HEARING

BEFORE THE

CALIFORNIA ENERGY RESOURCES CONSERVATION

AND DEVELOPMENT COMMISSION

In the Matter of:	)	
	)	
Application for Certification	)	Docket No.
for the Metcalf Energy Center	)	99-AFC-3
(Calpine Corporation and	)	
Bechtel Enterprises, Inc.)	)	
_____	)	

GENERAL SERVICES ADMINISTRATION

BUILDING II

1555 BERGER DRIVE

SAN JOSE, CALIFORNIA

THURSDAY, FEBRUARY 15, 2001

2:05 p.m.

Reported by:
James Ramos
Contract No. 170-99-001

COMMITTEE MEMBERS PRESENT

Robert A. Laurie, Commissioner, Presiding Member

William Keese, Chairman, Associate Member

Gary Fay, Hearing Officer

STAFF PRESENT

Kerry Willis

Paul C. Richins, Jr.

Linda Spiegel

Gary Walker

APPLICANT

Jeffery D. Harris, Attorney,
Chris Ellison, Attorney
Ellison, Schneider and Harris
for Calpine Corporation/Bechtel Enterprises

Kenneth E. Abreu, Development Manager
Calpine Corporation
Metcalf Energy Center

John L. Carrier, Senior Project Manager
Debra J. Crowe
CH2MHILL

Steve DeYoung
Calpine Corporation/Bechtel Enterprises

Gregory S. Darvin
RTP Environmental Associates, Inc.

Stuart B. Weiss

Mark R. Jennings

Thomas Priestley
Harza Engineering Company, Incorporated

James M. Dunstan

APPLICANT

Gary Rubenstein
Sierra Research, Calpine Corporation

Paul Stocks
Hillier Architectural Group

INTERVENORS

Scott Scholz
South San Jose.com

Michael E. Boyd, Commissioner
City of Sunnyvale
Californians for Renewable Energy, CARE

William J. Garbett
Issa Ajlouny
Jeffrey Wade
Agents, Public

ALSO PRESENT

Cecilia Brown
United States Fish and Wildlife Service

William Walters
Aspen Environmental

Joe Donaldson
Jones and Stokes

Mollie Dent
Richard Buikema
City of San Jose

I N D E X

I N D E X

P R O C E E D I N G S

2:05 p.m.

PRESIDING MEMBER LAURIE: Ladies and gentlemen, good afternoon. My name is Robert Laurie, Commissioner at the California Energy Commission, Presiding Member of the Metcalf Siting Committee case.

To my far right is Chairman Bill Keese, my colleague on the Committee. And to my immediate right is Mr. Gary Fay. Mr. Valkosky is temporarily out of duty and will be rejoining us but not for the day.

Mr. Fay.

HEARING OFFICER FAY: Thank you, Commissioner Laurie. We will use the same process that we've used previously in this case. And I've discussed that with Mr. Valkosky.

Just a few housekeeping matters. I want to call your attention to handouts on the back table by the coffee. There are copies of the draft exhibit list that has been updated. And copies of the notice, as well, and the topic and witness schedule for today.

Even though this was noticed for today and tomorrow, it is the Committee's fervent wish

that we complete all business today. And so we ask the parties to keep that in mind, and we'll try to be as efficient as possible as we go through everything.

I would like to, before we get into any other housekeeping matters, I'd like to take introductions at this time, if we could just proceed.

PRESIDING MEMBER LAURIE: And let's go a little slow for Mr. Fay's benefit, so he can actually listen. Thank you.

(Laughter.)

MR. ABREU: I'm Ken Abreu; I'm the Development Manager for Calpine/Bechtel. To my left is Jeff Harris, our Attorney. And Steve DeYoung, our Environmental Project Manager. And John Carrier, our Project Manager from CH2MHILL.

The other folks are witnesses that we'll introduce at that time.

HEARING OFFICER FAY: Thank you. And, staff.

MS. WILLIS: I'm Kerry Willis, Staff Counsel, representing the staff in these proceedings. And to my right is Linda Spiegel who will be our witness in biology. Cecilia Brown,

who is with the U.S. Fish and Wildlife Service. And Paul Richins, Project Manager.

HEARING OFFICER FAY: Thank you. And intervenors who are present.

MR. AJLOUNY: Issa Ajlouny, local resident, intervenor.

MR. SCHOLZ: Scott Scholz, local resident, intervenor.

MS. DENT: Mollie Dent, Attorney for the City of San Jose.

HEARING OFFICER FAY: Any others? Any other intervenors present? Okay.

Before we get started I'd like to clear up a couple questions about exhibits. I understand that the City wanted to verify the authenticity on a couple of exhibits that had previously been offered.

Have you verified that?

MS. DENT: Of the two memos, no, I'm sorry, I have not. I will do that by tomorrow's hearing.

HEARING OFFICER FAY: Okay. We may not be here tomorrow.

MS. DENT: Oh, I thought biology was today and --

HEARING OFFICER FAY: Biology and visual are noticed for today and tomorrow. And we will try to finish --

MS. DENT: Oh, I'm sorry, --

HEARING OFFICER FAY: -- both of them --

MS. DENT: -- I thought it was biology today and visual tomorrow.

HEARING OFFICER FAY: No, that's what I just -- are there any questions about that? We intend to finish all our business for the two days today. Does that cause a problem for anybody? I know the applicant has gone for --

MS. DENT: I was not prepared to do visual today, and I didn't read the notice that way, but I'm not going to -- I don't want to delay the proceedings on that grounds. I'll try to -- I didn't even bring the visual information with me. I might need a short break to get someone to bring it over.

PRESIDING MEMBER LAURIE: Well, Ms. Dent, what we're going to do, before we start visual, is we're going to have a discussion as to the nature of what the controverted testimony might be.

And if it's just a question, not is

there going to be a visual impact, because I don't know what can be added besides the written testimony, but if it's a question of what the building is going to look like, the applicant has a special witness here that the Committee's very interesting in hearing about, what potential and possibilities are.

Other than that, it's not the Committee's intent to otherwise debate what the building is going to look like today, because we want to consider alternatives that might exist to finding that solution.

So, visual, there may not be a lot to say about visual. But we'll see what everybody's greatest concerns are.

MS. DENT: I completely agree with you, I just didn't bring any of the material with me on visual today, because I didn't anticipate --

PRESIDING MEMBER LAURIE: You'll let us know if you feel that you're irreparably harmed --

MS. DENT: I certainly will. Thank you.

HEARING OFFICER FAY: Thank you. And Mr. Valkosky also indicated there was -- is there a question about exhibits 93 and 94 from the applicant?

MR. HARRIS: Those are the same documents.

HEARING OFFICER FAY: Those are the two, okay.

MR. HARRIS: The two from the City, yes.

HEARING OFFICER FAY: So we still have to hear from the City on that.

MR. HARRIS: Right.

HEARING OFFICER FAY: Will you be able to get word on that, Ms. Dent, today?

MS. DENT: No, I will not. That I'm going to have to check with the clerk's office. I'm going to call my office to bring over the other material for visual, but I don't have that in my office, those --

HEARING OFFICER FAY: Okay, so --

MS. DENT: But I do want to make it clear that I believe that the exhibits that were introduced, even though they weren't signed, are public documents in our council packet. I just wanted to make sure that the ones that you are using and have in the record are the official versions.

