earlier hearings as well as written testimony; is that correct?

MR. SCOTT: Yes, that's correct.

MS. FOLEY GANNON: Do you have any corrections or amendments to that earlier testimony that you submitted?

MR. SCOTT: No, I don't.

MS. FOLEY GANNON: Again, we won't walk through all of the analysis that you did on the Boyer well that
you have previously discussed or provided written testimony, I'm predominantly, first off, getting your reaction in response to the analysis that was included in the supplemental staff assessment.

Have you had a chance to review their discussion of the groundwater use?

MR. SCOTT: Yes, I have.

MS. FOLEY GANNON: And could you provide us with sort of your overall reaction or impression of that?

MR. SCOTT: Well, first of all, the impact identified in the supplemental staff assessment doesn't reflect any adverse physical consequences, but it does indicate some very small degree of water depletion in the abstract in the basin as a whole. And the supplemental staff assessment concludes, as do I, that pumping from the Boyer well, even for 40 years beyond using it as a temporary source, will not -- will not adversely affect water level declines, it will not impact neighbors significantly through the pumping, nor will it affect any springs. There are no nearby springs or phreatic plants because the water table is too deep, it's about 125 feet. And we -- I'd also agree that the upwelling of any poor quality water that lies below the alluvium would not significantly impact the neighbors.

And the conclusions basically confirm that
there's no significant impact resulting from the use of
the Boyer well for the project.

MS. FOLEY GANNON: So when you are looking at or
considering the issue of whether using groundwater from a
particular basin is or is not an adverse effect or a
significant adverse effect, the factors that you'd just
run through, those are the things that you would look at?

MR. SCOTT: Right. Yes.

MS. FOLEY GANNON: So just sort of what you were
saying is you looked at the impact on neighboring wells;
is that correct? You've looked at the impact on potential
springs in the area. You looked at the impact on
vegetation.

MR. SCOTT: On plants.

MS. FOLEY GANNON: In the area, you looked at
potential for the pumping to somehow bring in or affect
the water quality of the overall basin.

MR. SCOTT: That's correct.

MS. FOLEY GANNON: And in simple terms, how did
that occur, or what level of sort of pumping would you
need, or does that change basin by basin? How do you look
at that issue?

MR. SCOTT: Well, you'd have to look at the
degree to which the water quality may have changed over a
period of time as a result of pumping.
For instance, we understand from the information appearing in the supplemental staff assessment, we have an idea of what the water use from the Westwind Water Company was. We also have some anecdotal information of water use prior to that, you know, between the period of, say, the 1970s and the current time. And what we found is if you -- there's water quality data from 1974, and as part of our investigation of the well that appears in the supplemental staff assessment, we found that there's been little or no change in water quality over that period of time.

And we must consider that, you know, the Boyer well was pumping, you know, at least at times, probably in excess of what currently appears in the well registration. And there were other wells pumping in the basin. And we see no difference in water quality.

MS. FOLEY GANNON: So when you analyze, you took water samples now?

MR. SCOTT: Yes, we did. When we did our aquifer testing in April of this year.

MS. FOLEY GANNON: And you had them run, and then you compared them to test results that were done in the 70s? Is that --

MR. SCOTT: Yes, we did.

MS. FOLEY GANNON: And the results were again?
MR. SCOTT: Well, the TDS, for instance, just to give an indicator parameter, was 380 milligrams per liter back in 1974, and it was the same value today. And when comparing even a number of all the other parameters, different cations and anions and fluoride, the concentrations were basically the same. So that in a real-life situation and not related to any kind of modeling, it shows that there's been no adverse impacts, pumping, on water quality in that particular area.

MS. FOLEY GANNON: So then your conclusion after reviewing that information was, with regard to the potential pumping from this well, was what?

MR. SCOTT: Was that there would be no significant impact to water quality.

MS. FOLEY GANNON: For the other determinations that you made regarding the impacts that there's not going to be impacts of neighboring wells, that was done based on --

MR. SCOTT: Well, that was based on the results of the aquifer tests that we conducted. And we calculated the hydraulic parameters for the aquifer, and then we projected what the drawdown and zone of influence would be resulting from pumping at the 40 acre feet a year rate that's specified in Mr. Boyer's well registration.

MS. FOLEY GANNON: And when you're looking at the
other potential impacts, like vegetation and other things along those lines, how do you make an assessment of that?

MR. SCOTT: Well, the water table in the vicinity is greater than 125 feet, and so we basically, you know, you'd look at -- there are certain plants that are deep rooted in the desert environment that would rely on groundwater, and generally the roots of those plants don't tap water at that depth.

MS. FOLEY GANNON: So overall, if you're looking at sort of what you would -- what you've listed as what you think would be the physical effects of changing -- of taking water from an aquifer, and am I correct saying -- summarizing that you're saying you're not seeing any of these negative effects?

MR. SCOTT: That's right.

MS. FOLEY GANNON: And staff essentially in the staff assessment came to the same conclusion after going through an analysis of these same factors?

MR. SCOTT: Yes, that's correct.

MS. FOLEY GANNON: Yet staff concluded that there was going to be significant and adverse and unmitigable impact.

Do you understand what the basis of that conclusion is?

MR. SCOTT: Well, I think I understand that if
any -- basically if any water's taken out of the basin,
being that it's been -- you know, it's believed that the
basin is an overdraft, it's an unmitigable impact.

MS. FOLEY GANNON: And you're looking at what the
effects of taking water out of a basin that is an
overdraft, if you were evaluating the significance of that
impact, what would you be looking at?

MR. SCOTT: Well, I would be looking at all of
those conditions that we'd already discussed.

MS. FOLEY GANNON: I understand there's something
somewhat unique about this basin in comparison to some
other basins; is that correct, that there's some evidence
that this basin is being depleted naturally? Is that an
accurate assessment?

MR. SCOTT: Yeah, this is true. I mean, the
basin is divided by an international border, and
groundwater generally appears to flow from the northwest
to the southeast. And so it basically -- I wouldn't
necessarily say leaves the basin, because the basin to the
south of the border is part of the same basin.

MS. FOLEY GANNON: And is this the -- what is the
size of this basin?

MR. SCOTT: There's an indication, DWR indicates
that it's about 228 square miles. I think in the staff
assessment there's an indication it's about a hundred
square miles.

MS. FOLEY GANNON: And if the -- the applicant, understand, was looking at this assuming that they would be relying on this well for about three years.

MR. SCOTT: Yeah, this is what I understand.

MS. FOLEY GANNON: So that would be a net --

MR. SCOTT: It would be a removal of 120 acre feet if we consider the 40 acre feet a year.

MS. FOLEY GANNON: And in your opinion, would this be a measurable difference in this size basin?

MR. SCOTT: Well, the storage of the basin has been reportedly anywhere from 1.2 million acre feet to 1.7 million acre feet. So 120 acre feet a year is like one one-hundredth of a percent of the total volume of the aquifer, which would not be -- would not be significant.

MS. FOLEY GANNON: And I understand that in the testimony that was submitted by in writing by Mr. Van Patten that the applicant's proposing mitigation measures to further offset any potential impacts associated with using temporarily the Boyer well.

Are you familiar with those measures?

MR. SCOTT: Yes, I am. And from what I understand, that the applicant will offset its water use from the Boyer well by an equal amount by paying Mr. Boyer not to sell water after -- after the applicant uses the
well.

MS. FOLEY GANNON: And in your view, would that be effective?

MR. SCOTT: In the grand scheme of preserving water in the basin, I would say yes.

MS. FOLEY GANNON: Do you believe it's necessary?

MR. SCOTT: I don't think it's necessarily required, because as we've discussed about the well registration, whether Mr. Boyer in his declaration sells the water to IVS or not, he will be using the 40 acre -- he will be selling the 40 acre feet a year that he's allocated for his well.

MS. FOLEY GANNON: So there is no -- have you reviewed his well registration?

MR. SCOTT: Yes, I have.

MS. FOLEY GANNON: And I noted that there was a number of conditions in there regarding maintenance of the area, making sure it was conforming with land use restrictions and other things.

Was there any restriction other than the amount of water that can be used on the operation that Dan Boyer can use?

MR. SCOTT: No. I think that if you look at -- it may be condition T-2. He's allowed to do what he wants with the 40 acre feet of water.
MS. FOLEY GANNON: And if we could turn, that, I believe, was an attachment to Mr. Van Patten or was in earlier testimony.

MR. SCOTT: It's actually in our report that appears in the supplement staff assessment appendix, Appendix D.

MS. FOLEY GANNON: And this was, again, the May 2010 supplemental staff assessment?

MR. SCOTT: Right. Yeah, if you look at -- if you look at Appendix C, it goes through the requirements that Mr. Boyer must comply with.

MS. FOLEY GANNON: And can you read the provisions of T-2 that relate to his ability to sell the water, or the relevant provisions of --

MR. SCOTT: Oh, yeah. Here it says -- it says 40 acre feet of groundwater per year is the maximum amount of groundwater extraction and exportation registration for the well.

MS. FOLEY GANNON: Exportation?

HEARING OFFICER RENAUD: What page of Appendix C is this?

MR. SCOTT: It's the first page. It says specific terms for groundwater well registration.

MS. HOLMES: This was just recently misidentified. It's actually not the staff assessment;
it's the supplement that was filed on May 12th.

    MR. SCOTT: Oh, I'm sorry. I'm sorry.
    MS. FOLEY GANNON: Yeah, I'm sorry.
    HEARING OFFICER RENAUD: Okay. That helps.

Thank you.

    MS. HOLMES: And I'm not finding it either.
    MS. JENNINGS: Excuse me.
    MS. FOLEY GANNON: Is it in Volume II? Is it --
    MR. SCOTT: Yes, it's in Volume II, Appendix D.
    HEARING OFFICER RENAUD: Yes, Ms. Jennings, could
we help you?

    MS. JENNINGS: We could not hear Ms. Holmes.
    HEARING OFFICER RENAUD: Okay.
We fixed that. That's fixed. Thank you.
    MS. JENNINGS: Excuse me. We could not hear what
Ms. Holmes just said.
    MS. HOLMES: We were just clarifying where we are
reading from.

We are reading from the May filing of the
applicant entitled, "Supplement to Imperial Valley Solar,"
we're in Volume II of it. We're in Appendix C of
Appendix D.

    MS. JENNINGS: Thank you.
    MR. BOYER: Hello?
    MS. FOLEY GANNON: We believe that Mr. Boyer has
just joined us.

HEARING OFFICER RENAUD: All right.

Mr. Boyer, is that you?

MR. BOYER: Yes, it is.

HEARING OFFICER RENAUD: All right. Please stand by, we'll be with you momentarily.

MS. FOLEY GANNON: So can you begin reading the applicable provisions that --

MR. SCOTT: Is everybody on that page?

MS. FOLEY GANNON: Did people find -- who are looking for that find the document that we're referring to?

MR. SCOTT: Under the specific terms of the groundwater well registration, if you look at condition T-2, it says 40 acre feet of groundwater per year is the maximum amount of groundwater extraction and exportation registration for the well. And then it goes on to indicate the number of gallons per day, gallons per week based on a six-day work week, 52 weeks a year. And exportation is limited to tanker trucks from the premises in Ocotillo.

MS. FOLEY GANNON: So pursuant to the terms of this permit that Mr. Boyer --

MR. SCOTT: The registration.

MS. FOLEY GANNON: The registration -- sorry, I
HEARING OFFICER RENAUD: Mr. Boyer, we're just in the midst of asking questions of another witness. And so if you will just stand by, we'll let you know, we'll make sure you understand when it's your turn.

MR. BOYER: Okay.

HEARING OFFICER RENAUD: Just sit back and listen. Thanks.

MS. FOLEY GANNON: So again, the limitations that you believe are in the registration are the amount, ultimate amount, 40 acre feet per year?

MR. SCOTT: Correct.

MS. FOLEY GANNON: There is a gallons per day --

MR. SCOTT: That's right.

MS. FOLEY GANNON: -- number.

And then this --

MR. SCOTT: How it can be --

MS. FOLEY GANNON: Exported?

MR. SCOTT: -- transferred or transported.

MS. FOLEY GANNON: Right. And those are the only restrictions that are in there relating to use.

MR. SCOTT: Right.

MS. FOLEY GANNON: So that based on this information, assuming that Imperial Valley Solar was not purchasing the 40 acre feet a year from Mr. Boyer, there
doesn't seem to be other things that would restrict him from selling this water to anybody else.

    MR. SCOTT: That's correct.

    MS. FOLEY GANNON: Very good. That concludes my direct.

    HEARING OFFICER RENAUD: All right. Any cross-examination by staff?

    MS. HOLMES: I'm sorry, excuse me?

    COMMISSIONER BYRON: Put the microphone right up next to you, Ms. Holmes.

    HEARING OFFICER RENAUD: Cross-examination by staff?

    MS. HOLMES: Yes, thank you.

    CROSS-EXAMINATION

    MS. HOLMES: Mr. Scott, you referenced in your testimony a county groundwater regulatory scheme. Do you believe that that regulatory scheme, as you referred to it, is based on the county's determination of safe yield for the basin?

    MR. SCOTT: I'm not sure whether it's based on that or not.

    MS. HOLMES: And do you know whether or not there's some sort of overall limitation on extraction from the basin based on safe yield?

    MR. SCOTT: No, there's no -- there is no
MS. HOLMES: Are you aware of any environmental evaluation that the county has performed of the effect of pumping water from this well at 40 acre feet per year?

MR. SCOTT: No, I'm not.

MS. HOLMES: I want to ask you a couple of questions about your significance threshold and your testimony about facts, because I'm just a little bit confused.

I think I heard you say initially there was no physical effect on the groundwater basin of pumping water. Did I hear you correctly? Or if I didn't --

MR. SCOTT: Well, there's some level -- there will be some level of small depletion as a result of the pumping.

MS. HOLMES: But it's your testimony that that depletion is not a significant impact.

MR. SCOTT: That's correct.

MS. HOLMES: And when you're determining whether or not a project has a significant impact, what's your criteria?

MR. SCOTT: Well, the criteria would be the ability to impact adjacent wells and to adversely affect the water quality.

MS. HOLMES: Would you look at impacts to the
amount of water in storage?

MR. SCOTT: Yes, I would.

MS. HOLMES: Would you look at -- if you're making a determination of whether or not an impact is significant, would you take into account whether or not the basin was an overdraft; would that be a factor that you would consider?

MR. SCOTT: Well, it might be; but in the case of this well, that -- it's already permitted for -- well, it's allowed to remove 40 acre feet a year, whether it's IVS or Mr. Boyer sells it to others.

MS. HOLMES: So is your determination that it's not a significant effect based on the fact that it's already permitted?

MR. SCOTT: Well --

MS. HOLMES: Or, excuse me, registered.

MR. SCOTT: Registered. Partly. But as a result of our aquifer testing, we found that the extent of the point of depression during the period of temporary use would not extend to the nearest well.

MS. HOLMES: Do you know how many pumpers are in the basin?

MR. SCOTT: They're on the order of anywhere from probably 30 to 50. And that's just off the cuff, you know, based on a number of wells that we've identified
through a -- through a variety of sources and documents
that we've reviewed.

Now, the -- whether all of those wells are
currently in an operating capacity is not known.

MS. HOLMES: Do you know whether or not any of
those 30 to 50 wells themselves cause significant adverse
impacts?

MR. SCOTT: I don't know.

MS. HOLMES: Would you agree that water levels in
the basin can decline even if there are a series of small
individual projects that are causing the decline?

MR. SCOTT: I think that -- certainly. I mean,
water, you know, there's water that comes out of the basin
and there's water that recharges the basin. And there's
also water that can -- can move in an adjacent basin
through underflow.

MS. HOLMES: Right. I'm not talking about
recharge right now, I'm talking about basin balance.

You testified that this project -- you testified
that some people believe that the project -- that the
basin is in overdraft conditions.

MR. SCOTT: That's true.

MS. HOLMES: Do you believe that?

MR. SCOTT: You know, there are wells that
indicate a steady decline and there are others that show
increases in water levels.

    MS. HOLMES: What's the overall historic trend of groundwater levels in this basin?
    MR. SCOTT: In a majority of the wells, it's been downward.
    MS. HOLMES: And do any of these -- do any of these wells cause a significant adverse impact?
    MR. SCOTT: Well, all of them added together.
    MS. HOLMES: Thank you very much.
    Is it your testimony that overdraft in a basin need not be addressed unless the basin is faced with dewatering? Is that a point at which regulatory agencies should take action, and not before?
    MR. SCOTT: Well, I think the action is currently being taken in the case of this basin.
    MS. HOLMES: Are you referring to the county regulatory groundwater scheme that you were talking about earlier?
    MR. SCOTT: Well, in the restriction of the Boyer well to 40 acre feet a year, yes.
    MS. HOLMES: Okay. My question was more directed at the basin as a whole.
    Is it your testimony that regulatory agencies need not take action when a basin shows decline unless that decline threatens dewatering?
MR. SCOTT: I think that -- I think that -- yeah, I'd agree.

MS. HOLMES: But they don't need to do anything until dewatering is a threat?

MR. SCOTT: Oh, no. I mean, certainly you wouldn't want to get to the point of any kind of dewatering.

But the amount of water that this project is going to use is relatively small compared to the overall amount of water in storage in the basin.

MS. HOLMES: Thank you. Those are all my questions.

HEARING OFFICER RENAUD: All right. Questions by CURE?

CROSS-EXAMINATION

MS. MILES: You testified regarding the average -- I'm not sure if it was average actually, but acre feet per year a typical home and what you'd expect in the region.

MR. SCOTT: Right.

MS. MILES: And I just wondered if you had looked at -- actually, let me find the exhibit number.

There's an exhibit in the record now, 517, that states that there's a limit of 1.5 acre feet per dwelling in the Ocotillo/Nomirage community area. This is the
Ocotillo/Nomirage community area plan.

MR. SCOTT: I don't -- I don't remember seeing that.

MS. MILES: Okay. So is that consistent with your earlier testimony?

MR. SCOTT: Probably -- it depends to what degree these properties use water for irrigation. And I suspect, you know, being out in that vicinity, that very little water is used for irrigation. And I would suspect considerably less than a city urban lot where at least half of the water is used for irrigation. So I would think that that might be an overestimate.

MS. MILES: And also you testified to the number of -- was it the number of dwellings that you estimate are relying on this basin? 80 -- I'm sorry, I can't remember what --

MR. SCOTT: Oh, that are relying on this basin? I think that we talked about how many wells there are.

MS. MILES: Okay. I just wanted to -- also in this document, that there are 366 dwelling units in the Ocotillo/Nomirage community area. I was not sure if that was relevant to the number of wells or not, but I just thought that I wanted --

MR. SCOTT: Well, I suspect that people live there seasonally, and maybe there may be instances where
they bring their water with them.

MS. MILES: Are there any impacts associated with
the mitigation of offsetting use that you can imagine?

MR. SCOTT: I think in the grand scheme of things
it does preserve water that's present in the basin. I
mean, generally, I mean, you wouldn't look at it
necessarily from year to year. I think you would need to
look at it in a grander picture for its overall basin
health.

MS. MILES: So you wouldn't be able to find that
there are some benefits and some impacts, you'd say that
you could only look at the overall picture? I'm asking if
you could envision any impacts associated with that
mitigation proposal.

MR. SCOTT: I think that it would be a benefit,
certainly, that the applicant would pay Mr. Boyer not to
use his well for an equal volume of water.

MS. MILES: So you don't see that there could be
an impact associated with residential water use or
commercial water use or hampering development in the area
as a result of not allowing that water to be used in the
community?

MR. SCOTT: I wouldn't anticipate any.

MS. MILES: Okay. I have another question.

So -- where is it? Okay.
The July 14th letter from the Imperial County Planning Commission stating that the well is now registered. Is this the permit or what had been considered the permit for the Dan Boyer well? Or is there any other documents that are active permits for the well?

MR. SCOTT: I'm not aware of that July 14th document.

And what was your question again?

MS. MILES: I'm just wondering, so my understanding is this is the current permit or registration for the well --

MR. SCOTT: Yeah, the current registration, as I understand it.

MS. MILES: And are there any other permits for this well that are active?

MR. SCOTT: Not that I'm aware of.

MR. VAN PATTEN: The only thing that I'm aware of is that it's registered with the state.

MS. MILES: And have you provided that registration?

MR. SCOTT: The registration is the actual well I.D. number.

MS. MILES: And there's no other documentation?

MR. SCOTT: Not that I'm aware of.

MS. MILES: Okay. So there is no other permit
MR. SCOTT: Correct.

MS. MILES: Okay. Thank you.

No further questions at this time.

HEARING OFFICER RENAUD: I have a question of clarification.

When you referred to Exhibit 517, were you referring to page 4 where it refers to one acre foot per family of five?

MS. MILES: It looks to me like it --

HEARING OFFICER RENAUD: Or if not --

MS. MILES: Let's see. Okay. Looks to me like it's page 10 of the actual plan, but it's page 3 of the submission.

HEARING OFFICER RENAUD: All right. And page 10 is a lot of objectives, right?

MS. MILES: That's correct. So it's objective 5.10.

HEARING OFFICER RENAUD: Okay. Impose a limit of 1.5 acre feet of water per dwelling.

I just wanted to -- I wasn't sure where you were looking, and I looked on page 4 where it talks about current use, existing conditions, and trends, water, sewer, and there under D, water, sewer, second paragraph,
last sentence says an acre foot of water supplies a family
of five per year.

Does that -- does that affect your questioning
perhaps seeing that? Would you like to follow up with
that, because the committee's going to be looking at all
of these things?

MS. MILES: Well, I would -- I'm not sure what
the actual current usage is because this was a document
from 1994, but I just wanted to draw the attention of the
committee and the expert witness that there is a limit of
1.5 acre feet per year.

HEARING OFFICER RENAUD: All right. Thank you.
Thanks for that clarification.

Okay. Let's see, where were we? Okay.

Cross-examination by Budlong?

MR. SILVER: I just have a couple questions.

CROSS-EXAMINATION

MR. SILVER: Sir, with regard to your conclusion
that there not impacts on phreatophytes because of the
depths of the wells, did you survey for phreatophytic
vegetation at all in this area?

MR. SCOTT: I specifically have not, but there
doesn't appear to be any. And regardless, the depth to
groundwater is 125 feet, and from what I understand,
mesquite, for instance, roots don't extend down to that
MR. SILVER: And when you say from what you understand, are you referring -- did you yourself then look at a study on phreatophytes or consult with someone else as to the presence of phreatophytic vegetation?

MR. SCOTT: I consulted with the applicant's botanist.

MR. SILVER: And who is that?

MR. SCOTT: Michael Wood.

MR. SILVER: Thank you.

And did you perform any analysis with respect to the impacts that might occur if the various permitted wash uses, including that of U.S. Gypsum, occurred at the same time as pumping from the Boyer well?

MR. SCOTT: Through our evaluation and our aquifer testing, we found that our well would not affect any of the neighboring wells, and so that was -- that was where we completed our evaluation.

MR. SILVER: But did you perform any analysis with respect to the effects on the aquifer, if you will, of varying other permitted uses -- take, for example, something, I think, like 700 acre feet that have been allocated or granted to U.S. Gypsum for its operations -- in terms of simultaneity of use?
MR. SCOTT: Well, as I understand it, U.S. Gypsum is currently extracting water, and the results of our aquifer test would have been superimposed on that. So that's -- that would have been the extent of our analysis.

MR. SILVER: Did you in terms of that analysis have knowledge concerning the extent of those extractions at the time you made that survey?

MR. SCOTT: Well, the information isn't publicly available since well data is proprietary in the state of California. So we did not have that information.

All I know is that between 19- -- sometime in the 1990s, that on an annual basis U.S. Gypsum extracted amongst its three wells 350 acre feet a year, and that would have been about 72 gallons a minute if you assume it was pumped 365 days a year.

MR. SILVER: I have no questions.

HEARING OFFICER RENAUD: All right. CNPS?

MR. BELTRAN: No questions.

HEARING OFFICER RENAUD: Redirect? Follow up?

Thank you, Mr. Scott.

MR. SCOTT: You're welcome.

HEARING OFFICER RENAUD: All right. Let's talk to Mr. Boyer next.

Commissioner Byron, would like to --

COMMISSIONER BYRON: Mr. Boyer, this is
Commissioner Jeff Byron.

Are you still with us?

MR. BOYER: Yes, I am.

COMMISSIONER BYRON: Listen, I wanted to welcome you and thank you very much to our proceeding for joining our proceeding today and making yourself available on such short notice.

Let me just give you a brief introduction as to what we're doing here in hopes that that's helpful to you.

We understand, or we assume that you're doing business with the applicant. And Commissioner Eggert and I are two members of a five-panel commission that are looking into gathering all the evidence that we can get for this application for this project with regard to the environmental impact.

So we've taken a lot of evidence, a lot of testimony, not just today but over previous days. Some of that's been about water and many other issues. And you can just assume that this is one piece of a much bigger pie.

So we've got some parties here that are interested in asking some questions, and they were really interested in hearing from you. And we appreciate your being with us. I hope you understand all that and you'd be more than willing to answer some questions for us.
MR. BOYER: No problem.

COMMISSIONER BYRON: Okay. Thank you.

HEARING OFFICER RENAUD: All right. I think we need to have Mr. Boyer sworn first.

Mr. Boyer, the court reporter here is going to give you an oath, swear you in. And let me caution you or remind you just to speak right into your telephone so we can all hear you in this big room.

(Mr. Boyer sworn.)

THE REPORTER: Mr. Boyer, could you please state and spell your name for the record, and then just consider yourself sworn. Thank you.

MR. BOYER: My name is Dan Boyer, D-a-n B-o-y-e-r.

DIRECT EXAMINATION

MS. FOLEY GANNON: Good afternoon, Mr. Boyer. My name is Ella Foley Gannon, and I'm counsel to Tessera.

I want to thank you, first off, for joining us and making yourself available so quickly this afternoon.

We were discussing this morning some of the conditions that relate to water usage associated with your well, particularly focusing on residential uses.

Did you sign a declaration regarding the residential water uses -- and I'm sorry, I'm trying to find it -- which was submitted to Marc Van Patten? I'm
trying to find the date that you signed it.

Did you sign a declaration, Mr. Boyer,
regarding --

MR. BOYER: Yes, I did.

MS. FOLEY GANNON: -- residential uses associated
with your well?

MR. BOYER: Yes, I did.

MS. HOLMES: It's Exhibit 126.

MS. FOLEY GANNON: Exhibit 126. Thank you.

MS. HOLMES: Always want to be helpful.

MS. FOLEY GANNON: Just one minute, Mr. Boyer.

Excuse me.

Here it is. I found it.

So this was a declaration which was signed, it
looks like, on July 15th, 2010. Do you recall that
declaration, Mr. Boyer?

MR. BOYER: Yes, I do.

MS. FOLEY GANNON: And in that declaration you
state your knowledge about the residential users of this
well since you have owned it. Can you provide us with
your conclusions regarding the normal residential uses
served by your well since you have been the owner of that
well?

MR. BOYER: Yes. It's very minimal. The average
person that lives down in Painted Gorge are vacationers.
They have lots out there, some of them have no electricity, and they come in with very small containers, you know, anywhere from 50 gallons to 500 gallons. A couple of people have old trucks that they have that are a little bit bigger. The biggest one is a thousand-gallon truck.

But they very seldom come in for water. It's an occasional use. And I just provide it as a courtesy. It's something that, you know, I'm not really obligated to do, but I let people come in, and it's self-serve, so they come in and log in and put their name and how many gallons.

And we did the math, I sat down and calculated up an approximate use, you know; but again, it's seasonal. So like I say, the summer times are a lot less water use, and in the wintertime it's a few more people that camp, you know, on their property, come down and use it.

MS. FOLEY GANNON: I see. So I think one source of confusion for some of us when we're looking at this is we're thinking about residential use, you're thinking about usually like a home depending upon this well for its water supply.

MR. BOYER: There's a few homes that are in Painted Gorge that they use water. But some of them truck in their own water from other areas, you know, and they do
have other sources to get water. But, you know, the thing is it's very minimal. And I was real close to just, you know, not allowing them to come in to get water because it's more of a hassle than it's worth to me, but I'm still letting them come in to get water.

MS. FOLEY GANNON: So is there any residents or are their multiple residents in your area that rely upon your well for their normal domestic needs on a, you know, regular annual basis?

MR. BOYER: I'm sorry, could you repeat that again?

MS. FOLEY GANNON: Is there any resident or multiple residents who rely on your well for, really, for their basic water needs?

MR. BOYER: Yeah, there are a few people that do, but it's not a lot. You know, there's -- offhand, I know a few people that live out there year round, but most of them leave because of the heat.

MS. FOLEY GANNON: And to understand how you came up again with the half acre figure, you said you looked at the records of people -- I'm sorry, you said there's sort of like self logs that people write down when they take the water; is that correct?