HEARING OFFICER FAY: Okay. Can you let us know at the next hearing?

MS. DENT: I will certainly let you know. I'm sorry --

HEARING OFFICER FAY: That will be two weeks from today.

MS. DENT: I'm sorry that that slipped my mind. I really am.

HEARING OFFICER FAY: All right, I'm sorry, two weeks from yesterday.

This is the fourth set of evidentiary hearings for the proposed Metcalf Energy Center and the Committee noticed this set of hearings in a notice of hearing order issued on January 12th of this year.

That document also contained the filing dates for testimony. And as I indicated earlier, those filing dates and the order that we'll receive testimony is on a schedule in the back.

In addition to the October 2000 staff assessment, and the AFC document, and associated supplements, other filings pertinent to this set of hearings include the applicant's group 3A testimony filed on January 24th; that is exhibit 95.

Staff's group 2B FSA changes regarding plume analysis dated February 2nd; that is exhibit

96. And applicant recently filed its spreadsheet summarizing additional visible water plume analysis dated February 13, 2001; and we will mark that as exhibit 97. And it is included in the draft exhibit list and identified as exhibit 97.

The purposes and procedures we will follow today are the same as the previous evidentiary hearings. Basically a party sponsoring a witness shall briefly establish the witness' qualifications and have the witness orally summarize the prepared testimony before requesting that the testimony be moved into evidence. Relevant exhibits may be offered into evidence at that time as well.

At the conclusion of the witness' direct testimony the Committee will provide the other parties an opportunity for cross-examination, followed by redirect and recross examination, as appropriate.

At the conclusion of each topic area we will provide an opportunity for public comment in that topic area.

The parties are encouraged to consolidate presentations by witnesses and/or cross-examination to the greatest extent possible

in order to minimize duplication and conserve hearing time. And that translates into having panels testify wherever possible, rather than bringing witnesses up one at a time in a subject area.

Are there any questions before we get started?

MR. AJLOUNY: Yes, this is Issa Ajlouny, and I have a few questions and a few concerns.

The first one, exhibit 97, --

HEARING OFFICER FAY: Yes.

MR. AJLOUNY: Is that going to be presented today for the first time?

HEARING OFFICER FAY: I believe so. Mr. Harris, are you planning to introduce that today, or at least discuss it?

MR. HARRIS: Yes, it was filed and served on Tuesday because Monday was a state holiday. And I have additional copies, I think, as well.

HEARING OFFICER FAY: You do have additional copies? Where are those available?

MR. HARRIS: We will by the time it's relevant.

HEARING OFFICER FAY: Okay.

MR. AJLOUNY: Well, my concern is that I didn't have a chance to look at that, and prepare for it or anything.

MR. HARRIS: Our intent, rather than bringing it today so you'd see it the first time, was to mail it on Tuesday and get it to you as soon as possible.

So, that's why we mailed it on Tuesday, but again with the state holiday it kind of became an issue. So, basically it's one spreadsheet that was developed by Gary Rubenstein, and he worked through the weekend to get it available. So that's why we did that.

And I actually weighed the balance of whether we ought to bring to the hearing or mail it out, and I decided that we ought to send it out as soon as possible.

PRESIDING MEMBER LAURIE: You don't have any copies?

MR. HARRIS: We will by the time we get to visual, yes. We're going to have our consultant bring over copies. And other copies were filed and served. It should have arrived in the mail by today.

PRESIDING MEMBER LAURIE: Well, it --

MR. AJLOUNY: My mail doesn't come till 3:00.

PRESIDING MEMBER LAURIE: Yes, we'll take a look, we'll see what it is. If it's reasonable to indicate that you have a detriment because there's been inadequate opportunity to review, we'll take a look at it.

MR. AJLOUNY: That's fair, thank you. Second concern is, because this is all new to me, Mr. Fay, the issue with the biological opinion review, is that the -- no, biological review opinion, whatever the words are --

HEARING OFFICER FAY: Biological opinion, um-hum.

MR. AJLOUNY: Okay. From the U.S. Fish and Wildlife, as I understand it, has still not been delivered?

HEARING OFFICER FAY: Yes, and I'm sure they'll get into that today --

MR. AJLOUNY: But -- okay, so just --

HEARING OFFICER FAY: -- during the testimony.

MR. AJLOUNY: -- to confirm that it hasn't. I have a hard time doing a good analysis and getting ready for the cross-examination when

that's a significant part of this whole process.

I know, you know, I'm just going to state it for the record, I really feel strongly that this whole bio should be continued until we do have a way to look at all testimony, all evidence, and be able to do a thorough cross-examination.

HEARING OFFICER FAY: I understand your frustration. In many of our power plant siting cases the U.S. Fish and Wildlife Service has not had the biological opinion prepared within the timeframe that we have for power plant siting.

If the staff conditions of certification are supported by U.S. Fish and Wildlife Service we get that on the record, if they feel comfortable doing that. And that gives the record some sense of how compatible the biological opinion is likely to be.

If, as it turns out, there is a difference and the biological opinion requires additional things, it's a federal judgment, and it will preempt.

So, the conditions can only get tougher if the biological opinion requires that.

MR. AJLOUNY: I understand that it's

been done before and it's maybe normal procedure. But I want to state for the record I don't feel that that's correct. I mean it hasn't been the way we've been doing business in these hearings. I think it's highly irregular to sit there and have a testimony and exhibits and so forth, and not have it all before us so we can do a thorough job.

So, with that, I didn't do much in the bio because I thought this wouldn't happen. And then I found out yesterday that it's normal that you do a bio, even though U.S. Fish and Wildlife isn't out.

Now, I remember in the prehearing we talked about it, and we put the biological at the third set hoping that it would be out, and that was a concern in the prehearing. So, I thought I wasn't off base thinking that, you know.

PRESIDING MEMBER LAURIE: Why don't you -- you're free to ask staff a question or two or three, whatever is necessary to get an understanding of their testimony in light of not having a final federal biological opinion.

And you're certainly free to make a continuing objection, but you can also be educated

at that time.

MR. AJLOUNY: Okay, and then my last concern is something we've talked about, Commissioner Laurie, and I just want to emphasize it, especially with more and more pressure from the state legislators and stuff.

I'm just real concerned that that might interfere with this independent study that, you know, that we're going through here in the process. And if there's anything, and I don't know what the legal words are, but if there's anything that you're receiving from the state legislators, any pressures or documents or phone calls, I'd like to know about them, and to actually --

PRESIDING MEMBER LAURIE: Every communication, and I've received only one, and that one is the letter sent to the Chairman, and that has been docketed, I have not received any other. There have been no other communication. Any other communication would be docketed.

MR. AJLOUNY: Okay, and that's the point, being docketed and being served, I found, is two different things. And I even went on the website as recent as yesterday and it still isn't

anywhere where I can see it or anything.

So I guess what I'm asking, to further on my concern, is if anything is, if you could insure that those that are interested parties get a copy of that. If it's a phone conversation, if it's like that letter --

PRESIDING MEMBER LAURIE: If I have any ex parte communications I will not only docket, I will send a copy of what's docketed to the parties.

MR. AJLOUNY: Okay, so we'll get a letter from Senator John Burton that was sent to Commissioner Keese?

PRESIDING MEMBER LAURIE: You have it. You --

MR. AJLOUNY: Well, I don't have a --

PRESIDING MEMBER LAURIE: You had it before I had it.

MR. AJLOUNY: I realize that, but I don't have a good copy of it. Mine, I couldn't read the whole thing --

PRESIDING MEMBER LAURIE: Well, I don't have a good copy, either, so whenever -- I'm not going to go back now and --

MR. AJLOUNY: Well, --

PRESIDING MEMBER LAURIE: -- it out and find it. You have it.

MR. AJLOUNY: Okay, --

HEARING OFFICER FAY: I think your best pass on that is to contact the Public Adviser. You're correct, there is a gap, all documents are not served, just documents that are introduced. And if something comes in, like correspondence, like that letter you're referring to, it is not then served by the Energy Commission to everybody in the case. It sits in the public record.

And what parties do is go to the docket office and search the public records. The master document file that is duplicated on the webpage lists all documents that come in. So if you check that regularly you'll know if something came in that you were not served a copy of.

But my suggestion is keep in touch with the Public Adviser and get that kind of help from the Public Adviser's Office.

PRESIDING MEMBER LAURIE: What I will send you is my response to Mr. Hertzberg's office. It was a written response. It has been docketed. I will send a copy to the parties.

I can tell you in summary fashion my

response said I acknowledge the existence of your letter, thank you very much. That's pretty much what my letter says.

But, again, and Mr. Fay, if you could remind me, or staff could remind me -- or staff could remind you, since they're not allowed to talk to me, we will serve a copy of my letter.

MR. AJLOUNY: Okay, see, I wasn't aware of that. And when I look at the website it doesn't even have anything from this year. I think the last thing is like in December or November of 2000. So I can't even see the line item to request it.

So, again, just getting a copy to all interested parties, it's a very sensitive issue. It's been in the paper all the money's being spent for these legislators, it's a real concern to us as citizens.

PRESIDING MEMBER LAURIE: Okay.

MR. AJLOUNY: Thank you.

PRESIDING MEMBER LAURIE: Thank you.

MS. DENT: I'm sorry to interrupt. I was outside the room when you went through the procedure, and I had a question procedurally about the U.S. Fish and Wildlife Service witness, and

any documentary evidence that might be introduced.

Just so that I understand, since there was no prefiling on behalf of that witness and no service of any prefiled testimony, do I understand that the U.S. Fish and Wildlife Service will be testifying as a comment and not under oath as some other witnesses have done, or do I understand that the witness is not going to be testifying, but is only here to assist staff?

I'm sorry, I was outside the room when you --

HEARING OFFICER FAY: Let's ask staff to characterize the nature of the testimony.

MS. WILLIS: I spoke with Mr. Valkosky earlier when we had scheduled Ms. Brown to come, and he said he would prefer that she be sworn and under oath.

The substance of her testimony would just be whether or not staff's testimony and conditions of certification would be consistent with the biological opinion.

MS. DENT: And I will be objecting, then, to the witness' testimony. I hate to do that to another governmental witness, but I will have to state the objection on the record at that

time because the witness' testimony was not prefiled, and there is, as a result, a surprise and really an inability to cross-examine the witness.

But I'm not going to hold the proceeding sup on that basis.

HEARING OFFICER FAY: Fine. Any other preliminary matters, then, before we start? All right, Mr. Harris, are you prepared to introduce your witnesses on biological resources?

MR. HARRIS: Yes, we are. I'd ask that our witnesses be sworn first.

HEARING OFFICER FAY: Please swear the witnesses. And could you have them stand so we know who your panel is.

Whereupon,

DEBRA CROWE, STUART WEISS, GREG DARVIN and MARK JENNINGS

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

MR. HARRIS: Thank you. We do have a panel that will be presenting information today. We have four witnesses, Debra Crowe, Dr. Stuart Weiss, Greg Darvin and Dr. Mark Jennings.

Ms. Crowe will be speaking for the panel as I go through the litany of identifying the documents and the information. If any of the other witnesses disagree, they will speak up at that time.

So, on behalf of the panel, let me begin with you, Ms. Crowe.

DIRECT EXAMINATION

BY MR. HARRIS:

Q Could you state your name and spell it, please.

MS. CROWE: Debra Crowe, D-e-b-r-a, Crowe, C-r-o-w-e.

MR. HARRIS: And which subject matter testimony are you sponsoring here today?

MS. CROWE: Biological resources.

MR. HARRIS: And were the documents that you're sponsoring part of your prior filings in section 1D?

MS. CROWE: Yes.

MR. HARRIS: I've provided a list of those biological resources exhibits. I can walk through those very quickly now. The ones that have already been identified as an exhibit number I will just identify as exhibits.

Section 8.2 of the AFC is exhibit 1. Appendix 8.2 of the AFC is also exhibit 1. Can I just read the exhibit numbers from that point, is that satisfactory?

HEARING OFFICER FAY: I'm sorry, can you what?

MR. HARRIS: Just read the exhibit numbers for the ones that --

HEARING OFFICER FAY: Yes, that's fine.

MR. HARRIS: Okay. Exhibit 3 is included; exhibit 5; exhibit 13; exhibit 46; exhibit 47.

We have a new item which is responsive to CEC data request number 26R, 32R, 238 and 3-214 set 1G, and that's a new exhibit, and I'd ask that it be assigned a number.

HEARING OFFICER FAY: All right, that is exhibit 98.

MR. HARRIS: Thank you. Continuing on, we have exhibit 27, exhibit 14, exhibit 29. A new document entitled responses to CEC informal data request regarding cumulative nitrogen deposition impact analysis, and ask that that be assigned a number.

HEARING OFFICER FAY: Exhibit 99.

MR. HARRIS: Continuing on, we have exhibit 16A, exhibit 16B, exhibit 23, exhibit 66, exhibit 30, exhibit 40, exhibit 12.

Two more new documents, the biological assessment for the Metcalf Energy Center project is a new exhibit. I'd ask that be assigned a number.

HEARING OFFICER FAY: And we'll assign exhibit 100 to that.

MR. HARRIS: And another new document, preliminary draft biological resources mitigation implementation and monitoring plan for the Metcalf Energy Center is a new exhibit.

HEARING OFFICER FAY: And that is exhibit 101.

MR. HARRIS: And, Ms. Crowe, I understand that there are some additions and corrections, is that correct?

MS. CROWE: Yes.

MR. HARRIS: Those additions and corrections are as follows: responses to CEC informal data request regarding nitrogen deposition isopleths is a new exhibit, and I'd ask that be assigned a number.

HEARING OFFICER FAY: That is exhibit

102.

MR. HARRIS: Continuing on, exhibits 51, exhibit 52A, exhibit 52B. A new item, Metcalf biological assessment, supplement, is a new exhibit. I'd ask that be given a number.

HEARING OFFICER FAY: That is exhibit 103.

MR. HARRIS: Exhibits 80 and exhibit 18. And, of course, as well the testimony here, exhibit 95 and exhibit 97.

With those changes and corrections, Ms. Crowe, are there any other changes or corrections to your testimony?

MS. CROWE: No.

MR. HARRIS: And were these documents prepared either by you or at your direction?