MR. BOYER: Yeah. And the average income that I've had, based at two cents a gal, has been anywhere from
150 to $300 a month income, and that's based on two cents a gallon. So that's how I came up with the figure. And it's an approximate figure, but I actually put it a little higher than I thought it was --

MS. FOLEY GANNON: Okay. That's very helpful.
MR. BOYER: -- just to be on the safe side.
MS. FOLEY GANNON: All right. Thank you very much, Mr. Boyer. That's all the questions I have.

HEARING OFFICER RENAUD: All right. Ms. Holmes?

CROSS-EXAMINATION

MS. HOLMES: Good afternoon, Mr. Boyer. My name is Caryn Holmes, and I'm with the California Energy Commission staff.

Do you know how many people that you sell water to for residential use?

MR. BOYER: Well, there's three that are pretty consistent; but on and off, I think there's a total of maybe, you know, 12. Like I say, some of them I haven't seen for five, six months.

But when I first bought the place, I put down a list, anybody that's purchasing water here, to put their name and phone number down so that I, you know, had a contact with them. And I think that list consists of about 12 people all together. But there's only been a few people that come in and buy it consistently.
MS. HOLMES: And so when you say there's three that buy it consistently, is it your thinking that those people are probably at Painted Gorge year round or more or less there year round?

MR. BOYER: Yeah. And I do know them personally. They're just people that are die hards, and they stay out there all summer.

MS. HOLMES: I guess they are.

Let me -- I'd like to turn for a moment to the registration that you have.

First of all, when did you purchase the well, or purchase the property on which the well is found, located?

MR. BOYER: In August it will be two years.

MS. HOLMES: Okay. So this is based on the two years since you assumed ownership of the parcel.

MR. BOYER: Yes.

MS. HOLMES: Did the registration that is associated with the well, did it give you the right to pump water before the county approved the registration?

MR. BOYER: Yes. Actually, you know, we've been continually pumping, you know, we agreed with the county just to be able to satisfy them, but we were grandfathered in before the county requirements were there. So, you know, we went ahead and put in a driveway and the few things that they asked to do to clean the place up, which,
you know, it needed to be cleaned up; but the county was
really wanting that done, and we got it done.

MS. HOLMES: When you say "grandfathered," do you
mean that the registration was grandfathered, that it went
with the well?

MR. BOYER: Well, the state well license was
there, and it's been operating, from what I know, over 70
years.

MS. HOLMES: Right. I'm talking about the well
registration that the county -- that the county issued.

Were you saying that it was -- did it go with the
property in essence, you became subject to those terms and
conditions because you purchased the property with the
well on it?

MR. BOYER: Well, you know, the previous owner
got a letter from the county, and they were asking them to
do those things, to pave the driveway and put a meter on
and comply with a limit of 40 acre feet. It had quite a
bit bigger historic use than that, but they were actually
limiting -- trying to, you know, limit the well to 40 acre
feet, which, you know, what we came up with, that's the
paperwork I had seen from the county.

So we went ahead and complied and put the meter
in and did the things the county required. And that's,
you know, that's why they gave us, you know, the
registration.

    MS. HOLMES: Okay. Thank you.

Those are all my questions.

HEARING OFFICER RENAUD: All right. Ms. Miles?

CROSS-EXAMINATION

MS. MILES: Hello, Mr. Boyer. Thanks for making yourself available for the hearing today.

My name is Loulena Miles, and I'm representing California Unions for Reliable Energy, an intervenor in this proceeding. And I just have a couple questions for you.

You say that the usage goes up in the summer -- down in the summer and up in the winter because people, unless they're a die hard, they probably don't stay there all year; is that correct?

    MR. BOYER: Yes.

    MS. MILES: And what would be the variation be between summer and winter usage?

    MR. BOYER: Well, it's not a whole lot; but from what I gathered, I kind of sat down and did a brief summary on it, and there's probably about eight more people to come. But when they come, they might only come for two weeks, so it's not something that they stay all winter. They have their vacation homes out there, so they come out and ride their bikes and dune buggies. And they
have these individual little compounds, you know, I
wouldn't even call them homes, it's more like campsites.
The majority of them don't even have power. So they come
out and use it as, you know, more of a camping thing.

MS. MILES: And can you estimate how much your
income changes in the two seasons?

MR. BOYER: Well, you know, sometimes in the
summer it might be as low as a hundred dollars a month,
and in the winter months it might go up to, 3-, 4-, 500;
it just depends on how many, you know, times they come in.
It's really hard to average because it's -- like I say,
it's seasonal. You know, most of them come in, you know,
for a few weeks or two weeks. It's just -- you know, and
some of them don't even come -- you know, so people I seen
in the first year didn't even come back, you know, this
last winter. So, you know, it's whether or not they can
afford to go camping.

MS. MILES: Right. Have you signed a contract
with Tessera for supplying water to the project?

MR. BOYER: Yes, I did.

MS. MILES: And is that different than your
intent to serve letter?

MR. BOYER: I'm sorry, could you repeat that?

MS. MILES: In this proceeding, I have seen a
document that was, I believe it was called an intent to
serve or will serve letter that was signed by you, and I wondered if there was an additional contract that was signed besides that.

MR. BOYER: You know, I don't remember one at this point.

MS. MILES: Okay. So --

MR. BOYER: There could have -- you know, I'm at a job site right now out here in about 115 degrees, so --

MS. MILES: I'm sorry.

MR. BOYER: -- for me to recall everything, it's kind of hard right now.

MS. MILES: I hope you're in the shade.

MR. BOYER: Yeah, we are.

MS. MILES: Good. And I have one question just because you're -- I assume, do you live out there year round?

MR. BOYER: Yes, I do.

MS. MILES: And so you're probably familiar with the geography around your project site and over the water basin?

MR. BOYER: Yes.

MS. MILES: So are there areas where the elevation changes relative -- I mean, you know, the elevation changes quite a bit I guess from where the well is located at your Westwind parcel in the general
vicinity, like say, within a mile radius?

MR. BOYER: Yeah. Yes. I mean, it basically starts out at about 400, 450 feet elevation at my place and drops down to 20 feet below sea level in El Centro. It's just a slow drop.

MS. MILES: Right. I understand that there's an area where you have sort of a valley, and I believe that's where Coyote Wash is, and that the elevation is much lower there, and it's fairly close to your parcel?

MR. BOYER: Well, I'm not familiar with it, but --

MS. MILES: Well, I'm just asking because I'm trying to get established whether the ground level is the same relative to the groundwater level in different areas around your parcel.

MR. BOYER: Yeah -- I don't really understand the question.

MS. MILES: Yeah, I'm sorry, I know you're not a groundwater expert, or perhaps you are, but you have not been brought in to answer questions like that. So I was just wondering about your knowledge of elevation.

Thank you for entertaining my question.

MR. BOYER: Okay.

HEARING OFFICER RENAUD: All right. Any questions --
COMMISSIONER BYRON: If I may, Mr. Renaud, enough entertainment, can we move forward? We need to get some work done here today.

HEARING OFFICER RENAUD: Sure.

Questioning by Budlong?

MR. SILVER: No questions.

HEARING OFFICER RENAUD: CNPS?

MR. BELTRAN: No questions.

HEARING OFFICER RENAUD: Redirect?

MS. FOLEY GANNON: No questions.

HEARING OFFICER RENAUD: Committee? Any?

COMMISSIONER BYRON: No questions.

HEARING OFFICER RENAUD: All right. Thank you.

COMMISSIONER BYRON: Mr. Boyer, I'd like to thank you very much, and we really, it's inappropriate to apologize for some of the questions and the areas that we went, they might seem kind of silly to you, but we're trying to gather information here, and we really appreciate your being available to us today. Thank you.

MR. BOYER: All right. Thank you. So that's it?

COMMISSIONER BYRON: Yes, sir.

MR. BOYER: Okay. Thank you very much.

HEARING OFFICER RENAUD: All right. Applicant, call your -- do you have another witness?

MS. FOLEY GANNON: I think that we are ready to
submit on the groundwater and the water use issues.

There's two points of clarification I would like to make however, before I do that. One is that I believe I forgot to ask for an exhibit number for the rebuttal testimony that was submitted by Robert Scott on July 20th. That would be Exhibit 140. And I would like to ask that that's moved into the record.

HEARING OFFICER RENAUD: Any objection from parties?

That will be admitted then. Thank you.

(Applicant's Exhibit 140 was marked for identification and received into evidence.)

MS. FOLEY GANNON: And the one point of clarification, additional point of clarification, and it is -- we don't need to go into it in detail, but it is -- I'd like to have -- I will limit to the two or three questions to Mr. Van Patten about one change of condition that we are asking for related to soils and water, and this is specifically related to soils and water -- let me find it. Sorry.

We have some discussion of soils and water 2, but I think that Mr. Van Patten's testimony can stand on its own as it's written. But in soils and water 9, which is a condition relating to a limitation on use of the -- any water from the Boyer well outside of the basin, I would
just like to ask Mr. Van Patten a few questions about this.

DIRECT EXAMINATION

MS. FOLEY GANNON: Mr. Van Patten, with regards to soil and water 9, can you please tell us what impact this would have on the project, limiting the use to the basin?

MS. HOLMES: Can I ask -- I apologize for interrupting. I think it's soil and water 11.

MS. FOLEY GANNON: Soil and water 11? Am I looking at the wrong one?

MR. VAN PATTEN: Yes, it's 11.

MS. FOLEY GANNON: You're so good with exhibit numbers and things.

MS. HOLMES: I appreciate when I can get it.

MS. FOLEY GANNON: Okay. Substance same, soil and water 11.

MR. VAN PATTEN: Yes, it would restrict us from using, unless permitted by the county, the four percent, three, four percent of water that we would need to use for the linears for the transmission line and the water line. And given the current well registration with the county that Boyer holds, which allows him extraction and exportation, we believe that the condition should be changed to allow for this, if permitted by the county,
which under his current registration, it does.

MS. FOLEY GANNON: So have you had a discussion
with anyone from the county about this condition?

MR. VAN PATTEN: I have talked to the county
about it, and I have asked them in respect of the
condition, what I asked the county was, would you permit
an exportation from the Boyer well. And the answer was
he's already permitted under the well registration to
export.

MS. FOLEY GANNON: So the change that I
understand that we're asking, that you're requesting the
staff to make is to say that the permit is obtained or
evidence from the county that no permit is required to
allow for either one of these eventualities; is that
correct?

MR. VAN PATTEN: That's correct.

MS. FOLEY GANNON: Thank you.

I offer if there's any redirect on this issue, or
rebuttal, sorry.

HEARING OFFICER RENAUD: Ms. Holmes, anything?

RECROSS-EXAMINATION

MS. HOLMES: Can you tell me who you talked to at
the county?

MR. VAN PATTEN: Mr. Jim Minnick.

MS. HOLMES: Thank you.
HEARING OFFICER RENAUD: Questioning by CURE?

RE CROSS-EXAMINATION

MS. MILES: So just to clarify, there's nothing in writing though from the county stating that no permit is required for exportation.

MR. VAN PATTEN: There is a well registration that Mr. Boyer holds that the county referred me to that mentions that he can export. Other than that, there's nothing in writing, for instance, specifically from the county to me saying that he can.

MS. MILES: All right. Has the county done any analysis regarding whether it's appropriate to provide an exportation permit for this project?

MR. VAN PATTEN: I'm not familiar with anything, in that my intent to call Mr. Jim Minnick at the county was to determine if I could comply with this condition; and he referred me to the Boyer well registration and indicating to me that he was already permitted to export up to 40 acre feet per year.

MS. MILES: So this is -- the registration, that's not a permit that we have.

Thank you. No further questions.

HEARING OFFICER RENAUD: Okay. Budlong, questions?

MR. SILVER: No.
HEARING OFFICER RENAUD: All right. CNPS?
MR. BELTRAN: No.
HEARING OFFICER RENAUD: All right. Thank you.
Ready for your next witness?
MS. FOLEY GANNON: Do we want to move on now --
we're done with water supply and groundwater. Do we want
to take witnesses from the other parties on those issues,
or do we want to move --
HEARING OFFICER RENAUD: Ms. White would like to
ask some questions; I'm sorry.
MS. WHITE: Sorry. Just one clarification.
Could you define what is meant by "export" and
what use is allowed under export as the well is
registered?
MR. VAN PATTEN: Are you asking me?
MS. WHITE: Yes.
MR. VAN PATTEN: I don't know the definition of
"export" under that specific county regulation, well
registration or what have you. All I have is what I just
testified to, which is when I asked the county what could
I do to obtain an export permit, as was required by the
condition that the CEC imposed, would they be willing to
give me one, they pointed me to the Boyer well
registration, which implied to me that that was the permit
by the county, and that if I wanted something in writing,
they could give me something, but it would not be by this
Monday.

MS. WHITE: So what do you understand the term of
"export" to be that staff has directed you to --

MR. VAN PATTEN: That I could export out of the
Coyote Wells/Ocotillo basin up to 40 acre feet per year,
from that well, that he had the right to sell to folks
that would export outside of the Ocotillo/Coyote Wells
basin.

MS. WHITE: Okay. Thank you. I appreciate the
clarification.

MS. MILES: Can I ask one clarification?
With regard to the Ocotillo Coyote Wells basin,
when you refer to that, are you referring to the sole
source aquifer?

MR. VAN PATTEN: I believe so, yes.

MS. MILES: Thank you.

HEARING OFFICER RENAUD: And just for
clarification, referring to the registration which has all
these specific terms with the T numbers, number 2 limits
it to 40 acre feet for groundwater extraction and
exportation. That might be -- do you think that might be
what he was referring to?

MR. VAN PATTEN: That is specifically what he
referred me to, was condition T-2.
HEARING OFFICER RENAUD: Thank you. All right. Are we done?

MS. FOLEY GANNON: Yeah. So that's our witnesses on groundwater need and water usage, so if we want to have the other parties have witnesses on this subject then --

HEARING OFFICER RENAUD: Good. That's what we'll go to.

Staff, do you have witnesses to call?

MS. HOLMES: I do.

HEARING OFFICER RENAUD: All right.

MS. HOLMES: On water supplies, staff witnesses are Christopher Dennis, John Fio, and Steven Deverel.

COMMISSIONER BYRON: Ms. Holmes, I don't think they can hear you on the phone.

MS. HOLMES: Staff's witnesses on water supply are Christopher Dennis, John Fio, and Steve Deverel.

(Christopher Dennis, John Fio, and Steven Deverel were sworn.)

THE REPORTER: Independently state and spell your name for the record.

MR. DENNIS: Christopher Dennis, C-h-r-i-s-t-o-p-h-e-r D-e-n-n-i-s.

MR. FIO: John Fio, J-o-h-n F-i-o.

MR. DEVEREL: Steven Deverel, S-t-e-v-e-n D-e-v-e-r-e-l.
DIRECT EXAMINATION

MS. HOLMES: Did you gentlemen prepare the water supply section of the water resources section of Exhibit 302?

MR. FIO: Yes.

MR. DENNIS: Yes.

MR. DEVEREL: Yes.

MS. HOLMES: And were statements of your qualifications included in Exhibit 302?

MR. FIO: Yes.

MR. DEVEREL: Yes.

MS. HOLMES: I’m going to direct these things to Mr. Dennis to hopefully go a little faster.

Mr. Dennis, do you have some changes to your pre-filed testimony?

MR. DENNIS: Yes, I do.

MS. HOLMES: Could you please begin with the change on page C.7-1 in the second paragraph?

MR. DENNIS: Yes. We failed to adequately identify a second significant impact associated with water quality and sedimentation.

MS. HOLMES: Thank you.

And that impact is, in fact, analyzed in the analysis, is it not, it just was omitted from the summary.

MR. DENNIS: Yes.
MS. HOLMES: Thank you.

Could you please move on to the next correction?

HEARING OFFICER RENAUD: Please give us page numbers as you do this.

MR. DENNIS: Okay. I will.

On page C.7-46 we would like to remove the column in Table 8 called "Well I.D."

MS. HOLMES: Thank you.

We'll explain the significance of that in a moment.

Could you please move on to the next change?

MR. DENNIS: Page C.7-82. We would like to remove the words, quote, "and approved" from condition of certification soil and water 5.

MS. HOLMES: Thank you.

And are there any other changes?

MR. DENNIS: Yes. We would, on page C.7-87, we'd like to eliminate condition of certification 12; however, we want to make sure that the Dan Boyer well is not used as a drinking water supply. To do this, we'd like to have time to amend construction and operation water supply conditions of certification to ensure compliance with Title 22 for drinking water supply that's used.

MS. HOLMES: Thank you.

And staff plans to submit those as soon as we're
done testifying and have the opportunity to write them.

MS. FOLEY GANNON: I'm sorry, you said you were going to amend which condition?

MS. HOLMES: Why don't you explain it, Mr. Dennis.

MR. DENNIS: Okay. These are conditions for construction and operation water supply. I think those are conditions 4 and 9.

MS. HOLMES: This is intended to take the place of soil and water 12, trying to achieve the same intent. You commented on soil and water 12. He can go into more detail if it's necessary.

MS. FOLEY GANNON: Okay. I just wanted to make sure I understood. Thank you.

MR. DENNIS: And then I believe Mr. Lohan's two additional changes.

MS. HOLMES: Go ahead. We'll get to those later.

MR. DENNIS: Oh, sorry.

MS. HOLMES: With those changes, are the facts in your testimony true and correct to the best of your knowledge?

MR. DENNIS: Yes, they are.

MS. HOLMES: And do the opinions represent your best professional judgment? I'm asking you as a proxy for all three of them?
MR. DENNIS: Yes, they do.

MS. HOLMES: Thank you.

Mr. Dennis, would you please provide a brief summary of the staff's conclusions with respect to water supply issues and water -- excuse me, just water supply issues?

MR. DENNIS: Staff concluded that unmitigable impacts would occur to groundwater storage in the Ocotillo/Coyote Wells basin. This basin is in a state of ongoing overdraft, and the approximate use of this groundwater would exacerbate this condition. With the exception of this unmitigable impact, the proposed mitigation measures -- the proposed mitigation measures to reduce identified impacts would reduce impacts that are less than significant.

In addition, the proposed project would conform to applicable water LORS.

The proposed use of air cooled radiators fitted on each engine for heat rejection would substantially reduce water use and is consistent with energy commission water policy. The project's primary water use would be for routine mirror washing and dust suppression. Existing well yields would not be significantly impacted by the proposed project's extraction of groundwater from the Dan Boyer well. There are no reported springs in the area
of the Dan Boyer well, and the present day water table is too deep to support phreatophytic vegetation.

Increased pumping from the basin from the Dan Boyer well can increase upward flow, upflux of relatively poor groundwater from underlying water-bearing zones into overlying water-bearing zones that are pumped by most wells. This upflux is estimated to be at most 0.4 percent of the minimum affected aquifer volume and, therefore, is considered insignificant. This finding is consistent with water quality date from this well indicating little to no water quality change over the past 35 years.

The Dan Boyer well has only recently come into compliance with its well registration requirements allowing legal pumping for the first time from this well in the last several years. The Dan Boyer well is permitted to extract up to 40 acre feet per year. A portion of this water supports existing residential demand, which staff conservatively estimates to be six acre feet per year. This is based upon a doubling of the 2.9 acre feet sold in 1993, a year in which there appeared to be little to no commercial water sales.

Staff believes it's important to protect residential water users who may have few water supply options. This is consistent with, as is mentioned
earlier, the May 27th, 2010, Imperial County letter, which strongly recommends the energy commission take into account historical residential use when licensing this project.

Staff also analyzed potential impacts associated with the use of recycled water from the expansion of the Seeley Wastewater Treatment Plant if it becomes available sometime during the life of the project.

Staff concluded that use of this water would not cause significant unmitigable impacts to soil and water resources and is consistent with applicable soil and water LORS.

We just recently went over this, but approximately four percent of the project overlies the Imperial Valley Groundwater Basin. The remaining 96 percent is in the Ocotillo/Coyote Wells groundwater basin. This means about four percent of the water purchased from the Dan Boyer well would be exported to the Imperial Valley Groundwater Basin, something that we believe is -- appears is prohibited, what is prohibited under Imperial County Land Use Ordinance Number 9.

Now, looking at the permit, it specifically says that it's allowed for export from the Dan Boyer premises in Ocotillo, not out of the basin. So I think there's some confusion there.
MS. HOLMES: And is exportation also limited to tanker trucks in that particular condition?

MR. DENNIS: I would imagine so. That was our reading of it anyway.

MS. HOLMES: That would be condition T-2 of the groundwater well registration?

MR. DENNIS: And lastly, we looked at alternatives; and water resources would not be affected by the alternatives we analyzed.

MS. HOLMES: Thank you. My first question in follow up to that, is to Mr. Fio.

Could you please explain the effect and the reason associated with removing the well I.D. column in Table 8 on page C.7-46?

MR. FIO: Yes. This is John Fio. The reason is because the well numbering in Table 8 has no bearing or has no relationship with Figures 9, and with Tables 9A and 9B and Figures 12 and 13. This is a -- using these arbitrary numbers is kind of a standard practice when we're using well information that's given to us from the state that is confidential. And so we replace the well I.D. numbers with an arbitrary number. And we were using this table during a -- you know, during the working portions of developing our analysis, and we never deleted it. And I think there was
some confusion by CURE when they were doing their analysis in that Figures 12 and 13 have I.D. numbers on some wells, but those I.D. numbers have no relationship to this table here. In fact, it changes the conclusions that they came to.

For example, they looked at it, at wells number 1 through 9 in our figures and thought they were wells 1 through 9 in this table, and came up with a set of conclusions using water levels from the 70s and 80s, when in fact, the wells in -- in the figures and in the tables, the wells 1 through 9 actually correspond with numbers 34 through 37 and 39 through 44 in Table 8. And those are the wells that have the current water level measurements.

MS. HOLMES: Thank you.

Did you read CURE's testimony about the water quality implications of a potential upflux caused by project pumping?

MR. FIO: Yes.

MS. HOLMES: Do you have a response to that?

MR. FIO: Yes. Basically in our analysis we cited the impact based on a volumetric basis, which indicated that under worst-case conditions, you could get an upflux of .4 percent of the volume, which we calculated from the minimal impacted area. And this translates to a higher percentage in terms of water quality. It's
basically about four and a half percent. But that four and a half percent is still insignificant, as was testified earlier today, that basically over the past 35 years there appears to be no water quality change from a well that has been pumping and based on, you know, other records, probably was pumping a lot higher than what is planned in this situation.

To put it in perspective, if you used the numbers that CURE presented, being 300 milligrams per liter for the upper aquifer and 4,000 milligrams per liter from the lower aquifer, and you have complete mixing within the water column, you're looking at a change in TDS from 300 milligrams per liter to 316 milligrams per liter. And like I said earlier, the actually observed -- the actual observed data indicated that there's essentially been no change in TDS for 35 years.

MS. HOLMES: Thank you.

And do you have a specific response to CURE's recommendation that additional modeling be conducted?

MR. FIO: Yes. It's been recommended that we utilize a numerical groundwater flow model that was developed for the U.S. Gypsum EIR. We did utilize results from that model as part of our analysis in terms of water volumes or fluxes, but what's been recommended is to use that modeling and to expand its capabilities into solute
transport analysis.

And from our perspective, that would be an excessive effort. And the reasons are is that our entire analysis was conducted in an extremely conservative fashion, trying to isolate the worst-case scenario. For one, we assume that pumping occurred over the entire life of the project, over 43 years for construction and operation, when it's been stated that this water supply, this groundwater supply is a temporary supply. So we looked at the worst case in terms of the volume of water that would be pumped.

We also utilized pumping volumes that were higher than what is being planned. For example, we simulated 51.1 acre feet per year for construction, which is actually higher than the total amount that the well is allowed to pump.

We also conducted our analyses to look at the effects of natural uncertainty by varying the various aquifer parameters to look at how they impact the significance of the effects.

And then finally what we did is we looked at the potential area that was impacted -- that could be impacted from this upflux caused by pumping the Dan Boyer well, and we looked at the minimum area of all of our analysis.

And so you work in all of those conservative
assumptions and look at this worst-case scenario, and there still is not a significant impact. We don't see a reason to develop a new tool that at the get-go we really don't know whether it would be successfully calibrated to try to identify an impact where our conservative analysis indicates there is none.

MS. HOLMES: Thank you.

Mr. Dennis, have you read CURE's testimony regarding cumulative impacts?

MR. DENNIS: Yes, I have.

MS. HOLMES: And did staff, in fact, take the gypsum facility into account in its cumulative impacts analysis?

MR. DENNIS: Yes, it's part of the background.

MS. HOLMES: And are you aware of other facilities that also could have potential cumulative impacts associated with groundwater pumping?

MR. DENNIS: Yes.

MS. HOLMES: Did you recently become aware of another one?

MR. DENNIS: Yes, the Wind Zero project.

MS. HOLMES: Can you just in one or two sentences summarize what that project is and when you became aware of it?

MR. DENNIS: I became aware of it just a few days
ago. This project is both a military training facility and a race course facility that's going to use up to, I think, 65 acre feet of water, which will exacerbate the water impacts.

MS. HOLMES: So that was going to be my next question.

What would the results be of staff's cumulative impact, if that had been included?

MR. DENNIS: It would exacerbate demand on the aquifer.

MS. HOLMES: Thank you.

We heard some discussion earlier this afternoon about the applicant's mitigation proposal to purchase water in the future and have it remain in the aquifer and not be pumped.

Can you please summarize what staff's response is to that particular proposal?

MR. DENNIS: Well, we don't think it will be successful mitigation. The commission has always required mitigation to overdrafted groundwater basin. It either consists of adding water to the basin or reducing demand. This mitigation would do neither.

MS. HOLMES: Is what you're saying that the staff's position is, that the groundwater basin should remain unchanged as a result of the project?
MR. DENNIS: Yes.

MS. HOLMES: Thank you.

And I think we've been through the exporting water. It appears that we have some confusion about that, which we will brief or get more information on.

I guess I have a question.

Does the applicant want the staff to walk through the proposed changes that were contained in your testimony, or do you want to do that on cross-examination?

It makes no difference to me.

MS. FOLEY GANNON: Go ahead. I'm talk for a long time.

MS. HOLMES: All right. I have to find them first.

MS. FOLEY GANNON: That was why I wanted you to do it first, so you could find them.

MS. HOLMES: So I could say I don't know where they are? It worked.

I believe it's Exhibit 122 or 3 -- 122. And they begin on page 10 of Exhibit 122. And I can perhaps, again, cut this a little bit short.

Mr. Dennis, in soil and water 2 in the first paragraph, other than the reduction in the limitation on water use -- I'm going to have to start over again because I see there are additional changes.
Could you walk through the staff's response to the changes in the applicant's proposed changes in soil and water 2?

MR. DENNIS: Yes. There are a number of changes. The first change -- if we just walk through them, they're all okay until we get down to the numerical volume of water. This will be true for all the conditions of certification.

We believe the number should be 34 acre feet per year rather than 39.5.

Secondly, there's, in the first paragraph, last sentence, there's the word "any." We believe the word should be "all."

And the proposed mitigation --

MS. HOLMES: Staff does not approve of the proposed mitigation.

MR. DENNIS: Yes.

And again, for verification, in the second paragraph there's the underlined words that were inserted, "of sales to Imperial Valley Solar." We believe this should be "all."

MS. HOLMES: Thank you. Moving on to soil and water 9.

MR. DENNIS: Again, we have a correction to the amount of water, the volume of water. We believe it
should be 34 rather than 39.5. That will be true on the
same for the verification.

    MS. HOLMES: Thank you. And with respect to soil
and water 11, I think that the staff would prefer to try
to discuss this with Mr. Minnick. We had tried to get
clarification on this point earlier, did not get the
clarification that Mr. Van Patten is referring to to
staff's way of thinking that condition T-2 is somewhat
ambiguous, and we would prefer to hold off on that until
we've had a chance to try to confirm what the story is.

    HEARING OFFICER RENAUD: When are you thinking of
doing that?

    MS. HOLMES: As soon as the witnesses are through
testifying.

    HEARING OFFICER RENAUD: All right. Thank you.

    MS. HOLMES: And did you testify earlier,
Mr. Dennis, with respect to preparing a revision to
conditions to reflect the concerns that staff has about
potable water use that's currently in soil and water 12?

    MR. DENNIS: Yes, I did.

    MS. HOLMES: Okay. Thank you.

    I think that's it with that. The witnesses are
available for cross-examination.

    HEARING OFFICER RENAUD: Let me ask first about
what you just said. I believe it was Mr. Minnick?
MS. HOLMES: Yes.

HEARING OFFICER RENAUD: With respect to the testimony about the conditions of the registration?

MS. HOLMES: Correct.