MS. CROWE: Yes.

MR. HARRIS: Are the facts stated therein true to the best of your knowledge?

MS. CROWE: Yes.

MR. HARRIS: And are the opinions stated therein your own?

MS. CROWE: Yes.

MR. HARRIS: And do you adopt this as your testimony for this proceeding?

MS. CROWE: Yes.

MR. HARRIS: Could you briefly summarize your qualifications for the panel, please?

MS. CROWE: I have a bachelors of science degree in environmental biology and management from UC Davis. I did my undergraduate work at American River College. I have 15 years as a licensed veterinary technician.

And the last eight years as a biological consultant conducting threatened and endangered species surveys, impact analyses, formal and informal consultations, biological assessments, mitigation plans and permitting with the U.S. Fish and Wildlife Service, California Department of Fish and Game, National Marine Fishery Service, the U.S. Army Corps of Engineers, and the California Water Quality Control Board.

I'm very familiar with the California Energy Commission regulations for certification of power plants. And I prepared the biological resource impact analysis for the Sutter Power Plant and the Delta Energy Center project. Went through the certification and permitting processes for those.

I'm also the designated biologist for

the Sutter Power Plant, the Delta Energy Center and the Los Medanos Energy Center that are currently being constructed. And I'm involved in two other AFCs.

MR. HARRIS: Okay, thank you. Let's turn now to your testimony. I want to start with the project setting. Can you begin with an outline of where your testimony's headed?

MS. CROWE: I'd like to go through the impacts from construction and operation by project feature.

MR. HARRIS: And which features are you going to be looking at?

MS. CROWE: The Metcalf site, which includes the detention pond and storm water outfall pipe; the electric transmission line; the natural gas pipeline; the domestic water pipeline; and the recycled water pipeline.

MR. HARRIS: So you'll be going through each of those features and discussing impacts and mitigation?

MS. CROWE: Yes.

MR. HARRIS: Let's start with the first one, of course, the Metcalf Energy site. Can you begin there, please?

MS. CROWE: Okay, and I have a map that is taken out of the biological resource mitigation and implementation plan that Steve is passing out now. And this is an enlargement of that same figure.

HEARING OFFICER FAY: Does that plan have an exhibit number, Mr. Harris?

MR. HARRIS: Yes, it does. It's the draft biological -- it's a new exhibit 101.

HEARING OFFICER FAY: Thank you.

MR. HARRIS: It's from exhibit 101.

MS. CROWE: And the aerial photograph behind it, it's just an enlargement of the area.

This is the site --

HEARING OFFICER FAY: And, Ms. Crowe, as you describe things, please keep in mind not just the audience here, but the transcript, which Mr. Valkosky will be reading without the benefit of seeing what you're doing.

MS. CROWE: Okay.

HEARING OFFICER FAY: So, if you could say things like to the left, right, north, south, that type of thing. Or put a reference in terms of the pictures.

MS. CROWE: Okay.

HEARING OFFICER FAY: He needs a reference.

MS. CROWE: The Metcalf site is pretty much in the middle of this photograph at this point. The Monterey Road and Union Pacific Railroad is immediately north of the site and east. And U.S. 101 is north of that. PG&E switchyard is located right here north of the site, or east of the site, and Metcalf Road.

The site, itself, will result in a loss of seven acres of elderberry savanna and about seven acres of agricultural land.

MR. AJLOUNY: Excuse me, can we move that map over here, and that way we can follow along.

HEARING OFFICER FAY: You can't see the map?

MR. AJLOUNY: No. The witnesses are just -- we can't see --

HEARING OFFICER FAY: Okay, if the witnesses could slide back so everybody can see. Can everybody clearly see the map? And does everybody have a copy of it? All right, thank you.

MS. CROWE: Again, seven acres of

elderberry savanna on the site, highly disturbed; some cattle grazing; junkyard; roosters, et cetera. And the seven acres of agricultural land in this area would be for the access road and landscape corridor.

HEARING OFFICER FAY: And this area is to the east of the site, is that correct?

MS. CROWE: Immediately south.

HEARING OFFICER FAY: South, all right.

MS. CROWE: Approximately 80 trees on the site would be removed, and 59 of those would be County ordinance size trees; and 53 of them would be City ordinance.

These trees would be mitigated, the loss of the trees would be mitigated at four-to-one for trees greater than 18 inches in diameter; three-to-one for trees greater than 12 inches in diameter; two-to-one for anything smaller than 12 inches.

Mitigation would result in planting 320 trees for the loss of the 59 trees. And these trees -- seeds for these trees were collected from the Santa Clara Valley watershed, and the trees are native to that area.

Including the landscape trees, there

will be about 800 to 900 trees planted for the project.

MR. HARRIS: Debra, can you talk now about the setback area in the riparian corridor?

MS. CROWE: Originally in the AFC we had a 65-foot setback from the riparian corridor. The riparian corridor is identified as the top of bank in areas where there's no riparian vegetation, and the dripline, outer dripline of the riparian trees. Now we have a 100-foot setback from the riparian corridor.

MR. HARRIS: So those are two distinct things then, the riparian setback and the riparian corridor. Can you draw that distinction out for us, please.

MS. CROWE: The riparian corridor is the top of -- the boundary of the riparian corridor would be the top of bank where there's no vegetation or the outer dripline of riparian trees.

MR. HARRIS: And then the setback area is taken off of that outside edge?

MS. CROWE: And the setback is outside that riparian corridor.

MR. HARRIS: Thank you.

MS. CROWE: There's no construction proposed for inside the riparian corridor, itself. There will be temporary construction disturbance in the setback from constructing the footprint, and then also from planting the riparian trees.

The enhancement of the riparian corridor is expected to increase the available habitat for travel between Coyote Creek and the Santa Teresa hills for wildlife.

MR. HARRIS: In terms of riparian habitat, before and after the project, what will that look like?

MS. CROWE: Before the project we have about 4.3 acres of riparian habitat. After the project is constructed and the riparian plantings are finished, it will be about eight -- double it to 8.6 acres.

MR. HARRIS: So essentially with the improvements doubling the amount of riparian habitat?

MS. CROWE: Yes.

MR. HARRIS: I want to go on to another issue that's gotten a lot of attention, and that's been the noise issue. Can you, from a biological perspective, give us your view of the issue of

noise in the riparian corridor.

MS. CROWE: Currently the background noise on the site is 58 decibels. And with frequent peaks of 70 decibels with the railroad.

The Metcalf project would have noise levels of between 55 to 60 decibels in the riparian corridor. Impacts to wildlife from continuous noise really starts about 80 decibels and above.

Construction, though, will have temporary construction noise of 75 to 90 decibels. And this could temporarily displace nesting birds in that area.

MR. HARRIS: Okay, you went through a lot of numbers and dba's, so I want to make sure that we've got them all correct. What will be the steady state noise from the Metcalf Energy Center, in db's?

MS. CROWE: Between 55 and 60, the riparian corridor.

MR. HARRIS: And biologically the area of concern is about 80 db, is that right?

MS. CROWE: That's right, when it get to be about 80 --

MR. HARRIS: So we're about 20 below

that?

MS. CROWE: For continuous noise, right.

MR. HARRIS: For continuous noise. Are sharp noises sometimes more injuring or more, I guess, disturbing for biological resources?