HEARING OFFICER RENAUD: Your thought is what? You or Mr. Meyer or somebody will, what, phone him and ask him?

MS. HOLMES: Right. It's my understanding that the -- it appears that the plain language of the condition does limit exportation to tanker trucks off the property, and we certainly would like the county's help in interpreting that. At this point --

HEARING OFFICER RENAUD: What isn't clear about that? I'm just trying to save you some time.

MS. HOLMES: Well, I think --

HEARING OFFICER RENAUD: If you want to export, you have to put it in a tanker truck. I don't see that it's any more complicated --

MS. HOLMES: Well, I think that there's a difference between off of the premises and out of the groundwater basin. I mean, the whole purpose, as I understand it, of much of the county's regulatory requirements go to ensuring the water that's pumped is used within the basin and not exported.

HEARING OFFICER RENAUD: All right. Well, let me
suggest then that rather than having a private discussion
with this person, that if you can reach him by phone, that
he appear here.

MS. HOLMES: That would be fine.

HEARING OFFICER RENAUD: We'd prefer that. Thank
you.

All right. It's somebody's turn for
cross-examination.

Applicant?

MS. FOLEY GANNON: I guess that's to me. Thank
you.

CROSS-EXAMINATION

MS. FOLEY GANNON: Mr. Dennis, you were giving us
sort of the overall view of the staff's assessment. And
just to be clear, as you summarize that looking at the
specific physical environmental effects of withdrawing
40 acre feet from the Boyer well, you didn't see any signs
of that in terms of impacts like influx or vegetation or
drawdown to other wells; is that correct? Or is that
not -- I'm sorry, I may be confused about who I'm supposed
to be speaking to about this, but --

MR. DENNIS: Sorry.

MS. HOLMES: We'll help.

MS. FOLEY GANNON: But whoever I'm speaking to,
answer, whoever feels most appropriate.
MR. FIO: Okay. This is John Fio.
Can you repeat it please, the question, please?
MS. FOLEY GANNON: So in looking at the staff assessment, supplemental staff assessment, you evaluated the potential impacts associated -- the actual physical environmental impacts associated with pumping from the Boyer well at 40 acre feet. It sounded like the factors you were looking at were similar to those that Mr. Scott testified to earlier, vegetation, drawdown, other wells, potential for influx from toxins; is that correct?
MR. FIO: Yes, and decrease in storage.
MS. FOLEY GANNON: And decrease in storage.
And based on those physical effects, you can --
what was your conclusion?
MR. FIO: We concluded that there was no significant impact in terms of well interferences, which would be the drawdowns that you were referring to. We concluded that there was no significant impact on water quality due to upflux. And we concluded that because this is an overdrafted basin and it will consume groundwater and exasperate the overdraft situation, and there is no means to mitigate it in terms of bringing in an imported supply, conservation, or basically turning wells off, that it would be a significant impact.
MS. FOLEY GANNON: So is it your -- just to
understand the conclusion, because it was somewhat unclear
to me looking at the staff assessment what the standards
of significance were that you were using, I'm assuming
that you're relying on Appendix G to the CEQA guidelines
as your basic standards for this area, but it wasn't
entirely clear to me.

So is -- would you conclude then, based on your
analysis or the way you would approach it, that taking one
acre feet from an overdraft basin on an average year
would -- because it would in some way potentially lessen
what's in the basin, would that be a significant
environmental impact?

MR. FIO: It's a significant environmental impact
because of the fact that this is a drinking water supply
and it's been designated as a sole source aquifer, so
basically people rely only on this groundwater system for
their water supply.

It's also significant from the standpoint that we
are in a desert basin, and the consumption of water, it's
not a temporary thing, it's consumed and it's gone.

And then I also would think that there are, what
I would term "policy issues" in terms of management that I
would not be the one to answer, but I think those come
into play as well.

MS. FOLEY GANNON: So I guess so I can understand
though, so it would be one acre foot of use would be
significant in your mind, I mean --

MR. FIO: In this situation.

MS. FOLEY GANNON: -- given the situation.

MR. FIO: In this situation.

MS. FOLEY GANNON: So all of the users in this basin are essentially having a significant adverse impact on this basin; every existing user, any new user, anybody who's going to come in to that basin, just given the particular parameters and the status of this basin, that's just going to be an adverse effect.

MR. FIO: Collectively, if the consumption is greater than the recharge, then they're collectively having an impact on the basin.

MS. FOLEY GANNON: Okay. I just wanted to understand. These are difficult subjects, and as you said, there are many policy issues involved, but it is a difficult subject.

In terms of the mitigation that has been proposed -- first, I'm sorry, before we get to the mitigation, I guess given your conclusion that if you're just taking one acre foot from this particular basin, the fact that this is a temporary use, if this was a use that was going to be limited to, say, one year or two years, would that affect your analysis or your conclusion?
MR. FIO: It would alter the volume of depletion, but it wouldn't change the basis for my conclusions. It would still be a depletion. As you said, one acre foot.

MS. FOLEY GANNON: So, right, one acre foot, in your view one acre foot is a significant and unmitigable impact, then this would have to qualify for that.

In terms of potential mitigation -- I just want to make sure I understand. So if the Boyer well would be selling 40 acre feet a year every year, and the applicant was able to -- again, let's just for purposes of discussion so I can understand how you would view this, let's say that the Imperial Valley Solar Project used the 39.5 acre feet, or we can get to that discussion about what that number should be, but we might as well use my number since I'm asking the question, 39.5 acre feet a year for a year, and then the following year they purchased the amount of water that would have been used by somebody else and left it in the basin, or they purchased it and then they put it back in the basin, so that in the end of day they're replacing the water that would have been used by somebody else to make up for the water that they used, you don't think that would be an effective mitigation measure?

MR. FIO: I think based on what I've read, I believe somewhere there is a statement that Dan Boyer
would sell 40 acre feet a year regardless of whether this project purchased the water.

MS. FOLEY GANNON: Uh-huh.

MR. FIO: So that indicates to me that there's a demand for that water. By the solar power plant purchasing the water, that demand does not go away. It has to come from somewhere else in the basin. And so with that -- based on that assumption, you're consuming water, and by -- by -- to say it simply, you're not creating new water by delaying the pumping, because the background demand is still there and your demand is a temporary increase.

MS. FOLEY GANNON: I'm not sure that I see the basis for saying that the water -- the alternative -- the demand would be satisfied by somewhere in the basin. One does not seem to be equated with the other to me. That would seem to be dependent upon facts which I haven't seen which says that there are all of these supplies available out there in the basin that somebody could go and draw upon and is going to be able to draw upon, and, in fact, is going to have access to.

I mean, based upon the applicant's experience of trying to find water in this area, that doesn't seem to necessarily be a truism. So I --

MS. HOLMES: Can I ask for clarification then of
the hypothetical?

Is the hypothetical that if the Boyer well is currently selling 40 acre feet a year, which we have not heard that it is, but if the hypothetical were to be selling 40 acre feet of water per year and that the result of the project purchasing the water meant that the other demand went away, what would the effect be of the mitigation?

Is that the hypothetical?

MS. FOLEY GANNON: I'm not saying that the other demand goes away, I'm just saying that I don't think you should assume that the other demand is satisfied by the basin.

MS. HOLMES: It's your hypothetical; we need to know what the facts are.

MS. FOLEY GANNON: Well, I'm not assuming that that demand is satisfied by the basin. I'm assuming that --

MS. HOLMES: You're disagreeing with his answer, which is fine, you're welcome to do that --

MS. FOLEY GANNON: No, no. But I'm just saying that his answer, as I was hearing it, was assuming facts that are not in evidence, that we don't know --

MS. HOLMES: It's a hypothetical.

MS. FOLEY GANNON: There still has to be -- we
should still say -- then if it's my hypothetical, I'm supplying the facts. I didn't supply that fact. That's all I'm saying.

So if you could -- if you took away the assumption that the water would be supplied by somewhere else in the basin, would that mitigation measure be effective?

MR. FIO: You were talking to me now? I'm sorry. I was letting you battle it out.

MS. FOLEY GANNON: I'm sorry, I should have clarified.

MS. HOLMES: Do you understand all of the assumptions in the question?

MR. FIO: To be honest, no.

But what I would say, in listening to your dialog there, is that my assumption would be conservative to assume that demand does not go away, which apparently it's there because, based on the facts, he'll be -- Dan Boyer will be selling the water whether Imperial Valley Solar buys it or not. So the demand is there.

To be conservative, for the sake of the basin, I would assume that that demand would be met by water from the basin somehow. And that's just an assumption.

MS. FOLEY GANNON: Again, so if we took that assumption away and you were able to say, so, 40 acre feet
that would have been taken out isn't taken out, would that be effective mitigation?

I know you disagree with some of those assumptions, but if you could just assume that they were true for a moment, excepting your disagreement.

MR. FIO: I'm sorry, but I cannot give you an answer on that because I'm failing to see how you're creating new water.

MS. FOLEY GANNON: I'm not creating new water. I'm saying that the water -- the other demand is satisfied by something other than this groundwater basin.

MR. FIO: In order to mitigate --

MS. FOLEY GANNON: I mean, we're going to be getting water eventually from Seeley, so we are going to get water from someplace else other than this groundwater basin, we assume. So I'm just saying that other users may have other alternatives. I was just trying to explore the notion of if -- we're not creating new water, but if that other water user got their water from someplace other than pumping from the groundwater basin.

HEARING OFFICER RENAUD: Let's cut this short here. I think what we need is an indication of whether or not the Boyer well is currently supplying 40 acre feet or something in that area of water to users who would then, assuming Imperial Solar takes over that water, those users
would go get their water somewhere else.

And do we know that? Do we know who he's selling to and how much he's selling currently? I'm not sure I've seen that fact anywhere.

MS. FOLEY GANNON: I mean, Marc, you can answer that.

MR. VAN PATTEN: What we do know is that he's got some records, I'm assuming, I haven't looked at everything in, explicit, for the last two years other than when we specifically talked about the personal users; but given the restrictions on the well in his recent ownership of it, all we know is that he has a desire and a belief that there is demand in the valley.

I don't know that we can demonstrate that he's been selling 40 acre feet in the last two years. I think if we investigated, we'd find that he's less than 40 acre feet per year, and he'd like to have and believes there is the ability to sell up to 40 acre feet of new users that might be today going to IID or, I don't know, San Diego County or some other place. That's speculation on my part.

MR. DENNIS: I'd like to add a comment.

You know, still, I don't see how this mitigation actually brings in new water or is effective. If you assume that Dan Boyer's selling no water, still, you're
consuming however much water for however much period of
time from that -- from the basin, and it's not being
replaced.

MS. FOLEY GANNON: The mitigation is premised on
the fact is that he is going to sell 40 acre feet a year,
every year, and if we buy 40 acre feet every year and use
it and we -- or if we demonstrate, you know, we look at
the records and it shows that he was selling 35 acre feet
a year, whatever the use would be, if we buy that and have
him keep it in the basin, water that would have been taken
out of the basin is not taken out. And if the net effect
is equalized, we believe that should be efficient.

It's just like buying water and putting it in the
basin. It is -- there is a time lag. There would be a
difference in the time when the water would be replaced,
quote, unquote, but it would still be, we think in terms
of particularly given the analysis that says that, you
know, the actual physical effects on neighboring wells,
et cetera, appears not to be significant, that -- provided
you could do it in a certain time frame. That's what --
that's what it's premised upon.

MR. DENNIS: I can understand that, but what's to
limit the existing demand, like John was saying, migrating
to elsewhere within the basin which would be most
convenient for them?
MS. FOLEY GANNON: We just haven't seen any evidence that that's true, that's where they're getting water. I mean, there doesn't seem to be -- again, that disappears.

But we can move on.

HEARING OFFICER RENAUD: Commissioner Eggert has a question.

COMMISSIONER EGGERT: I wonder if I can maybe ask a slightly different question, which is that if you were to bring this, say, subsequent to the Seeley water supply, if you were to for a given period of time use that water to supply some existing demand within that basin, would that be considered -- that was based on no increase in demand, you weren't inducing any new demand by doing that, would that be something that would be sort of a replacement function?

MR. DENNIS: Yes, I think so.

COMMISSIONER EGGERT: Because you're offsetting what would otherwise -- okay.

MS. FOLEY GANNON: And we have explored the idea, the notion of trying to say -- I mean, you can't use -- I probably can't use water from Seeley to recharge the basin because --

COMMISSIONER EGGERT: Right.

MS. FOLEY GANNON: -- it's a different quality
well, and we don't want to have that happen. But I -- you know, I think we would welcome the notion of something like that to be able to use the water, the additional water we could access from Seeley, to offset other -- maybe other construction users, which does seem to be the evidence that we've seen, that's what he's selling to. So we are certainly very open to exploring those -- concepts like that and we appreciate you saying it.

That's good. Thank you. And now I'll move on.

I want to go to the estimates of the residential users in the staff -- and I think that's -- is that you? Who is the residential users?

Okay. This -- I have to admit, in reading the assumptions, I understand that you said you were making conservative assumptions, but I really had a hard time following the factual basis for the six acre feet. I mean, it really seemed to be assumption built upon assumption, assumption with no way of tying it back to residential uses.

Can you walk me through how you came to these conclusions?

MR. FIO: Sure. We were provided, I think it was in Appendix D, Appendix C of Appendix D, or whatever the water sales data for the period May 1990 through June 2004, it was monthly volumes.
MS. HOLMES: Excuse me. That's summarized on an annual basis; that's page C.7-52 in the staff assessment. It's not the monthly data, it's the annual total.

I'm sorry, Mr. Fio.

MR. FIO: That's fine.

And the monthly water sales are variable. We looked at the data over the period of record, and we assume that the variability that we were observing was related to non-residential use, which is fairly typical in a water use environment. Residential use is typically called hard demand because it doesn't go away. But if there's a temporary project that comes through and they need water, then you see an uptick in the sales.

So we assume that the variability was based on the commercial water use being for construction and dust suppression and so forth.

Then we looked at the temporal variability and we identified that February was the lowest water use. So all we know at this point is in terms of factual evidentiary data is that the low -- the low water use period is in February, and we actually have a number that we can tie to it.

So we made the assumption that the February water use would be representative of residential water use, assuming that the need for dust suppression and
construction would be a minimum at that time of the year.
And that worked out to be about .15 acre feet per month.
And then you pro rate that for a year, and that gives you
a value of almost two acre feet per year. So that was one
estimate that we made. Now, mind you, we're trying to be
conservative here.

The second thing we did is we looked at all the
historical sales data, and we noted that in 1993 was the
minimum annual volume of water that was sold. That was
2.9 acre feet. Okay? And then in looking at that number,
you can make the assumption, well, perhaps under those
situations during 1993 construction water uses were at a
minimum, so there's an estimate of potential residential
water use being 2.9 acre feet, which we rounded to being
approximately three acre feet.

And then because this is a residential supply and
we were trying to follow the directives of the county,
they were strongly encouraging us to protect residential
water supply, we made the conservative assumption of
doubling it, because we don't know what the number is.
And so that's where we came up with six acre feet being an
estimate for potential residential water use based on the
data that was available to us.

MS. FOLEY GANNON: It's tough to admit I'm just
confused by this, because in the first assessment, you're
saying February you assume everything must be residential. It appears from looking at the record that there was a lot of construction uses and, you know, dust control may be less there in the winter, but isn't water used for dust control during winter as well on construction jobs?

MR. FIO: It could be.

MS. FOLEY GANNON: I mean, for the Imperial Valley water calculations, we're assuming we need water for dust control in the winter. So it seems, again, these figures -- I understand being conservative, I understand protecting existing residential uses. These numbers -- I still -- I appreciate you walking me through the analysis with me, I still just don't understand the basis for them.

Were you present today when Mr. Boyer joined us by telephone? And did you hear his testimony regarding the way that the residential uses is sold?

MR. FIO: Yes.

MS. FOLEY GANNON: Does his testimony affect your confidence in the six acre feet number at all, or your assessment of what you think the sort of on the ground residential use is likely associated with this well?

MR. FIO: I've not had an opportunity to fully evaluate that. What I do know is that I had what was over 13 years' worth of data that was documented that I could actually analyze. And I had some information that was
provided over the telephone. I have not had an
opportunity to evaluate what effect that would have on our
estimate.

   MS. FOLEY GANNON: I understand that, you know, you just heard that today. You may have seen the
declaration that was submitted with our testimony as well. But again, I hope you will go back and look at this,
because it seems that the data that you had from 13 years,
I understand it's somewhat difficult to tie to, but
doesn't seem to actually say anywhere this is residential
use; is that correct? So these were all having to be
assumptions based upon assumptions trying to make the best
guesses from the information you had. Is that a correct
assessment?

   MR. FIO: The numbers we had were for total water
use, and what we knew was that a portion of that was for
residential.

   MS. FOLEY GANNON: And again, once we get these
numbers, and we're assuming that all these numbers are
used for residential without any factual support --

   MS. HOLMES: I'm going to object to that. I
think there's a mischaracterization. I think what he just
said is that he knows what the total is, he knows what the
total is, and he had to make some educated, professional
assumptions about which portion were residential. He did
not say that all of them are residential.

MS. FOLEY GANNON: But then that number was taken
and doubled or tripled, right?

HEARING OFFICER RENAUD: Ms. Foley Gannon,
please, you know, your questions do tend to get a bit long
and include some speech making --

MS. FOLEY GANNON: I'm sorry.

HEARING OFFICER RENAUD: -- so please try and
limit them to direct questioning.

MS. FOLEY GANNON: I'm sorry. Okay.

Going on to the analysis of Seeley, just so I
understand, I think you stated you said you looked at
the -- what you think the impacts associated with using
the Seeley water would be, and your conclusions were --
can you restate them?

MR. DENNIS: Yes. We found no significant
unmitigable impacts with that water use. And it would
comply with existing water LORS.

MS. FOLEY GANNON: Okay. Thank you.

MR. DENNIS: Actually, we would encourage it.

MS. FOLEY GANNON: And we encourage it as well.

In terms of the proposed changes to the soil and
water 11, which is related to the export permit, I want to
see if I can understand your analysis of the proposed
changes.
The proposed change was to have a permit obtained or evidence that a permit isn't necessary from the county?

MR. DENNIS: With respect to soil and water 11 is it?

MS. FOLEY GANNON: Soil and water 11? Or am I messing up my numbers again?

Soil and water 11.

MR. DENNIS: I think we'd like to see evidence and a permit's not necessary, clarification from Jim Minnick, if he can call in.

MS. FOLEY GANNON: I understand we can try to get him on the phone, I'm just trying, again, to figure out if there's a way we can limit our issues.

So we had proposed as a condition of certification that a permit be acquired or evidence that no permit is needed. Would that address your concerns?

MR. DENNIS: Yes, it would.

MS. FOLEY GANNON: And then I just wanted to clarify, with regard to looking at alternatives, you analyzed the various alternatives including like drainage alternatives 1. Did you see a difference in impacts associated with drainage avoidance alternative 1 and the proposed project in terms of impacts to water resources?

MS. HOLMES: Are you talking about water supply only?
MS. FOLEY GANNON: Water supply only, yeah.
MR. DENNIS: No, we didn't. It's basically this would be a reduction of water supply. The impacts would be more associated with soil resources.
MS. FOLEY GANNON: Okay. I just wanted to make sure that I understood, because I thought that it said you looked at it for alternatives. Okay.
That is all the questions I have. Thank you.
HEARING OFFICER RENAUD: Thank you.
Cross-examination by CURE?
Do you have a time estimate for us, Ms. Miles?
We're looking for a break.
MS. MILES: I only have a few questions, so --
HEARING OFFICER RENAUD: Just a few? All right.
Go ahead.
CROSS-EXAMINATION
MS. MILES: So with regard to your analysis of upflux impacts, did you consider potential cumulative impacts to -- that could be caused by upflux?
MR. FIO: Yes. What we reported on was the increase in upflux attributed to just the pumping of the proposed water supply well. So there would be other processes going on as a part of the background pumping going on in the basin.
MS. MILES: And did you analyze those?
MR. FIO: No, we just looked at the impact from pumping the proposed water supply well. So the numbers we used represent the relative increase.

MS. MILES: So then I assume you also didn't analyze the Wind Zero project with relation to this project and potential upflux impacts.

MR. FIO: No, we didn't.

MS. MILES: Let's see. Sorry.

Did you account for any potential elevation changes surrounding the Boyer well when formulating your conclusions relating to potential impacts to phytophreatic plants?

MS. HOLMES: Can I ask a clarification?

MS. MILES: Sure.

MS. HOLMES: Are you referring to land elevation or are you referring to the groundwater depth?

MS. MILES: Land elevation. I mean, it's really I'm trying to get the land elevation relative to the groundwater surface level and whether there were elevation changes surrounding the property where there may have been impacts to phytophreatic plants.

MR. FIO: Specifically, no, but our analysis looks at depth to water, which is relative to the land surface, or drawdown, which is relative to the water table.
So, for example, if you have a drawdown of ten feet at one location and you move to another location that has an elevation that's ten feet higher, it's still going to be ten feet of drawdown.

MS. MILES: Yeah, I apologize, I'm not very fluent in this hydrology language.

But so I'm just trying to understand whether you say the elevation -- the surface elevation, land elevation, if it drops substantially near the Dan Boyer well, did you look at whether there was any areas around the Dan Boyer well where the elevation drops like that and so that there would be a higher, you know, groundwater level compared to land surface?

MR. FIO: No, we did not look at land surface elevation.

MS. MILES: Okay. Thank you. That's my only question.

HEARING OFFICER RENAUD: Thank you.

Questioning by Budlong?

MR. SILVER: I have no questions.

HEARING OFFICER RENAUD: Thank you.

CNPS?

MR. BELTRAN: No.

HEARING OFFICER RENAUD: Okay. Thank you.

I would like to ask a question too of John Fio.
We heard testimony from Mr. Boyer about residential users who bring containers and so forth to get water. Are there any residential users in the region or who use the Boyer well or -- yeah, the Boyer well, who are somehow connected to it by a pipe, like we in the big cities would have, so that you turn on a tap at home and water comes out?

MR. FIO: To my understanding, no.

HEARING OFFICER RENAUD: Okay. So knowing that to get your water you've got to go carry it, does that change your thinking about the estimates of residential water use?

My understanding is an acre foot is 326,000 gallons, so, you know, you'd have to carry quite a lot of water it looks like to get anywhere close to that.

MR. FIO: No. 40 acre feet sounds like a lot of water to truck to me. And it will be done. You know, if people need the water, they'll do what it takes to get it. I do understand your point in that from what was said today there may be at most a dozen people, which would make it seem as though that would be a limiting factor.

HEARING OFFICER RENAUD: Not just the number of people but also the way in which they get the water; that is, going and collecting it. Doesn't that change the -- your thinking about how much water they would be inclined
to use?

MR. FIO: No. I would put more weight on how many people need the water.

HEARING OFFICER RENAUD: All right. Okay. Thank you.

Any other questions of the panel?

MS. FOLEY GANNON: No.

MS. HOLMES: Can I ask one more redirect question?

HEARING OFFICER RENAUD: Yes, Ms. Holmes, please.

REDIRECT EXAMINATION

MS. HOLMES: We'll have to check the transcript when it comes out. I thought I heard Mr. Boyer say that there were 3 consistent users and 12 users that were on and off. I know you'd like a chance to think about this a little bit more, but is there anything off the top of your head that makes you think that 3 consistent users and 12 off-and-on users is necessarily inconsistent with -- with the use that staff has identified?

MR. DEVEREL: I'd like to answer that.

This is Steve Deverel.

While we were listening to that, we just did some basic calculations of how much water that would be based on the Bookman Edmonston report, 2004 report on the groundwater flow model for the area, and I'll just read
A water use rate of 200 gallons per day per capita was computed for Ocotillo based on the population and water use records.

So using those numbers, just those three residents is already over .5 acre feet per year. I'm talking about almost .7 feet per year. So if we add to that an additional 12 residents, and we're probably over -- substantially over the half a foot per acre -- or half acre foot per year that Dan Boyer said. So that seemed significant. It seems in variance to what Dan Boyer's saying.

HEARING OFFICER RENAUD: All right. Thank you.
MS. HOLMES: Thank you. Those are all my questions.

HEARING OFFICER RENAUD: Anything else from these witnesses before we --
MS. FOLEY GANNON: Just one point of clarification.

HEARING OFFICER RENAUD: Please.

RECROSS-EXAMINATION
MS. FOLEY GANNON: I thought I heard him say that the 12 users were temporary users, so seasonal, occasional users. So I assume that that would affect the calculation and how you would -- like he said campers, really not
houses, more sort of camping type things. So would that affect those numbers? I know you need to think about it too, but --

MR. DENNIS: He said -- what I heard him say was there were 3 consistent people that took water and there were also 12 people on and off that took water. So I'm just looking at those 12 consistent people that, according to the Bookman Edmonston report, would use about 200 gallons per day.

MS. FOLEY GANNON: The 12 consistent or the 3 consistent?

MR. DENNIS: 3. 3 consistent users.

Now, we don't know if those people were individuals that just collected water for themselves or those were residences. If they're for residences, that would be more.

MS. FOLEY GANNON: All right.

No further questions. Thank you.

HEARING OFFICER RENAUD: Okay. Thank you. We're done with that panel then. I think we should take a short break. Let's keep it to ten minutes.

COMMISSIONER BYRON: Gentlemen, thank you.

HEARING OFFICER RENAUD: Be back here at 4:30.

And thank you.

(Recess.)

It looks to me like the next area would be the sedimentation part of water.

MS. MILES: Hearing officer, we do have a couple witnesses we wanted to tender.

HEARING OFFICER RENAUD: I'm just jumping the gun here.

All right. I'm sorry, I didn't mean to step on your toes there. So, CURE, go ahead with your witnesses, please.

MS. MILES: And just to clarify, we -- our witnesses do have testimony on water supply and what we're calling today sedimentation, and so we're just going to limit their testimony to water supply at this point.

HEARING OFFICER RENAUD: Sounds fine. Good.

(Christopher Bowles and Christopher Campbell were sworn.)

THE REPORTER: Please state and spell your names for the record.

MR. BOWLES: Christopher Bowles, C-h-r-i-s-t-o-p-h-e-r B-o-w-l-e-s.

MR. CAMPBELL: Christopher Campbell, C-h-r-i-s-t-o-p-h-e-r C-a-m-p-b-e-l-l.

THE REPORTER: Thank you. Please be seated.
HEARING OFFICER RENAUD: Let me remind you to identify yourselves when you're speaking for the benefit of those on the phone.

Thank you.

DIRECT EXAMINATION

MS. MILES: I guess I'll go ahead and address most of my questions to Mr. Campbell, just to keep things flowing more quickly, but if you want to interject, Dr. Bowles, feel free.

So, Mr. Campbell, whose testimony are you sponsoring today?

MR. CAMPBELL: Our own.

MS. MILES: Are you also sponsoring your exhibits and your rebuttal testimony with exhibits?

MR. CAMPBELL: That's true.

THE REPORTER: Is your microphone on, sir?

MR. CAMPBELL: Sorry about that.

MS. MILES: Do you have any changes to your sworn testimony?

MR. CAMPBELL: No.

MS. MILES: Are the opinions in your testimony your own?

MR. CAMPBELL: Yes.

MS. MILES: Hearing Officer, have I summarized their qualifications, or should I dispense with that?
HEARING OFFICER RENAUD: Unless any of the parties wants that, I don't think it's necessary.

MS. FOLEY GANNON: No. No.

HEARING OFFICER RENAUD: No? Anybody?

All right.

MS. MILES: Thank you.

HEARING OFFICER RENAUD: Go ahead.

MS. MILES: And at this time, before I forget, I'd like to move to enter Exhibits 499I and 499J into the record. This is additional rebuttal testimony with supporting declarations.

HEARING OFFICER RENAUD: Any objection from the parties?

MS. FOLEY GANNON: No.

HEARING OFFICER RENAUD: All right. That will be admitted. Thank you.

(Intervenor CURE's Exhibits 499I and 499J were received into evidence.)

MS. MILES: Dr. Bowles -- I'm sorry, Mr. Campbell, please describe for us what it was that CURE asked you to do since you testified at the last evidentiary hearing.

MR. CAMPBELL: They had asked us to review the supplemental staff assessment and the additional testimony by the applicant.
MS. MILES: And can you please just briefly summarize your findings in your testimony relating to the supplemental staff assessment?

MR. CAMPBELL: With respect to the SSA, most of the changes were with respect to groundwater and the water supply, and that's what we focused most of our additional testimony on.

MS. MILES: Thank you.

And what is the basis for your conclusion that the water supply estimates may be inaccurate or that the water supply would not meet demand?

MR. CAMPBELL: Well, for us, it is unclear whether or not the water supply numbers that are in the staff assessment and the supplemental staff assessment are accurate or not. There are no background detailed numbers, if you will, to justify those numbers like there were in the application for certification.

In the application for certification there was a detailed month-by-month log of construction demand water over that 39-month period, and that -- based on our own calculations, that equated to 439 acre feet. Based on the calculations in the supplemental staff assessment, we're now talking 166 acre feet. That's -- there is about 165 percent increase, or decrease, if you will, in the estimated water demand for construction needs.
And so it's unclear how exactly that overestimation of 165 percent was generated or how the number was reduced from 439 to 166.

HEARING OFFICER RENAUD: Sir, could you pull the mic right up to you? You should be an inch or two away from it. They don't pick up unless you're right up there.

MR. CAMPBELL: Okay.

So we have -- there's uncertainty with respect to -- with respect to the water budget numbers for construction.

Let's assume, for instance, that the numbers of 166 acre feet are correct. How are those numbers going to be distributed over the 39-month construction window? If we use the AFC construction schedule as a template, 52 percent of that construction water demand would occur in the first 12 months. 52 percent of 166 acre feet is 86 acre feet, which is more than two times the amount of water that is allocated from -- the maximum amount of water that's allocated from the Dan Boyer well. So it's uncertain to us how the product schedule could be modified to accommodate such a gross discrepancy between 40 acre feet and 86 acre feet potentially.

Additionally, it is unclear -- now we're going to jump to operations. It's unclear with the operations water budget numbers. In the table -- in one of the
tables that describe the operation water budget numbers, it says something like that nine acre or nine mirror washings, but in other instance in the text, it says that mirror washing will occur on a monthly basis and that access to them will be 12 times a year. So that would lead us to believe that maybe these -- the water budget numbers for the mirror washing are inaccurate and need to be pumped up a little bit.

There's also concern with the dust control numbers for operation. They don't account for -- what is it -- there's soil and water -- soil and water condition of certification number 8 that addresses Valley Fever and the need for additional or contingency water to mitigate for extra dust.

And so when you take into consideration a lack of contingency for dust and maybe for lack of consideration for additional mirror washing as well as some other considerations, the total operational demand might be less than -- would be greater than the 33 acre feet that's been specified in the table per year.

Finally, what the water budget calculations fail to address is the overlapping demand for water between construction and operations. Should they occur simultaneously, it is stated somewhere in the -- I believe it's the air quality section of the supplemental staff
assessment, that -- well, they did take into account overlapping operations and construction on air emissions, but it was not addressed -- but that did not transfer over to the water budget calculations.

And so there is, in our opinion, a lack of taking into account overlapping use or overlapping need for water for construction and operations as the project becomes -- as components of the project become phased and come online.

MS. MILES: And with regard to the Valley Fever condition of certification that you mentioned, I note that it states that it would include extensive wetting of the soil prior to and during construction activities.

Did you look at -- because this, I believe, was a new condition of certification in the supplemental staff assessment that was not included in the staff assessment, did you look to see if the water allocation changed between the staff assessment and supplemental staff assessment for operations to account for this new condition?

MR. CAMPBELL: I don't believe the water allocation changed. The operations table, I believe, has remained consistent from the application of -- the original application of certification up through the supplemental staff assessment.
MS. MILES: And can you talk about the gallons per day estimate relating to dust control a little more specifically? I know you mentioned that the dust control numbers were underestimated, I think, I'm not sure exactly how you characterized it, but can you talk a little bit more about that?

MR. CAMPBELL: With respect to operations?

MS. MILES: Yes, and how much they might need per day and whether it was calculated any additional need.

MR. CAMPBELL: The operations water budget numbers assumed 5,000 gallons per day, and then there was also a maximum number in that table of 10,000 gallons per day; but the 10,000 gallons per day contingency, if we call it that, was never accounted for in the annual water budget for dust control, and so it was only based on the 5,000 gallons per day number.

So it's conceivable, that, you know, maybe there'll be -- 20 percent of the days in the year will be high dust days, and on those days, 10,000 gallons per day will be required. And so the water budget just for dust control would actually go up. And so the table is not an accurate reflection of what could possibly occur.

MS. MILES: Are there any other groundwater issues that you want to highlight?

MR. CAMPBELL: I guess I would just say that
the -- it's not necessarily groundwater, but just water supply in general. The Seeley Wastewater Treatment Facility upgrade is an uncertainty, if it happens, it may happen. The applicant has stated that they can -- should it come online, that they could partake of 200,000 gallons per day. But even that is an uncertainty because the EIR process that the treatment facility is currently going through will likely determine whether or not that's a possibility and will determine if there will be impacts to the Salton Sea water quality impacts as a result of the project by the applicant securing up to 200,000 gallons per day.

All I will say is that with respect to the 200,000 gallons per day, that equates to 224 acre feet -- 224 acre feet -- well, I'll refrain from saying anything further to that. That number, the 224 was reflective of the original water budget for the application for certification. So if we assume that that is inaccurate and that the numbers that the applicant are providing of 166 acre feet are more accurate, then no point to comment on that further.

MS. MILES: And I remember in your testimony you talked about that the budget for water supply from the AFC matched the amount of water that the applicant was going to require -- had asked for from the Seeley Wastewater
Treatment Facility; is that correct?

    MR. CAMPBELL: Yeah. Well, that's where I was just -- yeah. So if I continue where I decided to stop, so based on our calculations of the AFC water budget, the first 12 months would require 228 acre feet, which is close enough to 224 acre feet or 200,000 gallons per day, which is the maximum amount of water that the applicant is trying to secure from the Seeley Wastewater Treatment Plant upgrade. So it seems like -- yeah.

    MS. MILES: So are you saying that an inference could be made that they asked for that much water from the Seeley Wastewater Treatment Facility that they anticipated that that was their water need for the project?

    MR. CAMPBELL: Yes.

    MS. MILES: And have you seen anything -- I mean, have you reviewed the staff assessment and the testimony from the applicant and have you seen anything that showed like a contract for water from the Dan Boyer Water Company?

    MR. CAMPBELL: No.

    MS. MILES: So have you reviewed the will serve letter that was from the Dan Boyer Water Company?

    MR. CAMPBELL: With respect to the will serve letter, I simply was going on the basis of what was in the supplemental staff assessment text indicating that Dan
Boyer was going to provide temporary water up to 11 months. Thereafter, it's an unknown whether he would supply water to the project.

MS. MILES: So did that raise any concern about the reliability of that water supply?

MR. CAMPBELL: It raises concern overall in general, because if Dan Boyer doesn't continue to step up to the plate and Seeley Wastewater Treatment Plant doesn't come online, then there is no -- no water supply is identified for the project beyond 11 months.

MS. MILES: And although the supplemental staff assessment identifies that the project overlies the Coyote Wells water basin, where is the -- would the water well be a part of the Coyote Wells water basin, or how would you describe the basin or sub-basin or --

MR. CAMPBELL: The Dan Boyer well is inside of the Ocotillo/Coyote Wells sole source aquifer, which is a component of the Coyote Wells Valley Groundwater Basin. And the project, while 96 percent might lie within the Coyote Wells Valley Groundwater Basin, 100 percent of the project lies outside of the sole source aquifer.

MS. MILES: Thank you.

Please describe the location -- okay, you just did, sorry.

MS. JENNINGS: This is Jennifer Jennings.
Can we ask what you're doing? Are you showing something on the screen?

MR. BOWLES: Yeah, we're trying to get it on the screen.

MS. JENNINGS: Okay. Can you do it through WebEx?

MR. BOWLES: I think we are doing -- are we not?

HEARING OFFICER RENAUD: I have it on my WebEx.

MS. JENNINGS: We don't have it on ours.

HEARING OFFICER RENAUD: There's a tab called EPA overlay. It might be you should open that up.

MS. JENNINGS: I would if I had it.

WebEx has bumped us off the connection. We'll try to get back on.

MS. MILES: In the interest of time,

Mr. Campbell, maybe I could go ahead and ask you a couple more questions while they're trying to sort that out that are unrelated to the graphic that they're working on.

In Robert Scott's rebuttal testimony from July 21st, he states based on the groundwater evaluation report for the Dan Boyer well, the water quality tests indicate that the quality today is the same as it was decades ago.

And I was wondering, do you agree with that opinion?
MR. CAMPBELL: We would disagree, because I think that's -- they're trying to infer a static condition, and it's somewhat misleading to assume that that static condition will continue into the future, even though the groundwater basin will not only be stressed by the Dan Boyer well extractions, but by extractions from neighboring wells as well.

If these extractions continue into the future, at some point there could be a threshold reached whereby additional groundwater upflux could be enhanced and due to pumping. And so over the life of the project it is uncertain whether or not we would cross this threshold, and I don't think it's actually been analyzed.

And so if upflux were to become more of an issue into the future, then we would foresee groundwater impacts to the aquifer, alluvial aquifer.

MS. MILES: In your opinion do you think that staff should have analyzed cumulative impacts relating to upflux and the other wells surrounding the Dan Boyer well?

MR. CAMPBELL: I do believe -- I mean, it's my understanding that staff used a relationship developed by Todd, which was an independent review of the Bookman Edmonston Groundwater Model for the U.S. Gypsum DEIR to come up with these relationships between what percent of water is upflux versus what percent of water is not going
through the south, so on and so forth, where it was identified that nine percent of the water for every hundred acre feet of pumping would be a result of upflux from the underlying Imperial Palm Springs Formation into the upper alluvial aquifer.

And so using that nine percent figure, they applied that to the pumping for the project itself, they did not -- I do not believe that they considered the pumping from the project in aggregate with neighboring well users. And so I don't believe that they addressed cumulative impacts.

MS. MILES: Also, I don't think that you've addressed the issue relating to well interference. And in your testimony you discussed the potential for the project pumping at the Boyer well to cause interference to other well users.

Can you explain that?

MR. CAMPBELL: I would only say that I believe what I was saying was with respect to cumulative impacts. So if you were to consider other users in the system pumping at the same time, that there could be an amplified impact or there could be an impact of U.S. Gypsum on the Dan Boyer well that has not been addressed.

MS. MILES: Was there a potential based on the project's pumping to drop the water table below well
screens for any of the nearby wells?

MR. CAMPBELL: So if you were to -- yes, there was.

MS. MILES: And do you remember how many wells that might have dropped below their well screen?

MR. CAMPBELL: There were maybe two wells.

MS. MILES: Nearby that may have had impacts that were not analyzed in --

MR. CAMPBELL: Yes, if you were to take into account specific well characteristics in depth to groundwater and the well screen below the ground surface rather than using typical or average values across all wells.

MS. MILES: Did you want to explain this graphic, the figure?

MR. CAMPBELL: Shall I stand up there and do it?

MS. MILES: Yeah, please. But you'll have to speak into the microphone. I don't know if it's on up there.

MS. JENNINGS: This is Jennifer. May I interrupt?

We have the map now. Thank you.

MR. CAMPBELL: So the graphic demonstrates here's the project area, here's the outline of sole source aquifer, clearly shows that the project lies outside of
the sole source aquifer.

        MS. MILES: What is that dividing line between
        the aquifer and --
        MR. CAMPBELL: This is an extension of the
        Eleanor Fault.
        MS. MILES: Elsinore Fault? I believe it's the
        Elsinore Fault. And I can't really read it from here,
        but --
        MS. WHITE: I just want to remind folks that when
        you're using your pointer on the screen there, that people
        on WebEx won't actually be able to see what you're
        highlighting.
        MR. CAMPBELL: Sorry about that.
        MS. MILES: Yeah, if you could please describe
        the line that you're referring to.
        MR. CAMPBELL: So to reiterate, here's the
        project area in red I'm circling, the dark line is the
        outline of the sole source aquifer, and right through here
        is the Elsinore Fault. And what this demonstrates is that
        the project is 100 percent outside of the sole source
        aquifer.
        MS. MILES: Thank you.
        In the testimony of Marc Van Patten, he states
        that the project will adjust the construction schedule as
        necessary to ensure that construction does not use more
water than the amount allotted by the Dan Boyer well and
that there are no aspects of construction that would make
it impossible to construct the project using only 39.5
acre feet.

In your opinion, is that accurate?

MR. CAMPBELL: If I could interrupt, can I
continue to address another figure from the last -- that
we'd like to bring up for the last question?

MS. MILES: Sure.

MR. CAMPBELL: So can everybody online see the
additional graphic, or new graphic?

MS. JENNINGS: We can in El Centro. Thank you.

MR. CAMPBELL: So what this graphic shows is
information that was pulled from the U.S. Gypsum DEIR that
was an attachment to some version of applicant's
testimony. I don't know the exact exhibit number. But it
shows on the Y axis, it says TDS concentration, milligrams
per liter; and on the X axis is time. And these in the
legend are a handful of wells in the vicinity of the
Dan Boyer well, to include the Dan Boyer well. The
information presented by the applicant for the Dan Boyer
well is this dot and this dot over here. Those are the
two measurements that are in their testimony.

What this graphic demonstrates is that TDS
concentrations in the system are not static, that they
have increased in time, and that pumping can create spikes that could be associated with upflux from the underlying aquifer. So to simply assume that two points make a straight line and then you can extend that straight line into the future as a trend of the future is grossly inaccurate. There is greater variability that could have occurred between those two points, and that could continue into the future.

MS. MILES: Okay. So back to the question that I was asking, in Robert -- no wait, it was in Marc Van Patten's testimony regarding the fact that they estimate they can still fully construct with the water restriction, and I wanted to know, in your opinion, is that accurate?

MR. CAMPBELL: I don't think that it is necessarily accurate because they have not provided or demonstrated numbers for their construction water demands. As I previously stated, if we were to assume the construction schedule, water demand schedule, not necessarily the water demand numbers but the schedule on a percent -- by percent, month-by-month basis, 52 percent of the construction demand would need to occur in the first 12 months. So that could easily push the first 12 months out. Let's assume we can get 39.5 acre feet per year, or the project can use 39.5 acre feet per year. I would
easily push the construction schedule out a full year for
the first 12 months. So it is unclear how the project
will -- could be modified in order to meet the contractual
obligations for San Diego Gas & Electric.

MS. MILES: Was there anything else you wanted to
add?

MR. CAMPBELL: I believe -- I believe that's it.

MS. MILES: Okay. Thank you.

The witness is available for cross-examination.

HEARING OFFICER RENAUD: Applicant, cross?

MS. FOLEY GANNON: No questions.

HEARING OFFICER RENAUD: Staff?

MS. HOLMES: No questions.

HEARING OFFICER RENAUD: Budlong?

MR. BUDLONG: I have a couple questions.

HEARING OFFICER RENAUD: Go ahead.

CROSS-EXAMINATION

MR. BUDLONG: Mr. Campbell, you were talking
about where the SSA talks about the amount of water needed
for dust control, and it was an average of 5,000 gallons
per day with a maximum of 10,000. Did you find anywhere
in the documentation how they arrived at the numbers that
were used?

MR. CAMPBELL: No, I did not investigate that in
detail. All that I know is that that number was
consistent from the AFC up until the supplemental staff assessment.

MR. BUDLONG: Did you find anywhere where it talked about how much area is needed to have dust control?

MR. CAMPBELL: I believe that it probably was, but I did not do an independent calculation, such as yourself, to determine how much water would be applied over --

MR. BUDLONG: Excuse me. I was interested in how much area was -- needed dust control.

MR. CAMPBELL: I don't have that number off the top of my head.

MR. BUDLONG: Do you remember seeing it anywhere in the documentation? Because I didn't myself, and I'm wondering if I missed it.

MR. CAMPBELL: I do not recall.

MR. BUDLONG: Okay. Did you do a calculation to determine whether that was a reasonable number for dust control or not?

MR. CAMPBELL: No, I did not. I just did a calculation to determine if that -- if the water budget numbers would be sufficient with respect to the supply.

MR. BUDLONG: Okay. Those are my questions. Thank you.

MR. SILVER: And I had one question to
HEARING OFFICER RENAUD: Go ahead, Mr. Silver.

CROSS-EXAMINATION

MR. SILVER: With respect to your testimony concerning the site being outside of the sole source aquifer, does that have any implications with regard to effects with regard to drawdown of the sole source aquifer in terms of, I suppose, the capability of water to return to the source from which it was drawn?

MR. CAMPBELL: That, I am not certain of.

MR. SILVER: No further questions.

HEARING OFFICER RENAUD: Is the Boyer well outside the sole source aquifer?

MR. CAMPBELL: No.

HEARING OFFICER RENAUD: It's within it?

MR. CAMPBELL: It's within.

HEARING OFFICER RENAUD: Okay. What was the significance -- why did you want to tell us that the project site is outside the sole source aquifer? Why is that important to you?

MR. CAMPBELL: I believe it potentially gets down to the issue of exportation outside of the sole source aquifer.

HEARING OFFICER RENAUD: All right. Thank you. Any further questions?
MS. FOLEY GANNON: Not from applicant.

HEARING OFFICER RENAUD: All right.

Let's see.

MR. SILVER: Could I ask --

HEARING OFFICER RENAUD: Mr. Silver, sure.

MR. SILVER: With regard to the issue of exportation, why -- what is the usual rationale with regard to a prohibition on exportation from one aquifer site to another?

MR. CAMPBELL: Because this is a sole source aquifer with 50 percent of its water being used for domestic purposes. I mean, it has been designated by the EPA as an overdraft, and so abstractions from it into another aquifer could have a potential impact on that.

MR. SILVER: To preserve and maximize essentially that source --

MR. CAMPBELL: Any potential return back to that aquifer from the water that was abstracted from it.

MR. SILVER: Thank you.

HEARING OFFICER RENAUD: All right.

Ms. Miles, do you have another witness?

MS. MILES: Not regarding water supply.

HEARING OFFICER RENAUD: All right. So where does that leave us?

Yes, it looks like, Mr. Budlong, you would be the
next in line here. Do you have a witness to call on water
supply?

MR. SILVER: Yes, Edie Harmon, who is down in
El Centro.

HEARING OFFICER RENAUD: All right. Bear in mind
we have to stop at 5:30 to hear public comment. Would you
like to start? Do you think you could complete it between
now and 5:30?

MR. SILVER: I'm not confident that that would be
possible. It may be. We can start.

HEARING OFFICER RENAUD: I guess we'll just
start. Okay.

I think we need to swear the witness.

MR. SILVER: I think she was sworn in last time,
because she did testify with regard to the well
registration permit.

HEARING OFFICER RENAUD: We've decided those are
too old so we're just starting over.

(Ms. Harmon was sworn.)

THE REPORTER: Could you please state and spell
your name for the record, please.

MS. HARMON: My name is Edith Harmon, E-d-i-t-h
H-a-r-m-o-n.

THE REPORTER: Thank you.

///
MR. SILVER: So, Mrs. Harmon, you have prepared several pieces of testimony with regard to this hearing. If I'm not mistaken, you tendered a document, opening affirmative testimony on May 10th, 2010; is that correct?

MS. HARMON: Yes.

MR. SILVER: You tendered also on May 17th, 2010, testimony on alternative water supply?

MS. HARMON: Yes.

MR. SILVER: And you also tendered testimony on alternative water supply by way of rebuttal testimony or -- on July 21st, 2010; is that correct?

MS. HARMON: Yes.

MR. SILVER: And you have also tendered in connection with these three pieces of testimony, I believe, exhibits -- I may need some help here from Mr. Budlong to separate out -- I think Mrs. Harmon's exhibits started --

MS. HARMON: I think it's 515 to 599A.

MR. SILVER: Okay. 515 to 5- -- I have 515 to 591.

MS. HARMON: I had submitted some more last night, if that's okay.

MR. SILVER: The hearing officer has indicated that that's not okay. I think we'll tender the exhibits
that have heretofore been submitted. So I think that's through 591.

Mr. Budlong, are you there?

MR. BULDONG: Yeah, I am here.

Yeah, it does go through 591. I have the ones that Edie put in last night, and I have not tendered them yet.

HEARING OFFICER RENAUD: Are all of these about water quality?

MR. SILVER: These generally --

HEARING OFFICER RENAUD: I'm sorry, water supply?

MR. SILVER: They're in support of her testimony. They concern -- yes, they concern water supply and to some extent water quality.

MS. HARMON: And may I add Exhibits 599 and 599A are graphs, a map and two graphs of USGS groundwater monitoring data that indicate the decline in static water level and in feet above mean sea level from the northeast to the southwest and then the west to the east, and it's a very significant decline.

HEARING OFFICER RENAUD: We're not -- excuse me, Ms. Harmon, the committee isn't interested in a massive submission of documents, some of which aren't about water supply. I'm looking, just, for example, at 533, which is a paper called "How to Increase Renewable Energy
Production on Big Buildings and Other Local Spaces; obviously not about water supply. We're going to need some limits on this to documents that are in support of your water supply testimony.

Counsel, can you help out?

MR. SILVER: Well, I'm not aware of any objections that have been submitted to any of these exhibits. I was going to move her testimony into evidence after she avers that she prepared -- she prepared this testimony.

HEARING OFFICER RENAUD: I don't think she prepared that document I just referred to.

MR. SILVER: No, I'm sorry, I'm referring to the three testimonial statements that she made.

HEARING OFFICER RENAUD: All right. If we could get exhibit numbers for those, we'll look at those.

MR. SILVER: All right. Well, the three documents, I think the latest was Exhibit 591, the May 17th, 2010, statement --

MS. HARMON: Is 567.

MR. SILVER: Thank you.

And the May 10th opening affirmative testimony.

MS. HARMON: Was 566.

MR. SILVER: So at this point I would like to -- and you, Mrs. Harmon, prepared these documents; is that
correct?

MS. HARMON: Yes, I did.

MR. SILVER: I'd like to move those into evidence at this point in time as the testimony of Edie Harmon with respect to water supply and quality.

HEARING OFFICER RENAUD: All right.

Is there any objection to the admission of 566, 67 and 91?

MS. FOLEY GANNON: Applicant has no objection.

HEARING OFFICER RENAUD: All right.

MS. HOLMES: No objection.

HEARING OFFICER RENAUD: Those will be admitted.

Thank you.

(Intervenor Budlong's Exhibits 566, 567, and 591 were received into evidence.)

HEARING OFFICER RENAUD: You can proceed with your questioning.

MR. SILVER: Well, I'm not sure where we are with regards to the exhibits. I'm sort of at a loss here too. I mean, there are, admittedly, many of them she has cited these. Most of them are from documents -- for example, some are planning documents from the county, others are USGS documents, and there are a number of documents from the U.S. Gypsum EIR. As I say, there haven't been any objections. And I would propose that they be moved into
evidence for, you know, what they are at this point in time. They have supported the points that she's made in her testimony.

HEARING OFFICER RENAUD: We're really just trying to limit it to water supply testimony, and I think you've indicated that those three are for water supply.

MR. SILVER: Well, those are her testimonial statements. All the other documents are essentially cited there. I could move that all the documents be admitted into evidence except those that basically have no bearing on water supply.

HEARING OFFICER RENAUD: Okay. Here's what we'll do. You're indicating that 566, 67 and 91 contain specific references to other documents.

MR. SILVER: To the documents which she has -- yes, to the documents that are listed in this 500 series list.

HEARING OFFICER RENAUD: All right. So what will be admitted is 566, 567, 591, and any documents that have been placed in the record and are referred to therein. That make sense?

MS. FOLEY GANNON: No objection.

MR. SILVER: I'm not sure what you mean by then are placed in the record.

HEARING OFFICER RENAUD: Well, that have been
MR. SILVER: In connection with the testimony and referenced in the testimony.

HEARING OFFICER RENAUD: Yes.

MR. SILVER: Yes, that would be acceptable.

HEARING OFFICER RENAUD: That would be the order.

MR. SILVER: Okay. So the motion has been made and granted to the extent you just indicated. The exhibits are in evidence then except those that are not related to her testimony --

HEARING OFFICER RENAUD: The ones that are referred to in the testimony specifically are in evidence.

All right. Now, you have some questions?

MR. SILVER: Yes.

So, Mrs. Harmon, I know it's been a long day, there's been a lot of testimony already which I think deals with many of the points which you made. I'd like to confine your testimony now to just a few points in which you may wish to elaborate.

It's been stated that residents of Painted Gorge and West Texas do get water trucked from the Boyer well. Do you have knowledge based on your testimony concerning how many people live in those places and why they get water from the Boyer well?

MS. HARMON: I do not know how many people live
there, how many are permanent or how many are temporary. But the county in all the documents on environmental review, whether it was U.S. Gypsum or any other project in the Ocotillo Groundwater Basin, has already referred to the residents of West Texas and Painted Gorge as getting their water from the Westwind Water Company, which is now the Boyer well, and it's because the water in -- the groundwater in West Texas and Painted Gorge is non-potable. I mean, there is water there, but it's not potable for drinking and some of the wells have really highly saline water. And the table that I submitted, Exhibit --

HEARING OFFICER RENAUD: Ms. Harmon, please, you were asked a very limited question, and would you please limit your answers to the question that was asked. We're on a limited time budget here and we're trying to keep things clean. So answer the questions that you were asked and don't expound or elaborate until you're asked to.

MR. SILVER: I'll try to refine it.

Do you recall whether or not there's a table in the Bookman Edmonston study which references populations or estimates populations for 2010 for Painted Gorge?

MS. HARMON: Yes, there is. In exhibit, I think it was 592 that I submitted, it shows -- it's from the Bookman Edmonston study 2004, and Table 4.1 on page 4.1
talks about land use and mentions West Texas, and then on page 4.4 there's population and applied water use and projections of how much water was used in the past and how much in the future for these areas. So my information and apparently the information from the county is coming from the Bookman Edmonston study.

And the assistant planning director told me that the county believed that all the people in West Texas and Painted Gorge relied on the water from that well.

MR. SILVER: And I take it -- you did cite in your testimony the 2004 appendix to the 2006 U.S. Gypsum DEIR, which suggests that residents in those areas might be using or hauling 60 gallons a day per person. Did you reference that document?

MS. HARMON: Yes.

MR. SILVER: And did you make a calculation that using that figure contained in the U.S. Gypsum DEIR/S that the total usage in Painted Gorge could be as much as 4.23 acre feet per year?

MS. HARMON: I don't recall whether I made that calculation, but I think that's in the document.

MR. SILVER: In your testimony, okay.

MS. HARMON: It's in the Bookman Edmonston study, in fact, for Painted Gorge. It's on page 4.4, it would be -- there would be estimating a total of 4.3 acre feet
for the year 2010 for Painted Gorge and West Texas.

MR. SILVER: All right. Just one or two other questions relating to other projects.

We've had some testimony concerning -- from staff concerning whether or not the water for Wind Zero was considered. Could you be as specific as to what stage at this point in time the Wind Zero project is in terms of its proceeding through the county?

MS. HARMON: The Final EIR for Wind Zero project came out. There is a hearing before the Imperial County Planning Commission scheduled for August 11th, and a hearing before the Imperial County Board of Supervisors scheduled for September 14th. And the planning department mailed notices to all property owners within a half mile of the project. And I think they said they sent out a hundred notices.

MR. SILVER: And does that project FEIR or CWSP FEIR reference possible use of 65 acre feet per year use of groundwater for the project?

MS. HARMON: Yes, it does.

MR. SILVER: You also have indicated in your testimony with regard to alternative water supply for the project two possibilities. IID, west side main canal, and the alternative -- also another alternative, Centinela State Prison to the north. Could you indicate briefly for
the hearing officer the nature of those projects as
possible alternatives?

    MS. HARMON: For Centinela State Prison, I've
tried to get information. The prison has an inmate
population of over 5,000 and has over a thousand
employees, according to information on Wikipedia. I don't
know the total amount of water that they are using. My
understanding from IID staff is that the city of Imperial
annexed Centinela State Prison and that the prison is
getting water from the City of Imperial.

    Nobody yet has been able to answer my questions
as to what happens with their wastewater, how much it is
and how it's disposed of. I've looked on Google Earth,
and I'm not sure whether -- it looks like there's ponds on
there -- I think it sort of looks blue-green, so there may
be some evaporation ponds or settling ponds for sewage.
So I have no idea.

    And then I raised the question of water from
Imperial Irrigation District, because in 2006 IID had
signed an agreement to provide up to a thousand acre feet
a year to the Plaster City factory from a pipeline from
the west side main canal. And that was approved -- I
mean, a right of way to extend the IID boundaries was
approved by Congress, I believe, in 1981 in an attempt to
stop the export of groundwater for industrial purposes.
The status of that right now is that we're still waiting for a biological opinion for that water source.

MR. SILVER: For purposes of serving U.S. Gypsum, IID had to change its service boundaries; is that correct?

MS. HARMON: That's correct.

MR. SILVER: And do you see any impediment to doing that with regard to providing water to this project?