MS. CROWE: Yes. Sudden loud noises associated with movement, also, is very --

MR. HARRIS: So both noise spike and movement are of concern from a biological perspective?

MS. CROWE: Yes.

MR. HARRIS: So things like the train has both noise and movement associated with that.

MS. CROWE: (Affirmative head nod.)

MR. HARRIS: Okay, thank you.

HEARING OFFICER FAY: Is that --

MS. CROWE: Yes.

MR. HARRIS: I want to go now to the issue of the County ordinance and the setback. Can you provide us a summary of your testimony on that issue?

MS. CROWE: The County ordinance for setbacks riparian corridors is 100 feet for manmade or highly modified streams, and 150 feet for natural streams.

Fisher Creek in the area of the project site is highly modified with a manmade levee, so the 100-foot setback would apply in this case.

MR. HARRIS: So the 150-foot setback for the County applies only to natural streams, is that correct?

MS. CROWE: Natural state, yeah.

MR. HARRIS: Okay, and Fisher Creek is actually a drainage, is that correct?

MS. CROWE: Yes.

MR. HARRIS: Okay. In terms of mitigation, what are you looking at for the site, itself?

MS. CROWE: For the site we are going to be replacing the trees.

MR. HARRIS: What other kind of mitigation are you proposing?

MS. CROWE: For potential salamander aestivation habitat within the riparian corridor we're going to be providing burrow probes in that area before any ground disturbance, to determine whether there are salamanders or even frogs in the burrows along the riparian corridor. And then relocate those.

MR. HARRIS: It would be using fencing,

as well?

MS. CROWE: And we'll be fencing off the riparian corridor from cattle for water quality purposes.

MR. HARRIS: Okay, thank you. In terms of your agency permits for the site, which permits are at issue here?

MS. CROWE: For the storm water outfall we will be required to get a 404 permit from the Army Corps of Engineers; a streambed alteration agreement from the California Fish and Game; a 401 water quality certification from the Water Quality Control Board; and an encroachment permit from the Santa Clara Valley Water District for constructing and also planting trees within 50 feet of the Fisher Creek.

MR. HARRIS: Thank you. Let's move now to the next project feature and the impacts and the mitigation. Can we talk about the transmission line?

MS. CROWE: The transmission line will come off the site and go north directly to a PG&E tower that is already there; it's 240 feet long.

MR. HARRIS: You're indicating the base of Tulare Hill, right across Fisher Creek, is that

correct?

MS. CROWE: Exactly, yes.

MR. HARRIS: And how long is that line?

MS. CROWE: 240 feet, and that's one of the reasons the site was chosen, was for the short transmission line and short gas line.

MR. HARRIS: So there are no new towers associated with that?

MS. CROWE: No.

MR. HARRIS: Talk about the construction impacts for the transmission line, if you will.

MS. CROWE: ON the part of Tulare Hill the construction will occur at the base of that one tower. No grading or ground disturbance will occur at that point. It would just be vehicle access.

Construction would be conducted during the summertime when the Bay Checkerspot butterfly adults are not present. And erosion control and compaction measures will be used there.

MR. HARRIS: And you'll also have a designated biologist on site, is that correct?

MS. CROWE: Yes, for construction in all sensitive areas there will be a biologist on site.

MR. HARRIS: Let's talk now about

operational issues associated with the transmission line.

MS. CROWE: Once the transmission line is up there is potential for slight increase in avian collisions with the transmission line going over the riparian corridor. However, it's a very short line so few, if any, impacts.

MR. HARRIS: In terms of permits for the transmission line, what are you dealing with there?

MS. CROWE: For the transmission line we would need a biological opinion from the U.S. Fish and Wildlife Service for any potential impacts on the serpentine habitat.

MR. HARRIS: Okay, thank you. I want to move now to the next project feature which is the natural gas pipeline. Can you take us through where that line goes, and also discuss the impacts and the mitigation we're talking about for the gasline.

MS. CROWE: Okay, the gasline would come off of the southeast corner of the site through agricultural land and be an open cut trench in that area.

MR. HARRIS: Along the access road?

MS. CROWE: Along the access road and west of the railroad tracks, adjacent to them.

A directional drill pad would be set up at this location, and the horizontal directional drill would go underneath the railroad tracks, Monterey Road and Coyote Creek, and come up approximately 500 feet, at least 500 feet away from the riparian corridor of Coyote Creek.

It will then be open trench through the Coyote Creek Road, and up to the Highway 101, where again a horizontal directional drill will be used to go underneath the highway and then connect into PG&E's line 300 east of Highway 101.

There will be a gas metering station at that point and I think that's .06 acres.

MR. HARRIS: Okay, so that's the basic route and construction. You mentioned the HDD, the horizontal directional drilling.

Can you talk briefly about the potential impacts related to that and what you've done for mitigation for the HDD.

MS. CROWE: For horizontal directional drill there is the potential for drilling mud to escape through cracks in the soil and enter the waterway. The drills are normally very deep and

hopefully that won't happen.

But if what's called a frac-out occurs, we have contingency plan developed to stop drilling and contain it and clean it up. Also --

MR. HARRIS: What time of year would you be doing this HDD?

MS. CROWE: The directional drill would be done in the summertime when salmon and steelhead are not expected to be in Coyote Creek. And water flows would be really low at that time.

MR. HARRIS: And the bentonite clay that is used, can you describe that. Is that a concern biologically?

MS. CROWE: It is only a concern for smothering invertebrates, but is nontoxic.

MR. HARRIS: So basically it's a clay substance and it is nontoxic?

MS. CROWE: Yes.

MR. HARRIS: Okay. In terms of permits that will be required for the natural gas pipeline, what's the scope of that?

MS. CROWE: We will need to get a streambed alteration agreement from California Fish and Game to go underneath Coyote Creek. We'll also need a biological opinion from National

Marine Fishery Service which we have already received. And then a biological opinion from the U.S. Fish and Wildlife Service for red-legged frog.

MR. HARRIS: Okay, thank you. I want to move now to the next project feature you gave in your overview. You talked about the domestic waterline. Can you walk us through that particular feature of the project?

MS. CROWE: The domestic waterline would start at the southern part of the site and follow the west side of the Union Pacific Railroad tracks within agricultural land. And there are no special status species along there that would have impacts.

MR. HARRIS: So are you expecting any construction impacts associated with this?

MS. CROWE: No.

MR. HARRIS: And how about any operational impacts?

MS. CROWE: No.

MR. HARRIS: Thank you. Let’s move to the recycled waterline, can you describe that feature for us, please.

MS. CROWE: In the AFC the recycled

waterline was proposed to go down Monterey Road. However, there were many Keesling walnut trees there that could have been adversely affected. So now the recycled waterline goes southwest from the site through agricultural land over to Santa Teresa Boulevard, and then up through city streets and ties into the South Bay Water Recycling.

MR. HARRIS: In terms of construction impacts, are you expecting any?

MS. CROWE: No.

MR. HARRIS: And how about operational impacts?

MS. CROWE: No, the discharge of water back to the South Bay Recycle will be discharged to the Bay through their NPDES permit.

MR. HARRIS: I want to talk about a couple additional permits that are required for the project.