MS. HARMON: I don't know what the process is. When I've talked to IID, they would have to file -- they would have to go through the same process. I think it was rather quick on the U.S. Gypsum one because there were pressures for development. There were other industrial purposes. And so I think that the boundary was extended way back then. But also the demands for water in 1981 were not the same as the demands today, so I'm -- you know, it was just a question that needed to be asked because there is going to be available Colorado River water for Plaster City.

MR. SILVER: I have no other questions, and the witness is submitted for cross-examination.

HEARING OFFICER RENAUD: Cross by applicant?

MS. FOLEY GANNON: No questions. Thank you.

HEARING OFFICER RENAUD: All right. Staff?

MS. HOLMES: No questions.

HEARING OFFICER RENAUD: Let's see. CURE? Any
questions?

MS. MILES: No questions.

HEARING OFFICER RENAUD: CNPS?

MR. BELTRAN: No questions.

HEARING OFFICER RENAUD: All right. Thank you.

Any other witnesses for Mr. Budlong?

MR. SILVER: No, not with respect to water.

HEARING OFFICER RENAUD: You know, I guess I have a question, but I'm not sure if it's for you Mr. Silver or for the witness, but I'm going to ask it.

You referred in one of your questions, Mr. Silver, to the Painted Gorge and West Texas, people getting water trucked from the Boyer well. What does "trucked" mean? Is that people picking it up in their pickup trucks, or is it tanker trucks delivering it or what?

MR. SILVER: I think Mrs. Harmon can answer that question.

MS. HARMON: I believe what I've seen and other residents have seen is pickup trucks with containers in the back of the pickup truck and water being transported that way. I think it was last week I saw a pickup truck leaving the property with a very large plastic container in the back that looked like water in it.

HEARING OFFICER RENAUD: All right. Thank you
very much. That clarifies my questions. I appreciate that.

Okay. I guess we're done with Edie Harmon for this topic, correct?

MR. SILVER: Yes.

HEARING OFFICER RENAUD: Thank you for testifying.

Well, I think that's probably a good point to break. Public comment is scheduled to start at 5:30, and we like to be on time for that as members of the public may have planned their day around getting to our proceeding in time to make their comments.

I know Public Advisor Jennifer Jennings is down in El Centro and will be managing public comment from that end. And we'll manage it from this end.

If there are members of the public present who wish to comment, out on the table by the front door of this room you'll see blue cards. You could fill one of those out and bring it to me.

If there are members of the public on the telephone, we'll get to you shortly.

COMMISSIONER BYRON: In fact, Ms. Jennings, this is Jeff Byron, can I ask if you can give us a sense of how many members of the public you have there that wish to speak this evening?
MS. JENNINGS: There are five at present.

COMMISSIONER BYRON: All right. I think from our clock we're about five minutes away from 5:30. Do you have a sense also if you expect other people to arrive at 5:30 this evening there?

MS. HARMON: I have a feeling that there may be some people that expressed an interest to me, and I sent a reminder to them --

COMMISSIONER BYRON: Is this Ms. Jennings?

MS. HARMON: Oh, wait, this is Ms. Harmon speaking.

COMMISSIONER BYRON: Okay. Thank you, Ms. Harmon. We'll assume that there will be other folks coming.

You want to break for five minutes and then start at 5:30?

MS. HOLMES: Could I make just one comment to the committee. I'm assuming you're planning to continue after public comment. I wanted to make it clear if I didn't this morning that staff's witness on sedimentation and erosion is not available tomorrow, so we do need to get through that testimony tonight.

HEARING OFFICER RENAUD: Well, I think we can do that. We may lose a commissioner during that, but I think since we don't have a witness available, we'll go ahead.
MS. HOLMES: Thank you.

HEARING OFFICER RENAUD: Five minutes, we'll see you back.

Thanks.

(Recess.)

HEARING OFFICER RENAUD: Here at the Imperial Valley Solar Evidentiary Hearing, July 26th, 2010. We have forums for public comment here with us in Sacramento via our telephone and WebEx connections and at a cite in El Centro, California. And I understand we have commenters in El Centro, we have one commenter who submitted a blue card here in Sacramento, and we may have commenters on the phone.

And in no particular order, I think I'll just go ahead and call Daniel Curtin, who is here in Sacramento, to give his public comment.

MR. CURTIN: Mr. Chairman, any particular microphone? There's a little one --

HEARING OFFICER RENAUD: The tall one that you were just pointing at, make sure that's turned on.

MR. CURTIN: I'm assuming green means on?

HEARING OFFICER RENAUD: Yes.

MR. CURTIN: Okay. Thank you very much for the opportunity, Mr. Chairman and Commissioners.

Let me get comfortable here so I don't hit my
My name is Danny Curtin. I'm the director of the California Conference of Carpenters. I've come to this hearing for the public testimony portion to indicate on behalf of the carpenters' union, and I distributed a letter at an earlier hearing and I have copies of a similar letter for the two commissioners which I'd like to give you afterwards, but we want to indicate our support, the carpenters' union for this particular project. And in general we want to encourage the renewable energy industry in its efforts to build in California.

We have a tremendous respect for the process, having been to three hearings. It's very, very detailed, very meticulous, very complex. And we appreciate the due diligence that you apply to this process. It's important, of course, but it's particularly important now because we think this issue has now taken on global significance. What may appear and did appear and still appears as a ministerial function, so to speak, is absolutely critical on a large scale perspective.

We're in the midst of a virtual energy revolution. We are moving from fossil fuel to renewables. There's still plenty of debate, there's still plenty of hair pulling and teeth gnashing over it, as you'll see on the ballot in November for those of you who are not from
California, but it's absolutely critical, and it's absolutely urgent, because of the global warming issues, the greenhouse gas issues, and also the international politics that associate with renewable energy.

But just as importantly from our perspective is it couldn't come at a better time for those of us who work in the construction industry for a living. This is the worst downturn in California and this nation, I believe, since the Great Depression. We're seeing over 12-and-a-half percent or 12-percent unemployment in California for almost four months now, maybe five months, or at least four. In the construction trades we're 25- to 30-percent unemployed. The communities that will be around where these projects are located are in desperate need of the employment that some of them will see if they're sited.

So we're here to encourage you to site these projects as quickly as you possibly can with all the due diligence that you must apply statutorily and otherwise.

But in that context, we also want to make it clear that we are particularly annoyed, and I am particularly annoyed and frustrated with the role that the intervention of the California Unions for Reliability Energy plays in these hearings.

It's a critical issue that you're dealing with,
and what we find is that their role is constantly obstructionist, and we believe it's for one purpose and one purpose only, and that is to extract -- and I'm glad you're here so you can perhaps comment if I wish -- it's to extract the contract from the applicants or the contractors that the applicants hire.

Through the use of this process, which is essentially an environmental review process, we believe that they are abusing this process. And we want to make it clear once again to members of the commission, we think that they're here for one reason, which is to extract or shoehorn this company, this industry into a project labor agreement that is not only costly and restrictive but inappropriate under these circumstances. To use the environmental issues to extract this is really shameful.

On top of that, and I'm not positive about this, we'd like you to take a look perhaps, if you have the authority, at some of these contracts. We believe that they actually get these companies to sign these companies through this process and then get the privilege of paying for the intervention that they are being subjected to, the abuse of the system.

So we believe that this shameful practice needs to stop. It's obvious because, I've been here twice, one day after CURE got a project labor agreement, all of their
biological ecological environmental issues seemed to be resolved at the same time. So anybody who can put those two pieces together, it seems to be a commonly known or at least suspected connection.

We're not building strip malls here. These are not gas stations. These kind of labor tactics, whether they are tried and true, are really inappropriate in this context. This is not a strip mall, a gas station, or anything like that. This is a revolution, energy revolution that is so desperately needed, not just from the planet's point of view, let's be blunt about it, everybody in the process. And we think this is an abuse.

We'd like you to make it clear that all of the issues that you're dealing with here, please be meticulous, resolve these issues and move forward and site these projects in spite of CURE's intervention. We really need to do that once or twice, and we can convince people that you meet the rigorous standards that this commission sets, you will be sited, whether you have a project labor agreement or not. That's what I have to say.

Thank you very much.

HEARING OFFICER RENAUD: Okay. Thank you for your comment.

COMMISSIONER EGGERT: Thank you very much, Mr. Curtin. Is it Curtin? And I appreciate your
I think I share some of your perspective with respect to the importance of achieving our energy and environmental goals; and, yeah, you're right, here in California in particular, we are sort of at the potential transition away from fossil fuels towards renewables. I think there's tremendous opportunity, there's significant challenge. And I think, you know, we're all sort of part of this very exciting time. And I, you know, appreciate your organization's participation in that transition.

I would also say that my own personal experience, at least as far as that CURE has brought some value to this process. I think they do bring, oftentimes, testimony and expert witnesses that do provide additional insights, provide additional value in considering different issues associated with the CEQA process.

And so I think we do have a very open and transparent process, it does allow for anybody who has sort of standing to come in and participate, but, and again, I would also invite your organization as well, even in support of projects. Again, I really appreciate your coming forward and providing that perspective.

But I do think it is also very valuable to have participation of organizations like CURE.

MR. CURTIN: If I may, Mr. Chairman.
In spite of the charge intervention that has been dealt here at this hearing, we believe it's their right to do that. We have no question about that. And in some cases it may actually be helpful.

We want you to question the motivations, because from my perspective, and many, their motivation is very, very important here. And if they feel like they can cause delay when a delay is really detrimental to the process, I'm not that concerned with the issues they're raising any longer. There are other ways to hear about those issues.

I think the staff at this organization is unbelievable considering the situation they're under at state employment level, they are very thorough, and I am also very impressed with the commissioners and the chairman and those who run these meetings. There's very, very few issues that go unresolved or at least unlooked at. And what we wanted to do was lift the veil on the motivation behind one of the intervenors here because we think it's thoroughly inappropriate, particularly considering renewable energy.

Like I said, if it was just a normal little construction project, big deal, who cares, somebody makes a little more money, somebody makes a little less money. This is way too important for that.

Thank you.
COMMISSIONER BYRON: Mr. Curtin, thank you for being here, very much appreciate it.

We don't look into the motivation behind the reason our intervenors put the time and effort into the project that they do; but, again, I do appreciate your comments.

I think it would also be appropriate if Ms. Miles wanted to respond at this point, although you're under no expectation, Ms. Miles.

MS. MILES: Well, I would like to respond in particular to one accusation regarding just biological impacts going away, a reference you made relating to a PLA. I am not the attorney representing CURE in that case, so I can't speak about intimate details, but I can tell you that there was a substantial biological component to the decision to not intervene; in fact, there was a settlement that included mitigation to our biological concerns.

And we do not participate, you know, bringing irrelevant information; we are, you know, genuinely looking to make projects better so that we can have future potential for employment, because when there are projects that are permitted that are not well-designed, then it actually can create a lot of problems for community members so that they ask for no development in the future.
And there have been a lot of projects that have been improved, I believe, at this commission as a result of CURE's participation.

MR. CURTIN: Ms. Miles, you do a wonderful job, I must say, but it's odd to see the connection between the contract labor agreement and an objection on the basis of environmental grounds. I'm not saying you don't improve the project, you very well may, but at this point in time, some of these projects need to be sited and on the ground by the end of the year. This ARRA funding does all sorts of things of that area. You can improve the project to death or love it to death, which some people do here, and, you know, that's the point we're raising.

HEARING OFFICER RENAUD: Okay. Thank you.

This is public comment. We do have other people waiting, so I'm going to ask that we move on.

Ms. Jennings, you're down in El Centro. Do you have some commenters for us?

MS. JENNINGS: Yes. We'll start with the first commenter.

MS. HILL: Yes, I am Barbara Hill, that's H-i-l-l. I live in Nomirage, Ocotillo, California, and I'm going to be testifying on what I know personally.

Our well has dropped over 10 feet. Marty up the street from me, which he is a well driller, has dropped
13 feet. Sylvia down -- Gobel, down two blocks down the 
street from me, her well went dry. They had to redrill it. Tom Walker lives one block up from me; his well went 
dry. He had to redrill his well. Now, this is all in a 
proximity of approximate -- a mile and a half from your 
source well that you will be drawing from.

I'm also across the street from Wind Zero's 
project. From the solar panels, I'm approximately nine 
miles.

I'm also a construction worker; would you believe 
it? I was a water truck driver. I know exactly how much 
water it will take. You will have to have at least two 
water tankers, and that's running about ten hours a day. 
You're dropping two loads about every 25 minutes. The 
figures do not add up.

U.S.G. uses 85 cubic -- 85 acre feet of water -- 
85 acre feet of water. You propose 40 acre feet of water. 
Wind Zero wants 6 acre feet of water. And Granite wants 
70 acre feet of water that's been proposed.

This little aquifer is not one of the great 
lakes. We will end up going down to zero. And if we put 
in a deep well, you are going to get salt water, and 
everybody's going to lose.

That's just about all I have to say.

HEARING OFFICER RENAUD: All right. Thank you
for your comment.

Ms. Jennings, can you present the next commenter?

MS. WARE: I am Laurel Ware, L-a-u-r-e-l W-a-r-e.

I thank you for the opportunity to speak to you.

The conservation and preservation of our aquifers is of prime importance to us. We are now under consideration for cumulative projects that may be a cross-purpose and detriment to this. Imperial Valley Solar Project requests 40 acre feet of water per year. I spoke to a family whose well also dried up last month, and they're concerned for their neighbors. I will read, perhaps, from this lady if I may.

"To whom it may concern: My well has gone dry in this last month. I now have to truck my water in. The cost of digging a deeper well is well over $10,000, not to mention getting information or a permit and permission from the environmental lists. It is my further concern that my neighbors may have this problem since their water table has decreased significantly.

"With your request of such great amount to be drawn from the aquifer, I fear this will happen to many of my Nomirage residents.

"Sincerely, Donna Austin of Nomirage."

She lives near Barbara Hill as well.
It would be unconscionable, unconscionable to subject the residents to projects that could threaten the quality and availability of water. We need water to live. A few further concerns for disruption of scenic beauty, burial sacred sites and wildlife habitat. I live here because it is so beautiful.

I sincerely request that you deny this project. I hear people looking for jobs and that; well, perhaps they'd like it in their backyard. I live a little further out than Barbara, approximately another few miles, and you cannot put back what is destroyed. Please do not sacrifice our town by taking away our water.

I thank you very much for your time.

HEARING OFFICER RENAUD: All right. Thank you. Next commenter, Ms. Jennings, please.

MS. CONKLIN: My name is Diane Conklin. I'm the spokesperson of the Mussey Grade Road Alliance in Ramona, California.

The alliance is a grassroots community-based organization dedicated to the preservation of historic Mussey Grade and environment. As background, the alliance was an intervenor in the Sunrise Powerlink proceeding and brought the issue of fire to the CPUC. As a result, the CPUC for the first time included fire issues in the EIR EIS. Fire was deemed an unmitigable significant impact of
the line. As a result of the approval of the line, a
southern route, the alliance continues to oppose the
Sunrise -- (static on phone line).

The alliance is also engaged in several other
CPUC proceedings at this time, including a rule-making --
(static on phone line) in which --

HEARING OFFICER RENAUD:  Hold on one second.

Ms. Harmon, is that you?

MS. JENNINGS:  No, this is Jennifer Jennings, and
we're getting a lot of backfeed while the mic's on.

HEARING OFFICER RENAUD:  I'm hearing someone else
talking.

MS. JENNINGS:  No, she's with us.

HEARING OFFICER RENAUD:  Oh, all right.

One person at a time please. Those of you
listening in, please, please keep quiet so we can hear
this speaker.

MS. CONKLIN:  I appreciate your attention.

The alliance is also engaged this several other
CPUC proceedings at this time including a rule-making
proceeding in which the alliance has proposed new rules re
the issue of power line ignited wildland fires.

From our past experience in CPUC proceeding, the
alliance has learned that in large projects there are
often promises made. Here in this CEC proceeding we have
promises made about a lot of issues; for example, promises made as to the efficacy of the Stirling technology, that is, will it work; the promise that the project's use of local water will not deplete the existing water basin; and the parallel promise that another source of water will be forthcoming soon.

The assurance that there are no significant wind impacts related to this project, including the continuous control of the dust of the desert after 30,000 Stirling dishes are installed, while the western area in the vicinity of this project is eyed for energy wind generation.

The assurance that there will be no adverse effects on this project by future earthquakes, including any disruption of generation or the chance of explosions. And this in light of the fact that recent earthquake activity in Mexico affected the area.

On the other side of these promises is and are the generated use of public land -- excuse me, the guaranteed use of public land to develop a project that is private and profit making. The assured use of public stimulus funds to scale up an essentially untested and unproven technology. The fact that Sempra's Sunrise Powerlink, which is connected at the hip to this project, was not affirmatively conditioned by the CPUC to carry any
required percentage of renewable energy.

While we purportedly have a buyer and a seller of electricity, we do not have a guarantee of what will actually be bought and sold or used. A potential eventuality that should SDG&E not actively use electricity generated by this project, the investors in Stirling could conceivably recover lost revenues by payments for energy not taken. The certainty that overriding considerations of environmental concerns will be forthcoming.

The basic fact that buying -- going in this energy direction, massive Stirling dish technology with its massive environmental impacts also has other not so obvious effects which are generally ignored such as, the tethering of the rate payer to investor-owned industrial projects that serve the privately-owned utility industry and private energy suppliers at the expense of energy reliability and sustainability for the future.

For example, think of rooftop solar installation. All over the county of San Diego, SDG&E's service territory, versus a two-plus billion dollar transmission line, and an approximately two billion dollars for Stirling dishes. Ask yourself which you think will be more viable in the decades to come. As rooftop solar technology advances, can you imagine these Stirling dishes serving the rate payers and public better than the
electricity they could generate for themselves on their own property and without the massive impact this project will also deliver. This local generation, direct and combined with conventional technology is the obvious choice for the future.

Another effect not discussed so readily is the mutual support between the Sunrise Powerlink and the Stirling project. From the beginning, the alliance has been concerned with the interconnection between those two projects, especially the relevance -- excuse me, the reliance of SDG&E on Stirling at the CPUC and the reliance by Stirling on SDG&E's purchase of their power at the CEC. This is an exercise in mutual back-scratching.

But the most serious problem of all is whether this 100-year-old technology, not used very often in the past century, will actually work. The 2007 PUC testimony of expert Dr. Barry Butler, former SAIC, science applications international corporation, a competitor of Stirling SES, along with his cross-examination gives us another picture, to wit: One, that the Stirling dish technology is not cost competitive with conventional power generation such as wind and solar at this time. Two, major reliability problems exist with these dishes. On average once every 40 hours a problem occurred which required shutdown and maintenance, which means that a
great deal of time and effort and money must be spent on
maintenance. Three, Dish Stirling is a pre-commercial
technology that hold promise, but, quote, "there is no
possible way," unquote, Dish Stirling solar can move from
high-cost prototype models to large-scale production now.
And four, solar concentrating photovoltaics don't have any
moving parts, they just sit there and look at the sun.

With bad federal regulation in front of us all in
the form of BP and the gulf oil disaster, the alliance
respectfully requests that the CEC exercise its best and
highest judgment with respect to this application, which
the alliance believes should be denied and requests that
you do so.

Thank you for this opportunity to speak.

HEARING OFFICER RENAUD: All right. Thank you.
Do we have another commenter?

MS. JENNINGS: Yes.

MS. TISDALE: This is Donna Tisdale,
T-i-s-d-a-l-e. I reside in Boulevard, California, but I
am a property owner in Imperial Valley.
I'm speaking for myself as an individual on
behalf also of my non-profit group called Back Country
Against Dumps.

First of all, I want to request the commissioners
reject the applicant's and staff's request for overrides.
It is unconscionable to cut corners to meet an arbitrary deadline for this project. I would also like to mention that the Imperial Valley Solar Project is connected to the Sunrise Powerlink, and the PUC still has an outstanding decision on that final modification report and whether or not to reopen the CEQA-NEPA review process for that project.

Here's a direct quote. It says, "An agency memorandum will be prepared by the PUC and BLM to document the changes in the final project modification report document to determine whether additional CEQA NEPA review is required." That is still unresolved.

On the access roads and the air quality and all the grading that's going to be done for this project, I -- I have family members who live here to suffer from asthma, and I strongly disagree with the conclusions from certain people that that's not going to be a significant impact. When you include the destruction of the other desert facilities for wind energy and solar, the impacts are -- and you add in the off-road vehicle recreation adjacent, the impacts are significant.

Hydrology soils and water on page EF-34 talks about significant cumulative impacts to water; Ocotillo, Coyote Wells, sole source aquifer is rated as unmitigable. You can mitigate those by denying the use of that scare
That's a low-income community. This is an environmental justice issue in my opinion. They have no economically-feasible source of water, and regardless of how many residential users rely on the Boyer well, you heard testimony today of people who live in the impact zone of the Boyer well whose wells are most likely being impacted by that drawdown.

I was alarmed to see that the people cannot read the maps and that the project was purported to be located 96 percent over the designated sole source aquifer. Evidence today proved that false.

I am concerned that there's never been any environmental impact report on the withdrawal of water from that well. That should be done -- that should be done as a stipulation before the CEC allows any use of this water from this low-income community.

I was also alarmed under the power plant reliability says, quote, "Staff cannot determine what the actual availability factor for the long-term operation of Imperial Valley Solar Project would be." I'm wondering how can the CEC or BLM even consider approving any form of this large-scale project that will withdraw public land from public use and use hundreds of millions of dollars of taxpayer funded dollars. Approval is unconscionable
unless and until there is a more lengthy and
well-documented track record on the new SunCatcher design.

Transmission lines and safety. This section in
the EIS 45, page 46, it says that the line for phase one
and two, quote, "would traverse under disturbed desert
land with no nearby residents, thereby eliminate potential
for residential electric and magnetic field exposures." I
don't know how you can ignore the Sunrise Powerlink,
because that is the transmission line for this project.
That traverses about 120 miles, it comes within several
hundred feet or closer of properties in eastern San Diego
County, it runs through the Cleveland National Forest, it
will actually be buried under the road in front of the
Alpine Elementary School and their major business
district. They have major concerns there. That cannot be
ignored because this project phase two totally relies on
that line.

Visual resources. This whole thing should just
be denied. But the visual resources, the public would not
benefit with this project for recreation resources, the
people that travel I-8 on a daily basis and enjoy the
view. The pilots from the nearby naval air facility,
they're going to have to deal with glare from this project
and have to try to dodge the new wind turbines. And you
also have the Homeland Security and the commercial and
private pilots that use this route as an air travel route.

Waste management. I'm concerned, I didn't see anything on there about potential stockpiling of discarded SunCatchers and SunCatcher parts. Our public lands are littered with failed projects, and there's no requirement. I understand you're talking about decommissioning, but I'm talking about during the life of the project.

We've got problems with Kumeyaay Wind right now. They just replaced all 75 blades. They're laying at the base of the towers. The Department of Interior will not respond to our request on what's going to happen to those and where they're going to be moved to recycle.

Worker safety, fire protection. We concur with the information presented by the staff rebuttal testimony July 21 regarding the potential for the hydrogen fuel explosion, conflagration that could impact I-8; but an accident of that magnitude could also impact the adjacent U.S. Gypsum wallboard factory, the Plaster City OHV park and camping area, and that could also take out the Southwest Powerlink and the proposed Sunrise Powerlink.

Professional firefighters have informed us that they cannot drop fire retardant on or near electrical lines, whether they are energized deenergized, and they generally do not fight a ground fire within a thousand feet of high power lines due to the potential for
electricity to arc to the ground through the smoke. So there may be a no-firefighting zone within the project site because of the two 500 kV power lines that transverse it.

I also feel that this project is inconsistent with Executive Order 12212, the non-existence and repair link in phase two relies on it. They are in violation of this order which mandates that agencies act expeditiously and in a manner consistent with applicable laws to increase the production, transmission of energy in a safe and environmentally-sound manner. I don't think this project or Sunrise Powerlink can comply with those.

Site selection criteria. The IV Solar Project is not consistent with the fifth bullet on page B.2-19 that states that the site must be located close to a CAL ISO transmission line with adequate capacity and should have an adequate water supply. And the site should have few or no environmentally-sensitive areas, particularly biological and cultural, and should allow development with minimal environmental impacts.

Only phase one has existing transmission capacity, and no water sources are fully vetted or approved. And the project represents significant and cumulative impacts to a variety of environmental biological and cultural resources.
Our rationale for elimination of distributed solar generation from page B.2-114, the elimination of a far superior way to generate renewable energy much closer to the point was eliminated because staff could not conclude that will happen, quote, "within the time frame to implement the Imperial Valley Solar Project," unquote.

I want to go on record that the time frame is an arbitrary fast-track date for projects that could comply with applicable rules and regulations. And here we're talking about overrides, shortcuts; it's just beyond belief.

So in our opinion, IV Solar and the connected Sunrise Powerlink cannot meet the required criteria.

Thank you very much.

HEARING OFFICER RENAUD: Thank you.

Next commenter?

MS. JENNINGS: Yes.

MS. HARMON: Edie Harmon from Ocotillo.

And I'm going to add some of the things that I would like to have said earlier on water. And I have forwarded to Tom Budlong, and he said he would distribute the graph that I submitted last night and I identified as Exhibit 599 and 599A.

With that, there is a map which shows the location of private property within the Ocotillo/Coyote
Wells sole source aquifer. There is a fairly large surface area in the sole source aquifer, but only 15,500 acres are privately owned. All of the water that is pumped for domestic use comes from that private land. BLM is not authorizing wells to pump large quantities of water and transport it to any of the existing communities.

In Ocotillo there are two mutual water companies where the shareholders get water. I believe they are bound by requirements to provide water only to those who have been long-term and paying a monthly basis for the ability to use water at some point in the future.

In Nomirage, which is to the southeast of the Boyer well, there was originally a subdivision put in with a single well intended to provide water to all the lots, but the groundwater basin was not capable of yielding the quantity of water necessary to supply the existing lots, so all of the lots now have private domestic wells, everybody had to drill their own well.

The information that I got, I provided information in Exhibit 516, which I gathered from the USGS website. All of the information on water wells, depth to water, characteristic, monitoring water level and water quality is public information, it is not confidential. When I do maps and provide information, I provide the USGS well identification and where I know, because I do it for
local people also, I put the identity of the property owner so people can understand where certain wells are located.

I've drawn a transect through the figure that I provided, which shows water level from the Ocotillo area flowing to the southeast. There is about a 60-foot drop in the static water level in terms of feet above mean sea level from Ocotillo six miles to the southeast. So 60 feet in six miles is a significant drop.

If we draw a transect across the groundwater basin from Miller's well, the western part to Coyote Wells, in 3.75 miles there's a 69-foot drop in static water level above mean sea level. And each one of these transects goes through the area with the U.S. Gypsum well, 36H-1.

And I've shown where the -- in testimony that I've submitted I've indicated well interference and some very serious questions about the change in water quality on the first well that was on the Westwind water property, I think it was 36G-1, which was the well prior to the well that's owned by Boyer now. That well stopped being used because the salinity increased so greatly from 1951 to 1975, so that well was drilled.

Given that location, it's not only the high fluoride levels that raise concerns, but I know from
seeing years ago water quality data from the Plaster City factory, I don't know how much is being pumped from each one of the U.S. Gypsum wells, but I know there has been a change in water quality at the U.S. Gypsum factory from blending. I think it's important if you're going to make determinations on a groundwater basin to know what the largest wells are pumping and what's well interference.

There's documented changes in water quality in Ocotillo and in the area where I live. And David Huntley, who is a groundwater geologist, at one point when I was in his office talking to him and crying, he said if I weren't crying, he would think I didn't understand enough about the groundwater basin. He told me I couldn't -- I didn't have the technical ability to understand all the modeling, but he was seeing more information than I was on degradation of water quality with increased pumping from wells.

The basin is very complex, and I think that there's some real concern.

In talking with Dr. Izbicki at USGS, it's fossil groundwater. I've asked the county repeatedly when there are mitigation measures that require additional monitoring wells to be put in, that those wells be drilled to the specifications of USGS so that for, I think it was an additional like $2,000 we could actually date the water to
find out when the last significant recharge was. Some basins in southern California, it's 32,000 years ago; other basins it's 14,000 years ago. So any recharge is really insignificant, and when the water's gone, it's gone. And that's why the concerns. It's local impacts to the local community.

If we're not seeing changes in the portion of the groundwater basin five or ten miles away from where there's domestic use, that's, you know, not as important as what's happening where people live and the very large cone of depression.

I want to talk also briefly about seismic impacts and earthquakes. It was June 14th, there was a 5.7 -- at one point I say 5.9 earthquake. My house was about a half mile from the epicenter of it. The house survived, but the inside, everything is two to three feet deep in books and papers. And when I talked to the border patrol, they said that the bolts sheared off of one of the remote video surveillance towers from the concrete at the ground because the shaking was so violent.

I can't imagine the kinds of turmoil that cause rocks to roll down the hill so that I had to stop four times to get out of my car to even be able to get to my home.

Fortunately, I wasn't there when the earthquake
happened, but I cannot imagine what would have happened if these SunCatchers had been installed or stored on the property and there was an earthquake of even like a 5.7, 5.9 or something there, because the damage that I saw is just incredible. And my understanding is that some people's homes were knocked off their foundations, that wells were damaged and water electric and sewer lines were destroyed. So I think that the -- there hasn't been adequate consideration of what might happen with the recent -- you know, a big earthquake.

I was shocked in -- I was in San Diego, and how strong the 5.4 in Borrego Springs felt. It sounded like the house I was in was going to lose all the windows. And that was certainly a long ways away.

And anyway, we're still having earthquakes; it's still a big issue.

There's also some really serious air quality issues. And if we disturb the surface of the ground repeatedly when there's large wind and dust storms, you can't really tell the difference from the sky and the ground, and it's people downwind that are going to feel the really significant impacts of additional particulate matter.

And when I was talking last week with people from farm bureau, they expressed some real concerns saying
that, you know, the agricultural community is getting blamed for a lot of particulate pollution in the valley because there are air quality problems here. But if we're going to talk about or consider disturbing additional thousands of acres of public land, that's additional thousands of acres that are going to have tremendous amount of wind-blown particulates.

And it just -- it's amazing that there are not questions about having a solar project like this, and as soon as you get off -- you go a little bit further west, I don't know whether it's feet or miles, and you suddenly have 15,000 acres of land being proposed for wind turbines. There must be something that I don't understand about some of these violent winds. I know when I look at trees, 12-inch diameter trees that end up getting twisted and breaking down, it's hard to imagine that that would be less than 35 miles an hour or that the SunCatchers could survive.

It doesn't seem to me to make much sense to be considering disturbing this much public land when there are currently proposals already being considered, there's notices of preparation for two photovoltaic projects on disturbed agricultural land on the west side of Imperial County. The land is not contiguous. One project was 1103 acres, and the other was 903 acres. Obviously with the
same applicant looking at both, I question whether some of
the considerations of alternatives were really serious.

And I think that BLM has told me that they can
only look at alternatives on public lands, but that
doesn't make sense. If we're talking about energy and we
look at $four billion, two billion for this project, two
billion for Sunrise Powerlink, if people are concerned
about jobs and energy, just imagine how many people could
be put to work improving insulation in homes and putting
distributed rooftop solar and doing other things; and as a
result, we wouldn't have the disturbance of 6,000 acres of
public lands and the losses that -- some of us went to the
site, it did not look as if that site were heavily
impacted by off-road vehicles. I mean, the washes were
wonderful, we were finding a lot of cultural materials,
and it looked great.

I just want you to please take serious
consideration as to whether there's really any
justification for basically sacrificing public lands. I
mean, it hurts a lot to see so many times when
economically-disadvantaged rural communities are looked at
as sacrifice areas so that there can be higher levels of
consumption in some remote urban area.

Thank you.

HEARING OFFICER RENAUD: Thank you.
Ms. Jennings, could you give me an estimate of the time length for any remaining public comment that you have --

MS. JENNINGS: Don't have any remaining people who would like to comment here, but I think there are on the line.

HEARING OFFICER RENAUD: Okay. And is there anyone on the phone who would like to comment?

MR. TRAFICANTE: Dennis Traficante. Can you hear me?

HEARING OFFICER RENAUD: Yes. Go ahead, sir, please.

MR. TRAFICANTE: Okay. Thank you.

I'm not going to try to repeat.

My name is Dennis Traficante, and I live in Santa Isabel, and I frequent the desert land all the time, and I'm a member of the Protect Our Community Foundation, and I've spoken to you before.

One of my concerns is that I wrote comments and I also appeared in El Centro. I couldn't tonight because I couldn't get out there because I am -- I have a full-time position. But I submitted comments on May 24th, and I never saw them posted on the website. And I wondered if there was any place that I could send these comments to an individual and they could acknowledge to me that they're
going to put them on the website as official comment.

HEARING OFFICER RENAUD: Well, this is

Raoul Renaud. I'm the hearing officer.

When you submit a document, it would be docketed, but necessarily -- we don't put everything on the website. There's too much.

MS. JENNINGS: Hearing Officer Renaud?

HEARING OFFICER RENAUD: It has been docketed, as far as I know.

Yes.

MS. JENNINGS: And I did ask that it be put on the website, a link so that people could see other people's comments. So it is under the section of public comments under intervenors and others' documents.

HEARING OFFICER RENAUD: Okay. Well, thank you for that clarification.

MR. TRAFICANTE: Well, let me -- let me -- I'm going to try to do my best to not comment on things that have already been commented on so that we can all get on to bigger -- well, not bigger, but other things, other personal things.

First of all, I'm really concerned about distributed generation in major metropolitan areas, and I'm concerned that I've heard people say it just won't be enough. And yet the solar on my rooftop doesn't ever get
counted by anybody; and there's a lot of people, there's
no statistics on it because I'm not one megawatt or
whatever the cut-off is. And I just think it's totally
unfair to dismiss the public and all their efforts to
reduce their use of energy.

I actually, for one, I provide about 50 percent
more energy than I use on my own back to the grid. And
I've said it before and I'm going to continue to say it,
that someone's got to pay more attention to Bill Powers'
2007 Smart Energy Plan for San Diego and really give it
some intelligent discussion and not just dismiss it.

Further, I'm concerned about, you know, 60-plus
years of preservation of our environment and our public
lands and our state parks, et cetera, et cetera. And
we've got these fine organizations, CEQA and NEPA, and we
just can't, like the gentleman carpenter that first spoke,
we just can't rush something to judgment by December 31 to
get stimulus money from the government for foreign
corporations, which my understanding is that IV Solar is
financed primarily by a foreign corporation. So I just --
that doesn't make a whole lot of sense to me.

When I was -- went out to the May 24th meeting,
my wife and I ran into a herd of about four or five big
horn sheep, and when we did it, we commented on it. And I
made a request that we allow sufficient time for the
weather to get a little bit cooler so that we could do
more than the type of site viewing that there's done on
that property. Because I can't believe that we could
dismiss endangered big horn sheep corridors just because
somebody thinks -- and I think it was on a Tuesday when
that gentleman saw it -- someone thinks that there's a
bunch of off-road vehicles scaring up the sheep and
sending it off -- in other words, it's an isolated
incident. I don't believe we've done enough to determine
whether or not it is an isolated incident.

The one thing that the -- that I want to say, and
I'm going to keep repeating as well, is that if you decide
to dismiss all the comments that are being made against
this project that can't even be proven to be reliable, if
you continue to approve it, you must fund -- must require
the owners and investors to fund a bond to restore all of
that land, including footing, dishes, roads, trenching,
back to the original condition. And that's going to be a
bond that can't be dismissed from us by a bankruptcy.

As I think, Donna Tisdale I believe said, there
are so many of these projects that are out there, for
example, the blades on the wind project on I-8, they're
still laying on the ground. There are so many of these
things that are occurring to our public land, it's
unconscionable that you wouldn't require a bond to do your
best, all of our best to restore the land to its original condition.

But I don't believe it should be built in any event, I don't think it's been proven technology. You don't need a Sunrise Powerlink to carry the power for at least half of it, and I think it's probably all of the power that you're talking about generating.

There's extensive cultural and historical resources placed -- that are there and are going to be placed at risk, including cremation and sacrifice areas.

So the quick deadline, I don't -- we can't -- and as I think Commissioner Byron said at one time, we're not going to rush to judgment on this, we're going to look at all the comments, and we can't be concerned about whether or not there is stimulus money, especially when it's going out of the country in most cases.

So please do not allow this project to continue, please consider all the comments from all the other people that are there tonight. And thank you very much for your time.

COMMISSIONER EGGERT: Actually, if I may -- this is Commissioner Eggert.

Thank you, Mr. Traficante. In Commissioner Byron's absence, I will I guess reiterate what I think you heard him say, and that is that we will be definitely
considering all of the evidence and weighing that evidence
as we deliberate before making a decision.

I did also want to comment, I mean, you had
mentioned the fact that we're not necessarily taking into
account the actions of individuals such as yourself that
are putting on rooftop solar. And as a matter of fact, we
are taking those into consideration and supporting them
substantially through the California Solar Initiative. We
have a number of programs that are promoting the
development and deployment of solar rooftop, PV solar both
on residential and commercial buildings.

We see tremendous potential. It's a technology
that we've been supporting through our Public Interest
Energy Research Program. We're seeing great progress in
terms of cost reductions.

And so we definitely are not ignoring that, we're
not -- we're paying great attention, and we're looking at
all of the options that we have to meet our energy and
environmental goals.

HEARING OFFICER RENAUD: All right. Thank you
for your comment, Mr. Traficante.

Is there anyone else on the phone who wants to
make a comment? And I'm just trying to get a sense of
what we need to do, what's remaining.

Anyone on the phone?
Ms. Jennings, anyone there in El Centro?

MS. JENNINGS: No, no one right now, but there had been people earlier who had contacted us over the phone saying they were going to make a comment, but perhaps they --

HEARING OFFICER RENAUD: Okay. We have people present here who are parked in a nearby garage which closes at 7:00, so I think we better take a break now to let people get out of that garage, and then we'll come back.

I know staff has a witness, we'll do that, and we'll check one more time for public comment. So come back as soon as you can, hopefully no more than about ten minutes.

(Recess.)

HEARING OFFICER RENAUD: In addition to the staff witness, whom staff requested testify tonight because he will not be available tomorrow, applicant has requested that we put on the testimony of their witnesses Moore and Chang tonight and promised that that will not be very long.

We're in favor of it up here.

Does anybody have any objection?

MS. HOLMES: No objection from staff.

HEARING OFFICER RENAUD: Let's get that done, and
then we can start with bio in the morning.

MS. MILES: Also, CURE has a witness for sedimentation -- it's late, sorry, and so I'd like them to go on tonight too if possible because --

HEARING OFFICER RENAUD: We're up for it if you all are. Let's do it.

Applicant, you can proceed, please.

MS. FOLEY GANNON: Oh, absolutely.

We call Dr. Howard Chang and Matt Moore.

Can we please swear them in.

(Howard Chang and Matthew Moore were sworn.)

THE REPORTER: Please spell your names for the record.

MR. CHANG: Howard Chang, spelled C-h-a-n-g.

MR. MOORE: Matthew Moore, M-a-t-t-h-e-w M-o-o-r-e.

DIRECT EXAMINATION

MS. FOLEY GANNON: Starting, Dr. Chang, with you, are you the same person who offered testimony in these oral proceedings in May as well as rebuttal testimony submitted in July?

DR. CHANG: That's correct.

MS. FOLEY GANNON: And I will ask that Dr. Chang's testimony provided in our rebuttal testimony be marked as Exhibit 139. I'm looking at my next exhibit
in order.  141.

(Applicant's Exhibit 141 was marked for
identification.)

MS. FOLEY GANNON: So Dr. Chang, in your previous
testimony you provided an overall discussion of the
assessments that you had done, so we won't go back through
that. But can you provide a brief summary of what you had
analyzed on the site with regard to potential impacts
associated with the project?

DR. CHANG: I did sedimentation modeling study of
three or four different washes at the site. The purpose
of the study was to determine the project impact on
sediment transport and also on the hydrology flow,
including the velocity, the flow depth, sediment
transport, and the potential stream channel changes as a
result of the project.

In doing so, of course, we modeled the stream
channels using the hydrology, established hydrology for
the 10-year storm, for the 100-year storm. We used the
stream channel geometry, detailed stream channel geometry,
we used grain size distribution of the bed material. And
we modeled the stream channel changes during such storms.
And we compared all the hydraulic sediment parameters for
existing condition that's the pre-project condition, with
a post-project condition to determine and assess any
potential projects due to the proposal project.

We found out -- now these stream channels have moderate to low-flow velocity, even during the peak 100-year storm. The velocity in the stream channel is generally lower than three feet per second. So sediment transport is not very active in the stream channels.

Now, what's examining is the flow depth, the flow depth in the stream channels during the peak discharge are generally lower at one foot now, with exception of some very local areas, otherwise, the flow depth is less shallow than one foot.

Now, we compared the sediment delivery toward the downstream properties. We wanted to make sure we do not change existing regime. We do not change existing sediment delivery toward downstream properties. We compare that, we found out that, now there's really no change in sediment delivery.

Now, I have to point out something. Previously there was proposed sediment debris basins. Because results of the modeling study shows the sediment debris basins would actually change the sediment delivery toward downstream, I recommended that we remove sediment basins. Now, after removing the sediment basins, we would have no impact on sediment delivery toward downstream areas.

The stream channel changes during a hundred-year
storm. For all the four washes we modeled, are very limited in magnitude, I'm talking about general scour, due to the imbalancing sediment transport. The general scour, the depth are universally less than one foot. Of course there is also local scour. We recognize the local scour at the base of the SunCatcher pedestals. That scour depth can be deeper than a foot, but that scour actually affects very small areas. The total expected area by the local scour, even during the peak discharge, is less than one percent of the surface area for the washes.

So basically --

MS. FOLEY GANNON: So, Dr. Chang, your conclusions regarding the fact that there won't be any real sedimentation impacts as a result of the project, I understand, was based on the model that you ran.

There has been some criticisms raised about the model, about its ability to predict, make these kind of predictions. Are you aware of any shortcomings with this model?

DR. CHANG: Well, I'm quite familiar with the model because I'm the developer of the Fluvial-12 model, which has been used for over 35 years. We have users throughout this country and also, in fact, in many other countries as well. The study has been -- over hundreds of studies have been made using the Fluvial model,
particularly in the arid west.

Now, we have done many studies, such studies were reviewed by many federal agencies, USGS, and RCS, Army Corps of Engineers, California State Department of Water Resources, and also counties, cities, and all the studies have been reviewed and approved by the agencies.

MS. FOLEY GANNON: And can you describe have there been cases in which you ran the models, you made predictions about the likely outcome, and then subsequent to the activities that you had studied you went back to calibrate it or to verify whether your results were accurate or the degree of accuracy?

DR. CHANG: The validity of the model, of course, depends on the calibration results. The model has been calibrated using 14 sets of field and laboratory data. In the calibration study, we simulate stream channel changes, sediment transport. We compared the simulated results with actual measurement. Now, this has been going on -- we have done this for 14 -- using 14 different sets of river data.

MS. FOLEY GANNON: And have you run calibration tests also on ephemeral washes or on any places where they have similar types of aquatic resources that would be at issue in this project site?

DR. CHANG: Many studies we've made were dealing
with ephemeral streams. In fact, most streams in this area are ephemeral streams. We have only a major storm flow during major floods, otherwise the streambed can be totally dry for the most part of the year.

MS. FOLEY GANNON: And so based on the validations that you have seen in these studies for all the years, what is your level of confidence in the predictions that you have seen made with your model on this project?

DR. CHANG: Based on the calibration studies for a major stream, I'll give you an example in San Diego County, San Diego River, which is a major river in San Diego County, the maximum deviation for actual measurement is one foot; in other words, the accuracy's plus/minus one foot. But for such a small streams, which we calibrated based upon laboratory model, is measured in very small quantities, may be an inch or so.

MS. FOLEY GANNON: And so your level of confidence in these results would be described as you described them as highly, medium?

DR. CHANG: I have high degree of confidence in the modeling results because of extensive experiences and the tests and calibrations we've made in the past.

MS. FOLEY GANNON: And just to clarify them, so the final conclusion of your analysis was that
construction of the project as it's now proposed, would --

DR. CHANG: Would have no impacts, ER say insignificant impacts on sedimentation of the stream washes.

MS. FOLEY GANNON: Upstream and downstream?

DR. CHANG: In both directions. You know, we're going to place a lot of SunCatchers in the washes.

MS. FOLEY GANNON: And I understand you also did look at as part of your study the potential for there to be some hydromodification or changes in the intensity or timing of the runoff. Can you comment on your findings with regard to that?

DR. CHANG: Well, we going to have so many SunCatchers at the project site. SunCatchers should have insignificant effects on the surface water runoff. See, what determines surface water runoff is the rainfall. Rainfall is unaffected by SunCatchers. SunCatcher does not retain water. It's not a storage reservoir. SunCatcher does not change infiltration rate.

See, for rainfall, part of the rainfall becomes groundwater through the infiltration or recharge process, and part of the rainfall becomes surface water runoff. The entire processes are not affected by the presence of SunCatchers. So therefore, the hydrology of surface water runoff would not be impacted by the project.
MS. FOLEY GANNON: Would you agree those if there was -- if the project was resulting in significant creation of impermeable surfaces, that there would be a change in the runoff?

DR. CHANG: Well, we have done analysis on that. You see, the total -- we'll pave the roads, the surface roads would be paved. We also have other roads, dirt roads; some of the roads will have surface treatment. Now, the pavement and a surface treatment would actually reduce the permeability of the surface. The total surface area affected is about five percent of the total project area. When the permeability is reduced from the road surfaces, water will actually infiltrate in adjacent areas because infiltration rate is very high for the kind of soil we have. And also, rainfall durations are very short. The groundwater, the infiltration will never saturate the groundwater.

So even though we have surfaces with reduced permeability, that should not change the total amount of infiltration or groundwater recharge.

MS. FOLEY GANNON: Thank you.

I think those are all the questions for you, Dr. Chang.

The one thing I forgot to ask you in the beginning of your testimony, do you have any corrections
or additions to make to the rebuttal testimony that were submitted and is now marked as Exhibit 141?

DR. CHANG: I can't think of anything offhand.

MS. FOLEY GANNON: Thank you.

I will now turn to Matt Moore.

And are you the same Matt Moore who submitted testimony earlier in this proceedings and also participated in the oral proceedings in May?

MR. MOORE: Yes, I am.

MS. FOLEY GANNON: I understand you did not actually submit any rebuttal testimony in -- associated in preparation for this hearing; is that correct?

MR. MOORE: I did not submit any rebuttal testimony for this hearing.

MS. FOLEY GANNON: Is the c.v., the credentials that were submitted with your earlier testimony still valid?

MR. MOORE: Yes, they are.

MS. FOLEY GANNON: Thank you.

Have you had an opportunity to review the supplemental staff assessment?

MR. MOORE: Yes, I have.

MS. FOLEY GANNON: And I understand that you were in charge of evaluating and looking at the potential for there to be erosional impacts as a result of the project.
construction, either during construction or during operations; is that correct?

MR. MOORE: That's correct.

MS. FOLEY GANNON: And what was your conclusion based on, the studies that you undertook on the site regarding the potential impact?

MR. MOORE: My conclusions, I did run a revised universal soil loss equation that is a national resources conservation service model, modeled existing soil conditions as well as proposed soil conditions with and without anticipated construction best management practices and final operational best management practices on site.

My conclusions were that with proper selection and implementation of construction and post-construction best management practices, that the site could be designed and operated with insignificant impacts to soil erosion from gully formation on the site.

MS. FOLEY GANNON: There was a question earlier today about whether in identifying best management practices that would be used on the site whether you relied on the experience at Maricopa.

When you were looking at the potential impacts and the best management practice maybe needed and evaluating the potential for erosion, were you considering Maricopa?
MR. MOORE: No, I was not. I was considering general or typical best management practices that would be employed at a construction site here in California based on my knowledge of what the state construction general permit would require during construction.

MS. FOLEY GANNON: So it's fair to say that your analysis and conclusions were site specific; rather than looking more at the technology, you're looking at the -- the specific conditions on the site?

MR. MOORE: The soil conditions on the site were utilized in the models.

MS. FOLEY GANNON: Very good.
And there have been some questions raised about the conclusiveness of the revised universal soils calculation tests that you ran.

Is this a standard test or model that's used?

MR. MOORE: Yes, it is a standard model used to predict pre- and post-construction BMP effectiveness in California and throughout the United States.

MS. FOLEY GANNON: Have you used it on other projects which have been approved by the commission or by other state or local agencies?

MR. MOORE: Yeah. We've used it on various other construction projects within southern California.

MS. FOLEY GANNON: And have you then subsequently
been involved in the actual construction of a project?

    MR. MOORE: Yes, I have.

    MS. FOLEY GANNON: And have you seen that
effective management -- or can effective management
measures be identified for these types of projects where
the test results have indicated that that's going to be
possible?

    MR. MOORE: Yeah. If the BMPs selected are
properly installed and maintained, they can maintain a
level of control of the erosion and sedimentation on site.

    MS. FOLEY GANNON: And I believe that the staff
did a similar calculation or evaluation of the potential
for these erosional impacts to occur.

    Do you have any comments on their assessment or
on their conclusions?

    MR. MOORE: The conclusion was, I think, a
similar calculation was performed and came up with similar
results to what was prepared by me.

    MS. FOLEY GANNON: And there is a -- there was a
condition, Soil and Water 7, which was revised and
distributed this morning as Exhibit 138.

    Have you had an opportunity to look at the
revisions proposed to Soil and Water 7?

    MR. MOORE: Yes. This is in response to the
storm water damage monitoring response plan.
MS. FOLEY GANNON: And can you just summarize the nature of the changes that are being requested in this condition?

You can take a moment. It's been a long day. You can look at it.

MR. MOORE: Yeah, I have looked at it, I'm just going back through here.

The -- one of the items requested is that the monitoring and inspection occur before the first seasonal and after every 10-year storm event because --

MS. FOLEY GANNON: As proposed by the applicant or as proposed by the staff?

MR. MOORE: Correct, that the 10-year would be proposed by the applicant, condition of that 10-year.

MS. FOLEY GANNON: So in the initial condition the staff had suggested, I believe, that there be monitoring every storm?

MR. MOORE: Every storm event. And we had requested to change that to every -- after every 10-year storm event.

MS. FOLEY GANNON: In your professional judgment, would monitoring after every storm give information that would be meaningful to assessing the potential impacts or to identifying necessary measures to address them?

MR. MOORE: I believe that requirement to monitor
the entire site after every storm event would be excessive
in terms of the -- due to the size of the project as well
as the -- every storm event may not produce runoff on site
that would lead to erosion or potential damage to
SunCatchers or site facility.

MS. FOLEY GANNON: Do you believe that condition
will be effective in mitigating potential impacts as
proposed by the applicant?

MR. MOORE: Yes.

MS. FOLEY GANNON: Thank you.

That ends my direct testimony of my witnesses.

HEARING OFFICER RENAUD: Thank you.

Cross-examination by staff.

MS. HOLMES: Staff has none.

HEARING OFFICER RENAUD: All right.

CURE?

CROSS-EXAMINATION

MS. MILES: Mr. Moore, I have a few questions.

Do the proposed application of soil binders
reduce infiltration rates and thereby increase runoff on
the site?

MR. MOORE: There is a potential with the -- if
the surface is hardened in some fashion, that it could
increase the runoff rate on that surface. But as -- and
I'll let Dr. Chang speak again on this, but with the
surrounding soils having high-infiltration capacity, the additional runoff would be allowed to infiltrate.

MS. MILES: Say that last sentence again. With the surrounding soils being -- what was that?

MR. MOORE: That the surrounding -- the soil surrounding any of the areas that would -- surfaces that may have reduced impermeability would allow -- would -- that water would infiltrate prior to -- in most cases, prior to going off site.

MS. MILES: Okay. Have you ascertained the potential impacts to cryptobiotic crust and desert pavement from project development?

MR. MOORE: No. In the model we did not evaluate, in my model and the RUSLE2 model I did not evaluate the cryptobiotic soils.

MS. MILES: Or the desert pavement?

MR. MOORE: The model utilized the general soil classifications without specifically looking at areas on site that may have desert pavement.

MS. MILES: Would construction of over 250 miles of access roads compact the soil and completely destroy the pavement and crust affecting infiltration and runoff?

MR. MOORE: The construction of the roadways on site, if, you know, as Dr. Chang had indicated, would potentially increase the impermeability of the soils.
with -- you know, but the infiltration on site would, you
know, overall that the soils are adequate to allow that
infiltration.

Now, in regards to the construction of the roads,
I can't necessarily speak to the destruction of desert
pavement or cryptobiotic soils, because I -- you know, we
haven't, as far as I know, mapped those out on site.

MS. MILES: Have you calculated how much soil
binders will reduce infiltration and increase runoff?

MR. MOORE: I have not personally made that
calculation to determine the total amount of, you know,
potential increase or reduction in the amount of
infiltration due to the soil tackifiers.

MS. MILES: Have you seen that calculation made
by any of your colleagues on behalf of the applicant in
this proceeding?

MR. MOORE: I have not evaluated those.

MS. MILES: How did you justify your soil loss
factors used in the soil erosion calculations,
specifically the cover management factor used to account
for the effectiveness of the proposed best management
practices?

MR. MOORE: I utilized in my best estimate the
types of -- or equivalent cover management practices that
would be employed.
MS. MILES: And did you -- where did you get your best estimate? What did you base your best estimate upon?

MR. MOORE: Based upon my personal experience at construction sites in southern California.

MS. MILES: Please explain your rationale for using the hydrologic analysis provided by RMT which Dr. Chang identified was not representative of the actual desert hydrology when he initially reviewed the RMT study.

MR. MOORE: If we're speaking towards soil loss calculations, I used standard parameters for that area.

DR. CHANG: If I may add something to that question. Actually, I reviewed hydrology study by RMT. In fact, in two different rounds. Both rounds I made comments that, in fact, they made some important revisions. Finally, I accepted that hydrology study.

MS. MILES: As you can tell, I've been assisted in developing these questions from our experts, so that's why I'm looking to them.

So I think that's -- okay. I have a couple more. And how did you validate the sediment transport analysis when comparisons to field observations were not made and it is evident that the rainfall event was not a 10-year event that you went out and monitored?

DR. CHANG: I guess I should answer that question.
In sediment transport, we don't have any data at project site, that's for sure, but in standard practice, here's how we do it. We use the grain size distribution, which is analyzed, we used actual hydrograph, which has been established. We model sediment transport using a model which has been extensively calibrated. These other things we have to take in order to produce something which can be, you know, verified, which can be considered as valid.

MS. MILES: And did you calibrate it on the project site?

DR. CHANG: No, we don't have any data to calibrate with.

To calibrate a model, we have to know the actual rainfall record, not a hundred-year storm, we may not have a hundred-year storm. You may not have one in my lifetime. We have to have the measurement before the storm, we have to have the measurement after the storm. Such data are not available at this point in time.

MS. MILES: Was it possible in the last, I don't know how long it's been since the application was filed, to get that data?

DR. CHANG: I can't think of anybody making measurements aside years ago before the storm, I can't think of any.
MS. MILES: So you know the -- I mean, you've looked into more recent data, and there was no major storms in the area.

DR. CHANG: I look, and there's no, nothing available for calibration purpose.

MS. MILES: Okay. I think that's -- oh, I'm sorry, one more question.

Dr. Bowles and Mr. Campbell testified that two-dimensional modeling provides a better representation of physical conditions than one-dimensional modeling.

Why did you not use two-dimensional modeling?

DR. CHANG: That's a very good question.

Two dimensional -- there are several two-dimensional models. They're hydrodynamic models; that is, they model the surface water flow, but they do not model the sediment transport of the bed material. The bed load transport is not modeled by two-dimensional model.

In addition, a two-dimensional model does not model the dynamic changes of stream channel geometry during the occurrence of a storm event. So such a model does not exist today.

MS. MILES: Would you say even with those deficiencies that a 2-D model would provide more realistic results?

DR. CHANG: Only for the surface water flow.
See, but being a stream wash, the flow's basically one dimensional. So the advantage gained by two-dimensional model over one-dimensional model as far as the flow is concerned is very limited, let alone, a two-dimensional model does not simulate a bed load transport, does not simulate stream channel changes which are required for this project. Therefore, we could not use because such a model does not exist.

MS. MILES: Thank you, Dr. Chang.

I have no further questions.

HEARING OFFICER RENAUD: Okay. Questioning by Tom Budlong?

MR. SILVER: No.

HEARING OFFICER RENAUD: CNPS?

MR. BELTRAN: I have one question.

HEARING OFFICER RENAUD: Go ahead, please.

CROSS-EXAMINATION

MR. BELTRAN: This is kind of a -- I think maybe I'm going to have a little difficulty formulating this question, but, Dr. Chang, you had said that after applying the soil tackifiers, and I don't remember the exact name, it was soil tack or soil tech, there was a pretty elaborate description in one of the responses to the data request, and it described mixing this product down to a depth of about six inches, and that this material would
reduce the infiltration, that it was -- it talked about
the strengths of the material or the after product.

Is five percent the correct amount that you --
the area of the project, that five percent will be treated
with either roads or this soil treatment?

DR. CHANG: You know, I did not work on that
aspect.

Did you? Are you familiar with that?