You'd mentioned the biological opinion. Can you give us a brief overview of that?

MS. CROWE: The biological opinion will be needed for all of the construction impacts on special status species and especially for the Bay Checkerspot butterfly from NOx impacts.

MR. HARRIS: And I understand Dr Weiss

will be testifying to the NOx deposition issues, so --

MS. CROWE: Yes.

MR. HARRIS: -- we'll save that for him, how's that?

MS. CROWE: Great.

MR. HARRIS: I want to move to the issue of LORS compliance now. Did you do an assessment of the project's compliance with what we call LORS, of course, laws, ordinances, regulations and standards?

MS. CROWE: Yes.

MR. HARRIS: And what determination did you make?

MS. CROWE: That all the LORS were in compliance.

MR. HARRIS: The project is in compliance with the applicable LORS?

MS. CROWE: Yes.

PRESIDING MEMBER LAURIE: Excuse me, Mr. Harris, is your question relating to the subject matter to which this witness is testifying?

MR. HARRIS: Yes.

PRESIDING MEMBER LAURIE: Can you re-ask her the question, please.

MR. HARRIS: Okay, --

PRESIDING MEMBER LAURIE: Because your question was is the project in compliance with LORS.

MR. HARRIS: Right, applicable biological LORS, as identified in the final staff assessment.

PRESIDING MEMBER LAURIE: Okay, thank you.

MS. CROWE: And the project --

MR. HARRIS: Let's put it that way.

MS. CROWE: -- is in compliance with applicable LORS for biology.

PRESIDING MEMBER LAURIE: Thank you.

MR. HARRIS: Okay, thank you. And I want to turn now to conditions of certification. You've had a chance to review the conditions of certification?

MS. CROWE: Yes.

MR. HARRIS: And do you find those to be acceptable?

MS. CROWE: Yes.

MR. HARRIS: Can you provide us with a real brief summary of the bottomlines of your testimony, please.

MS. CROWE: The project does not result in impacts that would jeopardize the continued existence of any listed species. And there's no loss of serpentine habitat or other special status species habitat.

Second, the project sets precedents for mitigation and preserving proposed critical habitat for the Bay Checkerspot butterfly, and other serpentine endemic species from NOx impacts.

Third, it establishes a management strategy that maintains and enhances serpentine habitat on portions of Tulare Hill and Coyote Ridge which has proposed critical habitat that would not otherwise be in place.

And, fourth, the project meets the City and County riparian corridor policies and increases riparian habitat along Fisher Creek.

MR. HARRIS: Thank you, Ms. Crowe. I'd like to move now to Dr. Weiss, who is the expert for the group on the issue of the Bay Checkerspot butterfly. But, we'll begin at the beginning.

Dr. Weiss, would you state your name and spell it, please.

DR. WEISS: Stuart Weiss, S-t-u-a-r-t W-e-i-s-s.

MR. HARRIS: And could you summarize for the Committee, please, your qualifications.

DR. WEISS: My education, I have a doctorate in biological sciences from Stanford, received in 1996. Prior to and after my doctoral work I was in the research staff of the Center for Conservation Biology.

I'm the author or coauthor of more than 25 peer-reviewed scientific papers, 15 of which deal with the ecology and conservation of the Bay Checkerspot butterfly and the serpentine ecosystem.

Currently my professional status, I'm a freelance consulting ecologist, and I work for environmental groups, industry, academics and government. And my role is to provide the best available scientific information for decision making.

And I've authored or coauthored dozens of technical reports.

MR. HARRIS: Is it fair to say that you're the recognized expert on the Bay Checkerspot butterfly?

DR. WEISS: Yeah. I've been working on the butterfly since 1979, in the South Bay in

particular since 1984. And I wrote the paper that identified nitrogen deposition as a threat to the butterfly. That's included in the technical documents.

MR. HARRIS: And you mentioned you had, I think, 15 papers on this issue?

DR. WEISS: Yeah, 15 papers.

MR. HARRIS: And those are all peer-reviewed scientific documents?

DR. WEISS: Yes.

MR. HARRIS: Okay, thank you. I want you to help us understand the relationship between nitrogen deposition and plant fertilization and the butterfly. So let's walk through some of that.

Can you describe nitrogen deposition and its relation to the plant fertilization, please.

DR. WEISS: Nitrogenous air pollutants, nitrogen oxides, nitric acid vapor, particulate nitrite and ammonium, and ammonia undergo a process called dry deposition on all surfaces.

In the South Bay we estimate that the amount of dry deposition from existing smog levels are about 7.5 pounds of nitrogen per acre per year, which is the equivalent of dumping a couple

of bags of standard fertilizer bags on every acre of the habitat every year. So it's effectively fertilizing the soils and the plants.

Now, under such fertilization the nutrient-poor, very harsh conditions typical of serpentine soils are ameliorated. Scientific studies have shown that nitrogen is the limiting nutrient in these grasslands.

So, under those conditions, introduced grasses -- introduce annual grasses can rapidly invade and crowd out the native larval host plants and adult nectar sources of the Bay Checkerspot butterfly.

So, when --

MR. HARRIS: Let me ask you a couple questions, because you went through a lot of stuff and I want to make sure we all make the linkages here.

So, nitrogen deposition, as you described it, essentially is fertilization of the land, is that right?

DR. WEISS: Right.

MR. HARRIS: And we're concerned about serpentine soils here, is that correct?

DR. WEISS: Right, very nutrient poor

soils.

MR. HARRIS: So, very nutrient poor meaning very few plants. When you add the nitrogen, essentially the fertilizer, that allows nonnative grasses to grow?

DR. WEISS: Right. Normally serpentine soils are very resistant to invasion by nonnative grasses. But when you dump fertilizer on them, they can be rapidly invaded.

MR. HARRIS: So in a sense what happens is that the fertilization allows those nonnative plants to crowd out the native plants?

DR. WEISS: Yeah, it’s a very dramatic effect in the South Bay.

MR. HARRIS: And please explain, again, the linkage between the native plants, the ones who get crowded out, and the butterfly.

DR. WEISS: Okay, right. The Bay Checkerspot butterfly, as a caterpillar, only feeds on two or three species of plants out there, very low growing, and they get crowded out by the grasses.

They also get nectar, as adults, from a pretty broad variety of native wildflowers, but those wildflowers are also very short growing and

get crowded out by the grasses.

MR. HARRIS: So basically we have a situation here were the fertilization crowds out the plants that the butterflies depend upon?

DR. WEISS: Right, and we see a rapid decline in habitat quality.

MR. HARRIS: How do you keep such a, I guess a nonnative grass invasion in check, so that the native grasses are there for the butterflies?

DR. WEISS: Right. Well, what we've seen in the South Bay is that moderate, well managed cattle grazing works very well to keep the introduced grasses down.

We've seen on every site where cattle have been fenced off, out of the land, where cattle grazing has been removed, within a few years a very dense growth of grass invades, and the host plants and nectar sources for the butterfly are crowded out.

And we've lost some very substantial populations of tens of thousands of Bay Checkerspot butterflies in the Silver Creek Hills to the removal of cattle grazing.

MR. HARRIS: And I want to emphasize that point, because it's kind of counterintuitive.

So the cattle grazing here is important because it takes care of the grasses that are crowding out --

DR. WEISS: Right. The cattle are out there. They selectively go after these introduced grasses because cattle like nitrogen-rich grasses. So they basically crop the introduced grasses and keep the habitat very open and allow the host plants and nectar sources and other native wildflowers to persist in the habitat.

MR. HARRIS: Okay, thank you for explaining the linkage between the nitrogen and the butterfly, and then the cattle.

PRESIDING MEMBER LAURIE: Mr. Harris, unless it's going to mess you up, I'd like to ask your witness a question at this point.

MR. HARRIS: I'll try not to be messed up. So, go ahead, please.

PRESIDING MEMBER LAURIE: When you have any species that is sustained by a given source, what happens when that source is no longer available? If I grow up on burgers and the burger joint on the corner closes, I have a choice. I can either go to where the next burger joint is, or I can switch to broccoli.

What do species such as the butterfly at

issue do?

DR. WEISS: Well, they can't eat other plants.

PRESIDING MEMBER LAURIE: They cannot?

DR. WEISS: They cannot eat other plants, so when you remove their larval host plants and adult nectar sources the population will go extinct. And there's a very limited area of serpentine soils in the South Bay, and there's really nowhere else for them to go.

PRESIDING MEMBER LAURIE: And so their systems cannot adjust over a period of time to a new food source?

DR. WEISS: No, no, not in the system at all.

PRESIDING MEMBER LAURIE: Is that unique for insects?

DR. WEISS: Most insects that feed on plants are very host specific. And one of the basic principles of butterfly conservation biology, for example, is that you need to maintain larval host plants, caterpillar food, and adult nectar sources.

PRESIDING MEMBER LAURIE: Very helpful, thank you, sir. Thank you, Mr. Harris.

MR. HARRIS: Thank you. Actually that's a good segue because I want to move now to the impacts associated with the Metcalf project. Can you talk a little about those impacts.

DR. WEISS: Well, the proposed Metcalf Energy Center is going to add substantial NOx and ammonia to the local atmosphere which is already rather polluted with smog. And it's going to incrementally increase nitrogen deposition on serpentine habitats downwind.

The quantitative estimates of background nitrogen deposition levels and the increases from the MEC operations are provided in the technical documents associated with this testimony and in the biological --

MR. HARRIS: Thank you. So we're talking about the incremental addition by Metcalf to the background. What's the order of magnitude there of the incremental addition to the background?

DR. WEISS: We have a background of about 7.5 pounds per acre. And the incremental increase would be areas closest to the plant are on the order of an additional half pound to a pound per acre, right on Tulare Hill. And then

along Coyote Ridge we're talking about, you know, quarter pound to a tenth of a pound. So it's an incremental impact.

MR. HARRIS: Okay, so in addition to the background?

DR. WEISS: Right.

MR. HARRIS: What's the proposed mitigation plan for the Metcalf project?

DR. WEISS: Well, the mitigation plan was developed using a formula that first conservatively estimated the incremental increase from Metcalf Energy Center operations across the nearby serpentine habitats, and by conservative I mean an over-estimate of the amount of nitrogen deposition that the plant would cause. And the details of that, Greg Darvin can go into details on that. And it's also in the report.

And then we compared that with the background deposition in order to establish what the increment was, and used a formula that was developed by Energy Commission Staff and Fish and Wildlife Service to establish a total acreage to be preserved and managed in perpetuity.

MR. HARRIS: And what was that final mitigation proposal developed?

DR. WEISS: Final mitigation came out to 131 acres of serpentine habitat, 116 acres on Tulare Hill, and 15 acres up on Coyote Ridge.

MR. HARRIS: Okay, so we've got two locations there, and the details of the calculations are in the technical documents, but you have Tulare Hill and 15 acres on Coyote Ridge.

Let's talk about Tulare Hill as habitat. Can you give us your opinion of that?

DR. WEISS: Okay. Tulare Hill has only been intermittently occupied by the Bay Checkerspot butterfly, but it's still identified as critical habitat by the U.S. Fish and Wildlife Service, both for its intrinsic value and its value as a corridor connecting extensive habitats to the east on Coyote Ridge and west in the Santa Teresa hills.

MR. HARRIS: And how can a management plan affect the quality of the habitat on Tulare Hill?

DR. WEISS: Well, we think long-term management can improve the habitat on Tulare Hill for both the Bay Checkerspot butterfly and a lot of other rare species.

Right now it appears that the levels of

grazing up there are actually too high for optimal habitat conditions.

MR. HARRIS: So, in addition to improving that habitat, Tulare Hill will be a connecting corridor, is that right?

DR. WEISS: Yes.

MR. HARRIS: Okay. Let's move to the second area, than, talking about 15 acres on Coyote Ridge, which is to the east of the project. Can you talk about the Coyote Ridge property?

DR. WEISS: Yeah, these 15 acres occupy a very strategic location on the boundary of a proposed landfill expansion of the Kirby Canyon landfill, so it sets a hard border against the proposed expansion.

It's also adjacent to about 100 acres of mitigation land set aside for red-legged frog and Dudlias Achillea, the Santa Clara Valley dudlia. And it's also right in the middle of the core habitat of the Bay Checkerspot butterfly.

These lands were occupied by Bay Checkerspot adults in the year 2000; and they're currently occupied by Bay Checkerspot caterpillars. I just found some out there last month.

And both of these properties are going to be protected in perpetuity under conservation easements and fee title transfers. And it's going to have a substantial management endowment, so that we can monitor and undergo adaptive management on the sites.

MR. HARRIS: Taking into consideration the mitigation packages you talked about in your testimony, is the proposed mitigation protective of the biological resources?

DR. WEISS: Yeah, in addition to the fact that we're starting to piece together a reserve system adding 131 acres to permanent protection of the serpentine ecosystem which very little is protected right now.

The proposal really provides a qualitative lead as a precedent for addressing this nitrogen deposition issue and its impacts on the serpentine ecosystem.

But what the formula is designed to mitigate only for incremental impacts, so that any project doesn't get stuck with the fact that there's 42,000 tons of NOx being produced in Santa Clara County. But we're trying to come up with a formula that is fair to applicants and fair to the

butterfly so that the incremental impacts are dealt with.

MR. HARRIS: So, again, though, your bottomline opinion, you believe this is a very protective scheme we've put together?

DR. WEISS: Yes, I think so.

MR. HARRIS: How would you characterize your interactions with the Calpine/Bechtel team and the other members of the team that developed this plan?

DR. WEISS: Well, Calpine/Bechtel willingly addressed a complex and admittedly novel environmental impact that's supported by the best available scientific information.

And there was a real honest, open working atmosphere in our informal meetings with U.S. Fish and Wildlife Service and California Energy Commission and technical consultants by myself as very much a problem-solving atmosphere.

And instead of trying to deny or minimize their impacts based on inherent uncertainties in the nitrogen deposition modeling, we went ahead and came up with a conservative, over-estimation of what the impacts would be, so that the uncertainties in this case were actually

working in favor of the environment for a change.

MR. HARRIS: Bottomline, in your professional opinion is this a good mitigation proposal?

DR. WEISS: Yeah, I think it establishes an excellent precedent for protection of the species from the nitrogen deposition impacts, especially if it's applied to other projects of similar magnitude in the area.