MR. MOORE: I didn't prepare that estimate, but
that's what the latest number that I had received.

MR. BELTRAN: Okay. But five percent is
something that I just heard here this evening; is that
correct?

DR. CHANG: I don't know -- I don't know anything
about it.

MR. BELTRAN: Okay. But, Mr. Moore, you had said
that these surfaces -- that the water would flow off of
these surfaces, and because of the highly-permeable nature
of the surrounding soils, that it would be infiltrated,
that there would be no runoff.

Is that -- did I hear that correctly?

MR. MOORE: Yeah, during the -- my estimate would
be during low to moderate rainfall events, I mean, we
can't guarantee there's not going to be runoff at any time
from the site or from those areas. It would depend on the
rainfall amount and intensity.

MR. BELTRAN: I think that what I'm trying to get
at is what -- what I think I understood is that these
treatments would not affect -- would not increase runoff
from this project.

Did I understand that properly? Correctly?

DR. CHANG: The treatment would actually reduce
the permeability of the soil. That is very true.
However, only five percent of the surface area would
either be paved or treated, would reduce the permeability.

You see, we're talking about highly-permeable
soil, it's called soil type A, soil type B in hydrologic
soil classification, which has high permeability. See, we
have a short rainfall duration and high soil permeability;
even if certain surface areas, say five percent, does not
have same permeability. Now, water would still
percolate, would still recharge the groundwater in
adjacent areas. They will not reach the saturation point
for such a short duration rainfall with such high
permeability. So therefore, the net effect on surface
water runoff is really very, very small.

MR. BELTRAN: You're talking about small storm
events?

DR. CHANG: Small storm events runoff itself
would be very small.
MR. BELTRAN: And in larger --
DR. CHANG: Larger storm you would have more runoff, we would have more runoff.
MR. BELTRAN: So are you saying that in large storm events that the runoff from this project post-construction would be greater than pre-construction?
DR. CHANG: Would be -- the difference should be very small, should be very small.
MR. BELTRAN: Okay. Thank you.
HEARING OFFICER RENAUD: Okay. Any redirect?
MS. FOLEY GANNON: No redirect. Thank you.
HEARING OFFICER RENAUD: All right. Thank you.
And I believe, let's see, staff, do you have a witness?
MS. HOLMES: I do. I'm still writing notes.
HEARING OFFICER RENAUD: All right.
MS. HOLMES: I'm almost through. Thank you.
Staff's witnesses are Mr. Dennis, who has already been sworn, and Philip Lowe, who needs to be sworn.
(Mr. Lowe was sworn.)
THE REPORTER: Could you please state and spell your name for the record?
MR. LOWE: My name is Philip Lowe, P-h-i-l-i-p L-o-w-e.
DIRECT EXAMINATION

MS. HOLMES: Thank you. And I'll ask these questions to Mr. Lowe as a proxy for both members of the panel, but obviously if there's a question that's specific to Mr. Dennis, you can assume that he'll answer it.

    Mr. Lowe, did you prepare the sedimentation and erosion discussion in Exhibit 302, which has been identified, which is the supplemental staff assessment?

    MR. LOWE: Yes, I did.

    MS. HOLMES: And was a statement of your qualifications included in that document?

    MR. LOWE: Yes, my qualifications were in there.

    MS. HOLMES: Do you have any changes to your testimony tonight?

    MR. LOWE: Yes, I do.

    MS. HOLMES: Could you please go through them for the committee and the parties?

    MR. LOWE: Okay. I have two changes. It's a couple of paragraphs. I'll read them.

    MS. HOLMES: My suggestion to Mr. Lowe is to read them into the record, and then we'll provide a written copy tomorrow morning since he won't be here at that time.

    HEARING OFFICER RENAUD: All right. And please identify where these changes occur by page number, if you can.
MR. LOWE: Well, I can identify by section number in the staff assessment. I don't have the page numbers here in front of me.

Section C.7.4.3, which is CEQA level of significance for the project.

MS. HOLMES: That begins on page 58.

MR. LOWE: Let me see. Yes, actually the correction would be on page 59, because I'm talking -- referring to the fourth bullet below the title.

And the wording "conditions of certification soil and water-1, soil and water-3, soil and water-5, soil and water-6, and soil and water-7, would ensure that the project not create or contribute runoff water that exceeds existing or planned storm water drainage system capacity or provides substantial additional sources of polluted runoff."

That statement should be replaced with, "with the exception of runoff pollution related to increased sediment load due to stream morphological changes, conditions of certification soil and water 1, soil and water 3, soil and water 5, soil and water 6 and soil and water 7 would ensure that the project not create or contribute runoff water that exceeds existing or planned stormwater drainage system capacity or provides substantial additional sources of polluted runoff."
MS. HOLMES: Could you read that one more time? I know you're going to be presenting it in writing, but I want to make sure I understand what it says. Could you read that again?

MR. LOWE: Starting from where? Starting from the beginning?

MS. HOLMES: So where -- you're inserting from the start?

MR. LOWE: That part that I just first read is to be replaced with the second part.

MS. HOLMES: Then can you just read the second part then? Whatever you're putting in.

MR. LOWE: Okay. "With the exception of runoff pollution related to increased sediment load due to stream morphological changes, conditions or certification, soil and water 1, soil and water 3, soil and water 5, soil and water 6, and soil and water 7 would ensure that the project not create or contribute runoff water that exceeds existing or planned stormwater drainage capacity or provides substantial additional sources of polluted runoff. Additional sediment load associated with stream morphological changes are considered a significant adverse water quality impact."

The second one is in section C.7.6.3. That would be CEQA level of significance for drainage avoidance
Alternative number 1.

MS. HOLMES: That's on page 7.6-66?

MR. LOWE: Yes, it is.

That whole section which is very short, gets replaced with this: "CEQA level of significance is the same as for the proposed project in all areas except the following: Whether the project substantially alters existing site or area drainage patterns, including the alteration of streams or river courses, or substantially increases the rate or amount of surface runoff in a manner that results in on- or off-site flooding or substantial erosion or siltation. Conditions of certification soil and water 1, soil and water 5, and soil and water 7 would ensure no adverse alteration of drainage patterns related to flooding and would reduce stream morphology and water quality impacts related to sedimentation to a level not significant."

That's all the changes I have.

MS. HOLMES: And with those changes, are the facts in your testimony true and correct to the best of your knowledge?

MR. LOWE: Yes, they are.

MS. HOLMES: And did the opinions represent your best professional judgment?

MR. LOWE: Yes, they do.
MS. HOLMES: And have you had a chance to review Exhibit 138 which contains the applicant's revisions proposed today to soil and water 7, or do you need additional time to respond?

MR. LOWE: I need additional time to respond to those. I have not completed a review of them yet.

MS. HOLMES: Thank you.

MS. FOLEY GANNON: Can I have a -- add something. Do you have this electronically? Could you e-mail this to us, because I'm really having trouble understanding. Since you can't be available tomorrow, if I could look at it, I might be able to formulate -- I can hear your testimony, which, hopefully, will also help, but so that we can ask whatever questions we need to ask. Can you send that to us?

MR. LOWE: Okay. Yes. I can e-mail it to you.

MS. HOLMES: She means right now.

MS. FOLEY GANNON: Right now, yes.

MR. LOWE: Right now? I can't e-mail it right now, I'm not tied into the Internet, and I do not know how to tie into the Internet. I've tried --

MS. FOLEY GANNON: I can tell you.

MS. HOLMES: Can we go off the record for a moment, please?

HEARING OFFICER RENAUD: Yes. Off the record,
please.

(Recess.)

MS. HOLMES: Thank you.

Mr. Lowe, could you please provide a brief summary of your testimony focusing in detail on the area where you have identified significant adverse impacts?

MR. LOWE: The significant adverse impact, and recall I haven't reviewed -- completed a review analysis of the latest information submitted and testified to recently. The significant adverse impact had to do with stream changes related to the placement of SunCatchers in the washes. The plan that we were looking at had quite a few SunCatchers that would be placed in these large stream channels, and there would be vegetation removal associated with that. And there would also be a lot of sediment basins placed in these stream channels.

And the concern that I had was that the removal of the vegetation, the placement of this -- the SunCatchers in the stream path would alter the sediment transport characteristics of these large channels to the effect that they -- that they could have some adverse effects within the property as well as downstream.

The same would go for the sediment basins, which were designed by a regional equation that was applicable for the Mojave Desert, which I thought was not a rigorous
analysis for those kind of basins.

The types of effects that I expected to occur would be possible stream degradation, possible stream aggradation; it could go either way, I did not know. Those could occur both on site and off site. Some of those water courses will be crossing to the north of the property across a railroad bridge -- or railroad -- the railroad that's there and some roadway culverts that could be adversely affected by this, and there could be some sedimentation accumulation impacts further downstream or some other stream morphological changes that could be adverse.

And as a result of that, in the absence of a detailed sediment transport analysis that was not available at the time, I came to the conclusion that there was a potential adverse significant impact that could not be avoided. And so that is the way the staff assessment is written.

MS. HOLMES: Thank you. And have you had the opportunity to read the rebuttal testimony provided by California Unions for Reliable Energy?

MR. LOWE: I have had an opportunity to read quite a lot of it. I don't know if I read all of it, but I read a lot of it.

MS. HOLMES: Can you respond to the concerns that
CURE has raised with respect to hydromodification and wind erosion?

MR. LOWE: With respect to hydromodification, hydromodification would be related to changes in the stream channel associated with the changing in the hydrology that would normally occur in urban areas where a lot of pavement and rooftops and stream channelization occur. The changes, the peak discharge rates normally go up, stream flow volumes generally go up, the frequency of discharges or of a given discharge normally become more frequent. Small floods become larger, large floods become larger.

And the sediment -- the sediment transport volume within these streams is generally reduced by these effects causing stream channels to degrade and to erode and to -- the stream morphology to change usually for the worse.

I've looked at this site. I think that the hydromodification effects potential on this site are very small for very similar reasons to those testified to by consultants for the applicant. For one reason I think they're correct in assuming or the -- the infiltration rates within this property outside of the -- the areas that are treated with -- as roads would be substantial.

Another mitigating factor that I've taken into consideration is the fact that these increased runoff
coefficients only consider the site runoff itself. And if you look at Figure 1 in our staff assessment, the watersheds that we're dealing with extend off the site, and a lot of them extend to the south where there would be no effect. So the overall effect on the actual discharge within the watershed would be mitigated by that fact.

And also, I've done a back of the envelope type of a calculation, very crude calculation that would -- basically looking at the amount of roads that would be unpaved on the site and paved. And increasing the curve numbers, the hydrologic soil group curve number from soil group C, which is roughly what was assumed in the RMT hydrologic analysis, to soil group D. And the results -- the results indicate a very, very small increase in discharge.

So I think that the hydrologic -- or hydromodification effects would be very small.

MS. HOLMES: Did you have a response with respect to their concern about wind erosion?

MR. LOWE: The wind erosion, they -- CURE has commented that the wind erosion analysis was done using very simplistic methods and that a more site-specific method needs to be done. The wind erosion analysis was done with simplistic methods, but I think that wind erosion calculations are very difficult to make, and I
think that they were done using a normal standard of care for this type of work.

And that the conclusion that we made in the staff assessment was that there would be a significant adverse impact associated with wind erosion on this property unless mitigated. And as a result we've placed condition of certification in the staff assessment to mitigate the effects of wind erosion. And this is going to be a type of mitigation that would have to be monitored and adapted as the project goes through its life to make sure that these -- these best management practices for wind erosion are functioning.

MS. HOLMES: Thank you. Those are all my questions.

HEARING OFFICER RENAUD: Okay.

Cross-examination?

Did you want to call your other witness too or -- no.

MS. HOLMES: I don't think he -- do you have anything to add, Mr. Dennis?

MR. DENNIS: No, I don't. Thank you.

HEARING OFFICER RENAUD: Good. Thank you.

Cross-examination by applicant.

CROSS-EXAMINATION

MS. FOLEY GANNON: Mr. Lowe, so based on looking
at these changes, I'm assuming that you are proposing to find a significant adverse and unmitigable impact associated with sediment for the proposed project?

MR. LOWE: For the proposed project as -- as it existed when I evaluated it. Now, the proposed project has changed, as I understand it. I have not evaluated the revised proposed project and I have not evaluated the new sediment transport study that was just testified to by Dr. Chang.

MS. FOLEY GANNON: Looking at your testimony from C.7-37 where you go through the factors which you identified as being potentially affecting stream morphology, I think there's a number of them that it appears you may not have had information either about the proposed project that you analyzed or the project as it has been revised.

In your first factor you talk about there being an increased production of sediment from the watershed surface. Dr. Chang had studied this in all of his -- his -- his modeling analysis method that have been submitted to date.

Have you had a chance to review any of his studies?

MR. LOWE: Not in any detail. I'm aware of the conclusions he's made, but I have not evaluated it in
MS. FOLEY GANNON: So your determination about the fact that SunCatchers would change stream morphology was based on an independent analysis?

MR. LOWE: It was based on my personal experience as a civil engineer, and I've been working in this field for many years, more than 20 years, and I have experience in sediment transport analysis.

And in the absence of a study that specifically addressed this issue, I came to the conclusion there was a potential for a significant impact.

MS. FOLEY GANNON: I guess one thing I'm confused about is we had studies that specifically addressed this issue, and they were submitted. The first one was submitted, you know, I don't have the date right here, but quite some time ago.

MR. LOWE: That study didn't -- in my opinion, did not meet the expectation of evaluating the sediment impacts that I was looking for.

MS. FOLEY GANNON: On what basis?

MR. LOWE: It was, as I recall, it was only an existing condition sediment analysis, and it addressed scour, stream scour I think. I don't -- I don't recall it going into the type of detail that we discussed with Dr. Chang in doing his revised analysis.
MS. FOLEY GANNON: Dr. Chang has testified that he was looking at the stream morphology in all three of his analyses which have been submitted, and was evaluating them both pre-condition and post-condition, looking at the impacts of the sediment -- I mean, the construction of the SunCatchers in the washes, particularly focusing on that and analyzing the particular impacts.

So again, can you identify the specific parts -- so if that report actually looked at post-construction conditions, can you identify what the problems were with the report that made you not accept the results?

MR. LOWE: I need to go back and look at that study. Can you bear with me a moment?

MS. FOLEY GANNON: Yes, absolutely.

HEARING OFFICER RENAUD: Perhaps while the witness is reviewing the document, the applicant can identify the document by exhibit number or some other way so we'll be on the same page?

MS. FOLEY GANNON: Absolutely.

HEARING OFFICER RENAUD: It's not -- is it 32, the supplement?

MS. FOLEY GANNON: I'm looking at -- that we have in the supplemental rebuttal testimony there was a -- there was a report. This one was from May. I think we had copies of the earlier ones here too. But the report
was dated May 28th, that's what I was saying, which was Exhibit 120 to Dr. Chang's testimony, which was Exhibit 141.

HEARING OFFICER RENAUD:  Looks like it might be 30.

MS. FOLEY GANNON:  Exhibit 30?

HEARING OFFICER RENAUD:  Sediment study for three washes at the site?  Yes.

MS. FOLEY GANNON:  That would be one.  Yeah.  If you look at just the executive summary, the first paragraph, it does state specifically the modeling study covers a ten- and hundred-year floods for the pre-project existing conditions and the post-project proposed conditions.  That is on page 3 of Exhibit 30.

MR. LOWE:  Well, for one thing, this study looked at only one wash.

MS. FOLEY GANNON:  Three washes.

MR. LOWE:  Three washes?

MS. FOLEY GANNON:  Uh-huh.

MR. LOWE:  Is this the November 24th study?

MS. FOLEY GANNON:  This is the January 2010 study.

MR. LOWE:  That's the study I have not reviewed.

MS. FOLEY GANNON:  It was submitted on exhibit -- it was submitted on April 26th, 2010.
MR. LOWE: That's the one I'm saying I have not reviewed.

MS. FOLEY GANNON: So assuming there's a study -- you've heard Dr. Chang testify to his methodology, and you may be even aware of the studies that he's done --

MR. LOWE: I'm very well aware of his study. I helped scope the study out with Dr. Chang.

MS. FOLEY GANNON: So you're aware that he has done this, he has reported his conclusions.

I know it's difficult to give definitive statements on something you haven't had an opportunity to read over the last time period, but if the report is consistent with what Dr. Chang has reported, would that change your conclusions?

MR. LOWE: It might. We discussed this in great detail with Dr. Chang at the time before he did that study and the scope that was to be done. And if that study was done according to what we talked about and it shows the results that Dr. Chang says that it does today -- which I have scanned the report and so I was aware of what it said, I just hadn't looked at it in a technical standpoint -- then I might change my opinion.

MS. FOLEY GANNON: So how were you proposing to be able to determine whether the project is or is not going to result in this type of impact?
MR. LOWE: I would need to review the report.

MS. FOLEY GANNON: And when do we anticipate that would happen? I mean, I guess it has to happen pre-approval, or is it pre-certification, or is it a verification? How are you anticipating handling it with this new change?

MR. LOWE: I will review the report as soon as possible upon given direction by California Energy Commission to do that.

MS. FOLEY GANNON: Okay. It's difficult to discuss this in substance.

But there obviously are, as you did reference, there are a number of changes that have been made, so you list other factors here which are going to influence your decision. So would it make a difference in your calculation if you found out that only 1.5 percent of the vegetation will be cleared in the washes?

MR. LOWE: That would make a difference.

MS. FOLEY GANNON: That's consistent with the proposed project.

MR. LOWE: But like I say, I can't testify ahead of time to what my conclusions would be. It would likely make a difference, but I can't say for sure.

MS. FOLEY GANNON: One factor that you may have thought about, because it does seem to be called out as
being something that seemed to be part of your -- basis
for your conclusion, was the inclusion of sedimentation basins.

MR. LOWE: Right.

MS. FOLEY GANNON: I think you referenced you're aware that the applicant has proposed to remove the sedimentation basins?

MR. LOWE: I'm aware of that.

MS. FOLEY GANNON: You can't prejudge something, but do you assume that would change or influence your determination about the impact?

MR. LOWE: It would definitely be an influencing factor, yes.

MS. FOLEY GANNON: So again, are you proposing any mitigation measure? I guess because you haven't determined really whether there is a significant impact associated with the project, you haven't --

MR. LOWE: No.

MS. FOLEY GANNON: -- determined mitigation measures yet.

I have no more questions.

HEARING OFFICER RENAUD: Thank you.

Are there cross-examination questions by CURE?

MS. MILES: I have just have a few of the same questions I previously asked to a prior witness.
CROSS-EXAMINATION

MS. MILES: Have you ascertained the potential impacts to cryptobiotic crust and desert pavement from project development?

MR. LOWE: With regard to cryptobiotic crusts, no. Desert pavement, I've not done a detailed analysis. I have been on the site. I'm familiar with desert pavements. I live in the desert, I grew up in the desert, lived there for almost all my life, pretty familiar with desert pavements and the desert pavements that are on that site that are not very well developed in my opinion, they are not -- they're very few -- I actually did not see any on the site that I would really -- well-developed desert pavements, and what's there is few and far between.

As far as cryptobiotic crust, no. I did see a small amount of crust on the site. I imagine it might have been cryptobiotic in nature, but I really don't know. I haven't done an analysis on that.

MS. MILES: How much time did you spend on the site?

MR. LOWE: Probably, all added up, a day and a half.

MS. MILES: And did you travel around by roads or did you walk the site?
MR. LOWE: The entire site.

MS. MILES: By roads, or did you walk the site?

MR. LOWE: I traveled around by roads and I walked.

MS. MILES: Okay. Have you calculated how much soil binders will reduce infiltration and increase runoff?

MR. LOWE: The only thing that I've done is what I said earlier, was a back of the envelope type of a calculation assuming that the roadways, the unpaved roadways would increase the curve number, hydrologic soil group curve number up from hydrologic soil group C to soil group D. And whether that's representative of the soil binders, I don't know. And the result showed very little change in hydrology.

MS. MILES: Did you independently verify the soil loss factors used in the soil erosion calculations, specifically the cover management factor used to account for the effectiveness of the proposed best management practices?

MR. LOWE: No.

MS. MILES: That's all the questions I have.

Thank you.

HEARING OFFICER RENAUD: All right. Thank you.

Cross-examination by Budlong?

MR. SILVER: No.
HEARING OFFICER RENAUD: CNPS?
MR. BELTRAN: Yes.
HEARING OFFICER RENAUD: All right. Go ahead.

CROSS-EXAMINATION

MR. BELTRAN: My interests are in the wind erosion on the wind erosion subject.
You said that it's very difficult, that these calculations are very difficult. Did you basically use a model to estimate the wind erosion?
Did I understand that correctly?

MR. LOWE: The model was prepared by the applicant. I reviewed the model. And I reviewed the literature on the model. And it seemed reasonable to me, but I did not do an independent analysis.

MR. BELTRAN: And you said that you have 20 years' experience in this field of expertise.
Have you ever done any in situ tests?

MR. LOWE: In situ tests on what?

MR. BELTRAN: On soil erosion?

MR. LOWE: No. My 20 years' experience is in sediment transport and hydrology and hydraulics.

MR. BELTRAN: So your testimony is only in water erosion?

MR. LOWE: My testimony is over the overall area, but my main area of expertise, the 20 years' experience is
in water erosion, hydrology and hydraulics.

MR. BELTRAN: Okay. Thank you.

HEARING OFFICER RENAUD: Okay. No further questions?

Any redirect?

MS. FOLEY GANNON: No redirect of this witness.

Oh, I'm sorry. Sorry. Sorry. Sorry.

MS. HOLMES: It's getting late.

MS. FOLEY GANNON: It is.

MS. HOLMES: I have no redirect; so she, therefore, has no recross.

MS. FOLEY GANNON: Yeah, no recross.

But I would like to -- and we can discuss this tomorrow -- we have not offered this rewrite into evidence, but I would like to be able to discuss that tomorrow before we submit that and have a chance to look at it as well.


MS. FOLEY GANNON: Can we offer a brief rebuttal from Chang in response to --

HEARING OFFICER RENAUD: Sure. Right now?

MS. FOLEY GANNON: Yes, right now.

HEARING OFFICER RENAUD: Go ahead, please.
REBUTTAL EXAMINATION

MS. FOLEY GANNON: Dr. Chang, you are still under oath.

I'm sure you had the opportunity to hear Mr. Lowe's testimony. Can you provide a response to his conclusions?

DR. CHANG: Mr. Lowe commented on the possibility that the SunCatchers placed in the washes may change the morphology and the sediment of the wash. We actually have analyzed the facts of SunCatchers in washes and how they affect sediment transport.

See, SunCatchers are supported on pedestals. Each pedestal has a diameter of two feet. I calculated the surface area occupied by the pedestals in comparison to the total surface area of the wash. That's about a one-thousandth. So we're talking about a very low density of the surface area occupied by SunCatchers. That effect should be very small.

We consider them as increase the surface roughness. In other words, SunCatchers would actually increase the surface roughness to flow.

On the other hand, we offered trimming of the vegetation. Right now the vegetation in the washes are very, very sparse. We're going to remove some vegetation, but we're adding the SunCatchers to compensate for the
effects of vegetation removal. So the net effects is compensated. In that way we are basically maintaining surface roughness of the flow. If we maintain the surface roughness, then we are maintaining the same sediment transport, we are maintaining the same sediment delivery toward downstream.

The other point I wish to make is that in every sediment study afterward, I mean, this is after Mr. Lowe had a chance to review, we understand the concern is the impact of the project, so therefore, for all the studies afterwards, all together four washes have been studied. For every study for every wash we covered the pre-project conditions and the post-project conditions because only from the results of these two conditions we can evaluate, assess the impacts of the project.

Another point I wish to make is that we made -- I made recommendation that we do away with all the debris basins. I believe right now we have no debris basins planned for the project site. With no debris basins, we are not going to reduce sediment delivery toward downstream, we are not going to create hungry waters scenario for the downstream properties.

MS. FOLEY GANNON: Thank you, Dr. Chang.

HEARING OFFICER RENAUD: Thank you.

Any cross-examination of the rebuttal?
MS. HOLMES: No.

MS. MILES: No cross.

HEARING OFFICER RENAUD: Anybody?

MR. SILVER: No.

HEARING OFFICER RENAUD: All right. Thank you.

MS. FOLEY GANNON: I think I forgot the first time Dr. Chang testified to ask that his testimony, his exhibit be offered into evidence. So I would ask that that be accepted now.

HEARING OFFICER RENAUD: That would be 141?

MS. FOLEY GANNON: 141.

HEARING OFFICER RENAUD: Any objection? Parties?

MS. HOLMES: No objection.

MS. MILES: No objection.

HEARING OFFICER RENAUD: No objections. That's admitted. Thank you.

(Applicant's Exhibit 141 was received into evidence.)

MS. FOLEY GANNON: Thank you.

HEARING OFFICER RENAUD: All right. Let's see. You're done. You're done.

CURE, I believe you had witnesses in this area?

MS. MILES: Yes. We would like to call our witnesses. Dr. Bowles and Chris Campbell.

HEARING OFFICER RENAUD: Thank you. They've been
previously sworn today?

    MS. MILES: Yes, they have.

DIRECT EXAMINATION

    MS. MILES: And we've already established that their testimony is their own, so I'm just going to go ahead and ask the questions.

    Dr. Bowles, what outstanding issues do you have with the supplemental staff assessment?

    MR. BOWLES: Yeah, the supplemental staff assessment I think primarily addressed water supply. From our review there weren't any huge changes to the previous information we'd been given, so really, you know, our testimony here is to reiterate what we've already said, which is we think the hydrology is flawed. The frequency, duration, timing and volume of runoff, we believe will change as a result of the project, and that the analysis has under-predicted that change between existing conditions and with project. And we're going to go into that in greater detail as we go through this.

    The effect of that, the underestimation of the hydrology is that the flood plain inundation is likely underestimated. The scour around the pedestals might be -- is probably underestimated. Certainly sediment transport and soil erosion calculations are probably underestimated as well.
The SSA, supplemental staff assessment, did not consider compaction of over 250 miles of unpaved roads and the effect of soil binders and the increase and impervious area as a result of those, the compaction and construction of the roads. And I think we very clearly identified through previous testimony that no on the ground surveys of cryptobiotic crusts or desert pavement have been done.

In my opinion, a project of this magnitude, that really should have been one of the first surveys done because of the importance of desert pavement and cryptobiotic crust and the benefits to infiltration that they have. We really need to ascertain if they're even out there. And all we've got so far really is anecdotal evidence to suggest, well, we walked out on the site for a day, day and a half, and we didn't see any, or we did see some, but they weren't very prevalent. I think it's a huge question, the coverage of those cryptobiotic crusts and the desert pavement, fundamental to the analysis.

The flashiness and the peak magnitude and the volume of the runoff is underestimated and --

MS. MILES: Can you define "flashiness" too?

MR. BOWLES: Yeah. How rapidly the hydrograph rises and falls. Thank you. "Flashiness" isn't a very technical terminology; I apologize for that.

These increases in runoff as a result of the
project will, in fact, will affect sediment transport.

We've just become aware, I believe it's the LEDPA recommended by the corps, right, as recommended that the project be reduced to 709 megawatts. But the point is that still half the SunCatchers are in the primary washes, or should I say at least -- approximately half of the primary washes are still impacted by SunCatchers and all of the secondary washes still impacted by SunCatchers. I think in our opinion, the impact of the SunCatchers on the washes is significant. They'll have a major effect on the sediment transport regime of those washes.

I think we've already mentioned this. This SSA does not account for the current intensity of frequent storms and under-predicts flow plane potential impacts and scour and sediment transport.

And before we get on to more details, our -- in summary, our assessment of the sediment transport and hydrology and soil erosion has been that we're in a very fragile desert environment that is -- is -- can be highly impacted. The sediment transport processes are a function of a high-intensity predominantly summer storms. It's the short duration summer storms, which Dr. Chang has corroborated in his testimony, that really do all the work and rearrange these systems and really transport a lot of sediment. So with this very fragile environment that the
project is proposing to dramatically change has really been the fundamental basis of our whole testimony and our whole review.

And if it's okay, I think I'm allowed to do this, I was actually reading a report last night called the Arid Cram Assessment, which is the California Rapid Assessment Methodology. I don't know who commissioned this. Was it the applicant?

It was the corps. That would make sense. That would make sense.

So California Rapid Assessment Methodology hasn't been applied in desert environments very much. So they're using this project as kind of a case study of how to -- how to apply the California Rapid Assessment Methodology, and the corps are requesting that on all new projects now, that CRAM be done. So it's important that it's tested in a desert environment.

But I'm not really going to talk about the CRAM scores because I think there's -- we could debate those CRAM scores till the cows come home tonight, and we all want to go home at some point. But if it's okay, there would -- there's some really important observations by very highly-reputable scientists in the field that are made in this report.

So could I just take five minutes to read some of
these? I think they're really important.


HEARING OFFICER RENAUD: Yes, go ahead. Sure.

MR. BOWLES: I've just highlighted some issues which do a really good job of summarizing what we're dealing with here.

These channels are highly susceptible to widening and avulsions, channel relocation -- avulsion is channels moving. This is all in the natural condition -- during moderate to high discharges, reestablishing a low-flow channel during subsequent low flows. In other words, this environment is changing after every major storm. A lot of sediment transport, lot of movement of material all over the place. It's very hard to predict where this stuff is going to flow, both the water and the sediment.

MS. MILES: And how do you define a major storm?

MR. BOWLES: I think I read somewhere here that it's got to be in excess of the ten year. I think I saw an 18-year storm. Yes, that doesn't happen very often, but imagine a scenario where you've got a wash full of SunCatchers and an 18- or 20-year or 30-year storm does come through here. Those SunCatchers are really going to exacerbate what's happening within those washes in terms of hydraulics and sediment transport.

Second quote here is discontinuous ephemeral
streams are characterized by alternating erosional and deep positional reaches. They are constantly in flux as head cuts, nick points originating at the downstream end of the sheet flood zone migrate upstream causing dramatic temporal and spatial changes in channel morphology at any location.

Again, highly dynamic system.

A high-density of closely spaced braided channels with high width to depth ratio and low sinuosity generally characterize the larger drainages on the study site. Most of the channels encountered tend to have deep sediment deposits -- there's a lot of sediment out there -- composed of sands and gravels with widely scattered vegetation growing within the channel and its flood plain.

Headwater drainages on the site are characterized by some gullying and bad land development. High width to depth ratios, braided channels, low sinuosity, are often the result of high sediment concentrations and coarse grain sizes.

And then not much more left to go.

Although the majority of the rainfall occurs during the winter, the majority, 65 percent of the annual runoff occurs during the summer months of July to September. Runoff events when they occur are generally activated by intense summer monsoon rains that produce
short duration flash flooding with high flow peaks. Although winter storms produce more rain on average than summer monsoons, they are widespread and low intensity and expected to contribute less to runoff events at the project site.

In other words, don't go and look at events in the winter, you need to observe summer high-intensity, rapidly-rising hydrographs. Those are the events that move all the sediment.

I'm almost finished.

The three most common indicators of aggradation observed included an active flood plain with fresh splays of coarse sediment, perennial, terrestrial, riparian vegetation encroachments in the channel and a plainer bed. Erosion transport and deposition of sediment all have the potential to occur on the study site. Transport of sediments into the site commence from the south of Interstate 8 where several large basins drain into the site. When flooding occurs, detached sediments from these off-site basins can be deposited within the site.

Sediment from off-site basins entering the project's area south of the site is transported through the existing washes on site and typically exits through the north and northeastern sections of the site.

And then the final, so sediment is passing
through the site as we speak under existing conditions.

Finally, therefore, it is important to note that any indicators of aggradation should be expected for naturally function arid ephemeral streams. Perturbation to the natural process of sediment delivery and flood waters could lead to incision and down cutting of the stream channel. Perturbation meaning changes to the watershed as it -- for example, as a result of the project.

Delivery of water to a channel is dependent largely on the timing, duration, and the amount of water that falls on the surface and subsequently runs off, which is dependent on soil type and condition of the contributing watershed and buffer. Small tributaries generally have land-dominated hydrographs. So the small tributaries here have land-dominated hydrographs as opposed to stream flow, such as the San Diego River, dominated because they mainly drain adjacent land surfaces.

Condition of the upstream basin contributing watershed is a driving factor for streams in arid land. So the condition of the watershed really has a huge impact on these washes.

Upstream condition of the contributing watershed may be a more appropriate measure for arid land streams.

So these channels -- these channels are highly
susceptible -- oh, that's where I started. I'm so
excited -- the reason I wanted to read --

HEARING OFFICER RENAUD: Would you just read for
the record what that was that you read from?

MR. BOWLES: Yes, it's the Arid California Rapid
Assessment Methodology Assessment Draft June 2010. And I
think it was in the supplemental --

MS. FOLEY GANNON: We'll be offering that into
evidence tomorrow and discussing it.

HEARING OFFICER RENAUD: Good. Thank you.

MR. BOWLES: So the reason I read all that out is
I think it corroborates a lot of our observations by local
experts who spent a lot of time in these environments as
well.

So that finishes the introduction.

MS. MILES: Okay. Thank you. I see that you're
very enthusiastic about the results of that, and I think
that it does really draw out the distinction from the
analysis that, really, there's not a lot of movement of
sediment on the project site. And so, thank you for
sharing that.

Matt Moore and Dr. Chang said that roads
represent only five percent of the total area that will
infiltrate into the surrounding land.

Do you agree with that assumption?
MR. BOWLES: The thing to talk about there or to observe is that it all depends how these -- the access roads are graded. If they're graded and if they've been designed in such a way to run off to the side into the unimpacted areas, then, you know, that might reduce the impact. But I would imagine that there will still be a case where in the large summer monsoon, large summer storms these access roads will actually act as conveyance channels, if you like, passing these high flows into the washes.

So I think it's an oversimplification to say, well, the runoff from the access roads all run straight into the adjacent land. I don't think that's necessarily true. They will act as, in effect, in a large event as conveyance channels, and they will be more impervious than they are now.

The other thing to say is that Dr. Chang pointed out twice that the access roads represent five percent of the total area. A rough calculation. That represents an increase in percent impervious cover of over three percent. There's a lot of literature, research and literature to say that receiving waters and channels are impacted, the geomorphology of those channels due to hydromodification are impacted in cases of increase in percent impervious cover of less than percent. So in
other words, literature would suggest, prior research, that the increase in percent impervious cover that we will see at this site, you will see a response of the channels, of the washes, and that response will be, as has been corroborated by the CRAM study as well, a degradation of the channels. There's a lot of large, deep sediment deposits in the washes. You'll see increased runoff, which will increase the sediment transport through the site, and you'll see erosion and degradation of the washes, which is called incision.

MS. MILES: Did the applicant consider the difference between existing conditions and post-project hydrology?

MR. BOWLES: I think there's another question you were going to ask, is there?

MS. MILES: Sorry, I don't remember. Let me see.

MR. BOWLES: What we wanted to talk about --

MS. MILES: Yeah, please, talk about what you'd like to --

MR. BOWLES: Shall I just ask myself a question?

MS. MILES: You know this topic better than me.

MR. BOWLES: Dr. Chang brought up an issue about the hydrology, and we wanted to just summarize our observation of the hydrology. I think it's going to be very beneficial at this point to summarize our conclusions
on the four different hydrologic studies that were used and why we're of the opinion that the ultimate hydrologic study that was used is not representative of the hydrologic conditions actually at the site.

So, Chris, you should get behind the microphone; you're going to talk briefly about the various studies.

MR. CAMPBELL: Yes. So there were four -- three or four variations on the hydrologic studies that were performed by the applicant. The first study was conducted by Stantec in 2008, and that represents this black solid line, whereby they used regional regression, USGS regional regression in lieu of better information.

They then came back in in a second iteration, which was the second study, and did a more detailed local analysis of 15 USGS gauges, and came up with what is this green -- this green line. And the green dots that fall on that line are then -- represent each of the watersheds at the project site that were then a hydrologic model was developed for this site, and each watershed was basically calibrated such that the flow would fall on that green line, which seems appropriate.

Upon completion of that study, Chang had reviewed the Stantec 2008B study and concluded that the flows were too low. Following along from that, RMT came into the picture and developed a third hydrologic study using
hydroCAD represented by the blue dots. Chang then
reviewed their study and determined that their flows were
lower than the flows that he previously said were too low,
and so upon that he made some recommendations for RMT to
go in and revise their hydrologic analysis. Upon revision
of their hydrologic analysis represented by these crosses,
it may be difficult to see, but most of the crosses more
or less fall on top of their previous study points. So it
was unclear to us why the applicant continued to use a
study based upon the recommendation of Dr. Chang that were
too low for most of the project site.

MR. BOWLES: Okay. Does that make sense? Is
that clear to everybody?

MS. MILES: Do you want to reiterate the
conclusions from this, what this represents?

HEARING OFFICER RENAUD: May I just ask where is
the figure that's been referred to so it will be clear for
the record where he was talking about?

MS. MILES: Actually, I was going to offer these
exhibits into evidence.

MR. CAMPBELL: But this particular figure is in
our opening testimony.

MS. MILES: Okay.

HEARING OFFICER RENAUD: The opening testimony,
all right.
MS. MILES: And the prior one need to be offered into evidence. The one from the water supply.

MR. CAMPBELL: The prior two?

MS. MILES: Yes.

MR. BOWLES: So the conclusion that we're drawing from this analysis that Dr. Chang recommended some modifications to the RMT study because he said the hydrologic estimates were too low. When we looked into it, we don't see a dramatic change in the hydrology. So in other words, the hydrology is still problematic, we believe.

MS. MILES: Thank you.

So back to that question that I asked, did the applicant consider the difference between existing conditions and post-project conditions?

MR. BOWLES: In our opinion, from our observation, only existing conditions, no project condition hydrology was run. Typically we would do an existing conditions hydrologic model, we would build a post-project conditions hydrologic model, we'd look at the changes in the hydrology, and then design the mitigation to reduce the hydrology down to existing conditions. Only in existing conditions a hydrologic model was built.

Anything to add there, Chris?

MR. CAMPBELL: No. That's correct.
MR. BOWLES: Okay. And it was simply assumed that -- we've had a bit of discussion about the BMPs, but it was assumed that the BMPs would be implemented to mitigate for project impacts.

So in other words, the applicant decided not to run project hydrology because the assumption had been made that best management practices would mitigate for the hydrology, and hence, match existing.

MS. MILES: And is that a reasonable assumption?

MR. BOWLES: Well, no, no, in our opinion, no analysis was performed to justify the performance of the best management practices.

MS. MILES: Okay. Was climate change considered in that hydrologic analysis that you reviewed?

MR. BOWLES: No. No, it wasn't. No.

MS. MILES: And what's the consequence of not considering climate change?

MR. BOWLES: Well, we realize climate change is a highly-contentious issue, however, I think most people accept that climate change is real. Obviously the IPCC has spent huge amounts of time on coming up with all the various predictions.

In our opinion, we think due diligence would include some sensitivity analysis on hydrology. There are estimation methods out there to bracket the range of
hydrologic estimates in different environments, including desert environments, that you should run hydrologic sensitivity to test for climate change. We believe that should have been done.

MS. MILES: Do you believe the soil erosion estimates that were undertaken are representative of the actual project conditions?

MR. BOWLES: No. We think that the analysis was highly simplified, there was no -- no consideration of the protection of the soils by desert pavement. We don't even know how much desert pavement or cryptobiotic soils are out there, that's the first thing; but secondly, no allowance was made for protection of soil erosion as a result of those soils.

Also, there's a parameter within the soil erosion called the slope length, and a default parameter was used for that, which is likely an order of magnitude too long. At least some sensitivity analysis on the selection of that parameter should have been done to show that various different scenarios had been tested and that they had used the right number.

BMPs did not consider compaction of the roads during construction, which of course reduces infiltration and increases runoff and increases soil erosion due to increased runoff.
The BMP factor was arbitrarily selected. I shouldn't say arbitrarily; it was selected based on engineering judgment, expert judgment. But our opinion there is expert judgment should always be verified by other techniques. Whether or not some field measurements should have been undertaken, rainfall runoff simulator, there's various techniques out there to try to verify expert judgment and verify the factors that you're using in soil loss equations are reasonable and realistic. And admittedly, in a very small project you might not have the budget to do those sorts of field measurements, but it's our opinion in a project of this size and magnitude that some of that, some field verification should have been done of the factors used in the soil loss equations.

MR. CAMPBELL: And I would just add that I don't believe any BMP effectiveness literature was cited to come up with that C factor in the soil loss equation.

MS. MILES: And what's the consequence of the simplification?

MR. BOWLES: Again, it's underestimation we believe of the amount of soil erosion and the impacts to the washes and off-site impacts downstream of the site as well.

MS. MILES: And what are the potential water quality impacts from this, especially when you're thinking
about downstream aquatic resources?

MR. BOWLES: I think overall we haven't seen any downstream analysis at all. The assumption has just been made that everything will be dealt with on site. Well, I think we're fairly conclusive in the sense that we don't believe everything will be dealt with on site and certainly some downstream impact assessment should have been done, that as a result of erosion of the washes and general increase in runoff and increase in soil erosion from the watershed as a result of the project, that's going to release soluble salts from the soils and could likely be transported down to the Salton Sea, which as you know, is a -- is an impaired water body, and that hasn't been analyzed, simply hasn't been analyzed.

The increased runoff will increase sediment scour and sediment transport through the site, and water quality constituents are transported on the finer sediments throughout absorption and will be transported downstream of the site and in solution as well as absorbed to the particles.

And the -- we do have a figure of the Salton Sea in relation to the project site.

And, Chris, if you just want to point out so everybody's clear on the receiving waters being the new river and the west side drain which ultimately lead to the
Salton Sea.

I think there's been so much attention and focus on the Salton Sea, and certainly the EPA have been commenting a lot about this I think, in the corps, that the impacts to the new river and the west side drain should be analyzed on the ultimate response in the Salton Sea.

MR. CAMPBELL: So I'm just going to trace out possible flow paths from the project site to either the west side main drain canal to the Salton Sea and/or the project site to the new river to the Salton Sea.

So the project site is in red -- do we have a colored marker?

MR. BOWLES: Do we still have people online?

MR. CAMPBELL: Here we go. Better?

MR. BOWLES: Yes. Okay.

MR. CAMPBELL: So here is the project site. Water flows eastward. So we can either enter the west side main canal, or it follows this path approximately, and can reach the Salton Sea, or water excess runoff and sediment can overshoot the west side main canal, hit the new river, enter the new river, flow downstream, eventually enter the Salton Sea.

MS. MILES: How will the project affect sediment transport processes within the existing wash system?
MR. BOWLES: I think we've beaten this one to death in terms of the frequency duration --

MS. MILES: Okay. Well, you don't have to answer it again then.

MR. BOWLES: I'll move on rapidly.

The frequency duration timing of the hydrology is going to change, and, hence, the runoff from the project, and, therefore, more sediment will be eroded from the washes, the primary and secondary washes through scouring, and particularly with the inclusion of the pedestals in the washes, which will have off-site impacts.

The amount of sediment transported through the site and downstream has been underestimated through the staff assessment.

MS. MILES: And do you consider 1-D modeling to be adequate for this project?

MR. BOWLES: No. No, we don't. We use -- we're very experienced in a whole suite of different hydrologic and hydraulic models, and we use one-dimensional models all the time. Fluvial 12, Dr. Chang's model, is -- you know, I would never criticize that particular model itself. Dr. Chang has a very -- a great reputation and many years experience with that model. It is a great model. The point is we wouldn't use a 1-D model for this type of physical situation.
In years gone by, 2-D modeling and 3-D modeling, to be practical, two-dimensional modeling was very expensive, it was financially expensive and computationally expensive. They were hard models to build, they were hard models to run. Literally, only 15 years ago it often precluded the use of 2-D models, the financial and computational cost.

Now, in this day and age, computational power has improved so dramatically and the algorithms have improved and the public outreach tools of 2-D models, in many cases it's easier. A, it's easier to use a two-dimensional model; B, it's not necessarily more expensive than a one-dimensional model, provided you have the right input data. And we believe the right input data probably does exist for this project. And C, the accuracy of the results from a two-dimensional model and the representation of the actual physics on the ground are far better than in a one-dimensional model.

So that's our big issue; not the type of 1-D model that was used, whether it was Fluvial 12, Dr. Chang's model or HEC-RAS, another one-dimensional model, they're great models; the point is this is a two-dimensional issue.

And do you want to get that animation up?

MR. CAMPBELL: Yeah.
MR. BOWLES: The Goat Canyon, just to try and illustrate this as quickly and as briefly as I can.

The difference between a one-dimensional model and a two-dimensional model is that to a certain extent with a two-dimensional model the modeler has to understand where the water is going to flow on a site before he or she even builds the model, because you have to put a cross-section where you think the water is going to flow.

The second thing on a one-dimensional model is you can only predict your numerical parameters, whether it's depth, flow, velocity, sediment transport parameters wherever you have a cross-section. So it's very limited, one-dimensional is limited in the sense if you have a wash that's several thousand feet long you may only have a cross-section every 500 feet, therefore, you can only predict the hydrodynamic and sediment transport characteristics every 500 feet or wherever you have a cross-section.

With a two-dimensional model, you literally build a computational grid that represents the topography or the surface of the earth, and you force water in at the top end of the upstream end and the water finds its own way through the two-dimensional model just like it does in real life. So in other words, the modeler doesn't have to use his or her judgment to decide how to build that model.
to a certain extent.

And that's a simply indication, but in essence a 2-D model is a much more accurate representation of what's physically happening on the ground than a one-dimensional model, which you have to tell the model how to operate.

And it always makes me think of a classic quote that I love, which all models are wrong, and some are useful. And the point being there is that no computational model is right, but some are more right than others, and some are more useful than others.

And for this application a 2-D model is more useful than a 1-D model. There would be other circumstances where I would say, no, use a 1-D model, that's more useful than a 2-D model.

So the animation showing here is a very similar situation. It's an alluvial fan outwash area. It is in southern California in the San Diego region. But what you see here is a very -- it's an arid system, and you see here a summer pulse, nothing much is happening at the moment. Now you see that pulse come through. When I built this model, I didn't tell the water where to flow. I didn't build cross-sections. The water found -- the flows found its own way into those avulsions, those arms that you see, those two avulsions coming off the main channel. And that is the type of graphic and animation
that you would see if a two-dimensional model had been used for this project.

The final thing to clarify -- it's a shame Dr. Chang isn't here actually because I'd love to talk to him about this -- he stated that there are no two-dimensional sediment transport models available. There are several two-dimensional sediment transport models available.

MS. MILES: And what is the practical reason why you would recommend that the staff employ this 2-D model for this project specifically?

MR. BOWLES: Because we've -- initially you'd build a dimensional hydrodynamic model, and then if necessary you'd run the sediment transport component of that two-dimensional model, and the reason you would use it is many different reasons. Maybe I could just focus in on a couple.

In a two-dimensional model, you could actually model the flow around every single pedestal so you could calculate the flow field around every single pedestal. It wouldn't be too laborious of a job.

MS. MILES: And so would you be able to estimate the aggregate then rather than --

MR. BOWLES: I was getting there.

MS. MILES: Okay. Okay.
MR. BOWLES: I was getting there.

In a one-dimensional model, as Dr. Chang said and as we reviewed, each one of those pedestals isn't represented individually in a one-dimensional model. You just can't do that. You haven't got a cross-section where every pedestal is. So what he did is, and this is a standard 1-D technique, is he represented the impact of those pedestals on the primary and secondary washes as a roughness element. And a roughness element is essentially a knob that you tweak or turn in a model, a one-dimensional model, to represent the obstruction to the flow of usually trees and vegetation. In this case it's pedestals. And he talked about how there's going to be removal in the washes of vegetation and that will be mitigated by putting in pedestals.

I understood that, but -- but anyway, so the way those pedestals are represented in a one-dimensional model is as a roughness element, a knob that you tweak until you get the results that you want to see.

In a two-dimensional model you wouldn't necessarily represent those pedestals as a roughness element, you would model every single pedestal within the computational grid.

The point of all that being is that you get a better representation of the true physics on the ground.
We believe that representing those pedestals as a roughness element is underestimating the cumulative amount of scour.

Yes, Dr. Chang analyzed maybe one or a group of those pedestals and calculated the scour depth, but it's the cumulative impact of several hundreds or thousands of pedestals in the washes and how that would affect the geomorphology of the channel, the scouring of sediment and transport of that sediment downstream. That's the significance of why you should use a two-dimensional model for these types of analysis.

The other thing is these are not heavily-confined river channels, they are, as Dr. Chang said, they're very shallow sheet flow environments. 1-D model are inherently -- the use of 1-D models to analyze that type of physical situation is inherently difficult. I would always go with large, wide sheet-flow scenarios. Now that the 2-D models are readily available, I would always go with a 2-D model for that physical situation.

MS. MILES: Okay. Setting aside the issue of 1-D versus 2-D modeling, were there any other deficiencies you wanted to comment on in Dr. Chang's analysis?

MR. BOWLES:  I think we've touched on this.

He used identical hydrology and soil erosion estimates for existing and project.  I think the
assumption being that those would be mitigated in the
project conditions. But we believe that he should have
used existing and project hydrology, and existing and
project soil erosion estimates.

Anything to add to that, Chris? No?

MS. MILES: What is the significance of the
deficiencies in the analysis that have been undertaken?

MR. BOWLES: Well, the significance is that the
analyses have not considered the very significant
unmitigated impacts on the watershed of the project, and
ultimately the new river west side drain and Salton Sea,
we think there will be significant impacts on those
receiving waters.

MS. MILES: Thank you.

One last question.

And will the project impact groundwater recharge?

MR. BOWLES: We believe it could with reduced
infiltration, the increased runoff as a result of the
reduced infiltration could impact groundwater
infiltration.

MS. MILES: Thank you.

The witness is available for cross-examination.

HEARING OFFICER RENAUD: Applicant, would you
like to go ahead?

MS. FOLEY GANNON: Yes. Just a couple of
CROSS-EXAMINATION

MS. FOLEY GANNON: Have you done any field investigation on the site in particular? Have you been to the site?

MR. BOWLES: No. You asked that the last hearing --

MS. FOLEY GANNON: In May. I thought maybe between -- you didn't?

MR. BOWLES: No, we haven't been between May and now.

MS. FOLEY GANNON: Okay. So you still haven't been to the site.

Have you had a chance -- have you run any studies yourself on the site? I mean, you are asserting conclusions about what you think other studies may show. Have you run any of those studies?

MR. BOWLES: No, but we'd love to.

MS. FOLEY GANNON: Excellent.

You criticize the assumption that the -- that they should have had some different hydrology in their models for pre and post condition. Dr. Chang -- if Dr. Chang's conclusion that there isn't going to be any hydromodification is correct, would the model be correct that then you would have the same --
MR. BOWLES: But I -- we've seen nothing, nothing
to prove that there wouldn't be hydromodification impacts.
It's just been an assumption.

MS. FOLEY GANNON: Dr. Chang studied that and has
reported it in three reports; so there is some basis for
it.

And again, just a question, if it's true that
there isn't hydromodification, then wouldn't the input for
the hydrology be the same for pre and post conditions that
you're studying?

MR. BOWLES: Theoretically, if there's no -- but
the point is nothing's been demonstrated that there is no
hydromodification impacts.

MS. FOLEY GANNON: That's your conclusion.

MR. BOWLES: Yes.

MS. FOLEY GANNON: And just so I can clarify, I
heard in talking to Dr. Chang and hearing Dr. Chang
testify today, I heard him say that he wasn't objecting to
the idea of a 2-D model because it wasn't available, he
was saying he didn't think it was the most meaningful way
to analyze sedimentation.

Did you hear him say something different -- did
you hear him say it wasn't available?

MR. BOWLES: Yeah, he actually said there was no
2-D sediment transport model available.
MS. FOLEY GANNON: He said there was no 2-D model that would meaningfully --

MR. BOWLES: Sediment transport --

MS. FOLEY GANNON: -- he said that would meaningfully analyze sedimentation. I think that's what he said, but we can check that out.

MR. BOWLES: I apologize if I'm misquoting him. I heard -- what I heard was the reason he didn't use a 2-D model is because one didn't exist.

MS. FOLEY GANNON: Okay. That's all I have.

Thanks.

HEARING OFFICER RENAUD: Cross-examination by staff.

MS. HOLMES: No questions.

HEARING OFFICER RENAUD: By Budlong?

MR. SILVER: No questions.

HEARING OFFICER RENAUD: CNPS?

MR. BELTRAN: No.

MS. MILES: Just a couple questions on redirect.

REDIRECT EXAMINATION

MS. MILES: Do you feel like you needed to undertake your own study to formulate conclusions, the conclusions that are in your testimony?

MR. BOWLES: No, no, no. I mean, our conclusions are based on review.
The reason I threw in that flippant comment is that we love doing 2-D modeling, and we'd love to model this project in 2-D; but that's not our job, our job is to review the applicant's testimony. And so that -- our conclusions are based on that.

MS. MILES: And you feel confident in your conclusions --

MR. BOWLES: Oh, yes --

MS. MILES: -- without undertaking your own model?

MR. BOWLES: Yes. Thank you for clarifying that. Yes, we do.

HEARING OFFICER RENAUD: What was the question again, please? You were both talking.

MS. MILES: I asked whether he felt comfortable with his conclusions even though he had not undertaken his own model.

HEARING OFFICER RENAUD: That's the word you used, "comfortable," or "confident"?

MS. MILES: Confident -- I'm not sure.

MR. BOWLES: Confident, we are confident with our testimony.

HEARING OFFICER RENAUD: All right.

MS. MILES: No further questions.

HEARING OFFICER RENAUD: All right.
Commissioner Eggert?

COMMISSIONER EGGERT: I was just going to make a comment.

I think -- I appreciate your comment about the fact that all models are wrong, as an agency that uses models for all sorts of different activities, including trying to evaluate the potential impacts of climate change, I think you're correct, that, you know, we do use models to try to provide guidance, insights to help us make decisions, including about projects and design of projects.

And so I guess I did have a question with respect to you had the video up here, but these 2-D models, are there papers on them and how they've been applied to similar landscapes, desert landscapes and such?

MR. BOWLES: Yes, yes. Lots and lots of literature. Two-dimensional models have been developing over the last 20 years. One-dimensional models have been developing over the last 40 years. But so there's a lot of literature out there.

COMMISSIONER EGGERT: Is there any case in which they've been applied to something similar to this project? I'm thinking of --

MR. BOWLES: Well, there's a paper on this project right here that was presented at the International

COMMISSIONER EGGERT: Does that have any non-natural obstructions that it's modeling or is it --

MR. BOWLES: No, no. Well, actually, what it does have, it's very near the -- well, it's in the border patrol area, so it does have a whole bunch of border patrol access roads. And interestingly what we found was the water would preferentially flow down the roads rather than through the vegetation, because water follows the least path of resistance -- the path of least resistance, so the water would rather flow through the border patrol roads than through the vegetated areas. So that -- those are human-made obstructions, yes, but the water likes flowing down access roads.

COMMISSIONER EGGERT: Thank you.

HEARING OFFICER RENAUD: Well, I have a question. My ears perked up when I heard Ms. Miles ask you a question about the impacts.

Before I continue though, caller 50, I think we're hearing you; can you please keep is quiet or mute it?

That's better. Thank you.

All right. You were asked about the downstream water quality impacts. And most of your answer was about how the applicant's analysis didn't adequately or
accurately predict downstream impacts, but I never heard you say if you -- what your opinion was about downstream water impacts other than that there could likely, and I'm quoting, be some impacts. Can you go any further than that, or is that your testimony?

MR. BOWLES: I think sediment transport, there will be sediment transport impacts under the current plan downstream of the project site. How far that will extend to the Salton Sea, over time, sediments from the project site will ultimately end up in the Salton Sea.

Water quality, there's just not enough information to say, but in my opinion there will be -- there will be water quality impacts under the current project, to the Salton Sea.

HEARING OFFICER RENAUD: Significant impacts?

MR. BOWLES: I haven't got the information. Can I say that?

HEARING OFFICER RENAUD: You can say anything you want. Don't look at your counsel; I'm asking questions.

MR. BOWLES: Yeah, I couldn't say that it would be significant. I think it's something that should be looked at to ascertain whether it's significant or not.

HEARING OFFICER RENAUD: Okay. Thank you. I appreciate that. Thank you.

All right. Is there any further questioning of
Dr. Bowles?

All right. And any questioning of Mr. Campbell?

Ms. Miles?

No, all right.

Well, okay, I think that means we should stop. And we will then, as I understand it, we'll start up with biology tomorrow morning at 9:00.

Same arrangement for those of you calling in, those of you who are on WebEx, except we're starting at 9:00, but other than that, the access will be the same.

All right. Very good. We'll adjourn for the evening, and we'll see you at 9:00 in the morning.

Thank you.

(Thereupon the hearing adjourned at 8:45 p.m.)
CERTIFICATE OF REPORTER

I, PETER PETTY, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing Evidentiary Hearing Before the California Energy Resources Conservation and Development Commission, that I thereafter had it transcribed under my direction.

I further certify that I am not of counsel or attorney for any of the parties to said meeting, nor in any way interested in the outcome of said meeting.

I WITNESS WHEREOF, I have hereunto set my hand this 30th day of July 2010.

_____________________________________
PETER PETTY