MR. HARRIS: Thank you. I want to turn now to our other two witnesses and have them briefly introduce themselves and their qualifications. And they'll be available for cross-examination.

So I'd like to turn now to Mr. Darvin. Greg, could you state your name for the record and spell it, please.

MR. DARVIN: Greg Darvin, G-r-e-g D-a-r-v, as in victor, -i-n.

MR. HARRIS: And, Mr. Darvin, can you give us a summary of your professional qualifications.

MR. DARVIN: I'm a masters candidate in atmospheric science. I have a bachelors degree in physical geography. I've been practicing

meteorology and dispersion modeling over the last 15 years.

I've been involved in roughly five to six AFCs and in numerous power plant projects, gas plant, refinery applications and other modeling applications across the United States and including Alaska and Hawaii.

I also provide meteorological assessments for programming for providing or trying to update various types of models to improve their performance.

MR. HARRIS: And what was your task for the Metcalf team?

MR. DARVIN: I was to develop, in conjunction with the biologists, a conservative modeling methodology for assessing potential nitrate deposition from Metcalf.

MR. HARRIS: And you developed that model in support of the biologists, is that correct?

MR. DARVIN: I developed the assumptions that went into the model, yes.

MR. HARRIS: Okay. Thank you. Our last witness is Dr. Mark Jennings. And, Mark, could you state your name and spell it, please.

DR. JENNINGS: Mark Jennings, that's M-a-r-k J-e-n-n-i-n-g-s.

MR. HARRIS: And, Mark, can you give us a little bit of your professional background and qualifications, please.

DR. JENNINGS: Yes, I received a bachelor in science in fisheries from Humboldt State University in 1978. Received a masters degree in natural resources with emphasis in fisheries at Humboldt State University in 1981. And I received a PhD in wildlife and fishery science from the University of Arizona in 1986.

I've been a world class herpetologist for the last 21 years, studying lots of critters in California, basically amphibians and reptiles, but also fishes. I've served as an Adjunct Professor at the University of California at Santa Barbara since 1993. I've served as a Research Associate with the Department of Herpetology, California Academy of Sciences in San Francisco since 1987.

I currently have appointments at UC Davis. I'm also President of Rana Resources, which is a biological consulting company that does biologic surveys on fishes, amphibians and

reptiles. And also research in those species.

I've been noted by my colleagues for awards in conservation in herpetology, Southwest Herpetologists Society. Also Society for the Study of Amphibians and Reptiles. I've also received awards for my research by the U.S. Fish and Wildlife Service, and local and state chapters, as well.

Appeared many times on public television talking about declining amphibians, especially red-legged frogs, including CBS Evening News with Dan Rather, CNN, National Public Radio. My research has even made it into "Newsweek" as a popular topic.

I just want to say that I've had extensive research with these animals. I often am contacted for my opinions on what I think about red-legged frogs, et cetera. And I find my research has been used all over the world.

MR. HARRIS: Thank you. Red-legged frogs you mentioned is one of your specialties. What was your task for the Metcalf team? What species did you look at?

DR. JENNINGS: My charge was to look at the fishes that would inhabit Fisher Creek, and

also do protocol surveys for California red-legged frogs, California tiger salamanders, and then there are no protocol surveys, but I also looked for western pond turtles.

MR. HARRIS: Thank you very much. Before I make the witnesses available for cross-examination, I wanted to note that we do have now copies of exhibit 97. Mr. Ajlouny has his copy. And we'll make those available to everyone else, as well.

And with that, I will, I think, make the witnesses available for cross-examination. I'll move my documents in at the end, I guess, not now.

HEARING OFFICER FAY: All right, fine. Does staff wish to cross-examine the panel?

MS. WILLIS: We have no questions.

HEARING OFFICER FAY: All right, then City of San Jose.

MS. DENT: I have a few questions, thank you. I'm going to let the panel know what the areas of my questions are going to be in advance. Commissioner Laurie asked us to do that at one of the previous hearings, so I'll do that.

The first area of questioning I just want to clarify some of the survey information and

what was and wasn't surveyed and when it was surveyed, because it wasn't clear to me in reading through the testimony. It may be in some of the background documents, but I want to clarify that.

The second area that I want to get some information on is noise, specifically noise on Coyote Creek and noise in Fisher Creek.

And the third area that I want to ask the witnesses some questions about is the serpentine mitigation, and how that calculation was done.

So I'll start with what I think is probably the easiest area first, on the surveys.

CROSS-EXAMINATION

BY MS. DENT:

Q My first question is for the waterline. It sounded like you did not survey, do any surveying for the waterline beyond the connection there at Santa Teresa Boulevard. That there was no surveying for the waterline that does not yet exist, the South Bay Water Recycling pipeline waterline.

MS. CROWE: Yes, there was a survey done along the waterline, along the streets, and did not find any special status species.

MS. DENT: Now, so the pipeline alignment that you considered then for the purpose of surveying, the recycled water pipeline alignment, in your testimony you indicate that that's about a 10-mile pipeline alignment.

Yet in previous testimony in the hearing we've heard testimony that the alignment's been altered, and now it's about a seven-mile alignment. So I want -- I'm kind of asking you to describe for me the pipeline alignment that you actually surveyed, what you surveyed for, and when the surveys were performed.

MR. HARRIS: I just want to object to the extent that there's a seven versus ten miles. But she can tell you what she surveyed. I don't want to get into the issue of how long the pipeline actually is, because I don't think this witness has that knowledge, but she --

MS. DENT: Well, I --

MR. HARRIS: -- can let you know what she did survey.

MS. DENT: Yeah, I'm just asking for the particular alignment, pages 7 to 11 of her testimony refer to the length of the pipeline, and that's not the current length of the pipeline at

all. So.

HEARING OFFICER FAY: Can we be real specific as to which alignment she will be referring.

MS. CROWE: I'm referring to the waterline that was presented in the biological assessment, which is the same as supplement A, and it was ten miles long.

MS. DENT: Okay, so that is then a different alignment than is currently been proposed. It's just a different length. So you surveyed along the alignment that is identified in supplement A, that's your testimony?

MS. CROWE: Yes.

MS. DENT: Thank you. And, what level of survey and what surveys were conducted and during what season?

MS. CROWE: Well, I don't remember the exact day. It was in the springtime. I looked about 1000 feet on either side of the waterline. Most of it was City, residential areas, commercial areas.

MS. DENT: And you were just doing a visual survey at that point?

MS. CROWE: Just visual survey,

binoculars, yeah.

MS. DENT: Okay. The next question I have about the surveys have to do with the sensitive species, and I don't know which witness would be the witness on this, but there's a recommendation for preconstruction surveys for sensitive species in impact areas during the spring. That's item 5 on page 16 of the testimony.

And there's another recommendation for preconstruction surveys on page 5 of the testimony.

Can you tell me what species were -- what surveys beyond just visual surveys were performed for the project up to this point, or have there been no surveys other than visual surveys performed up to this point?

MS. CROWE: There have not been trapping surveys, if that's what you're talking about. There's visual surveys, both day and night.

MS. DENT: Well, I heard Mr. Jennings, I think, talk about protocol surveys for red-legged frogs and salamander, I think you said. Were those the only protocol level surveys conducted?

MS. CROWE: Those were the only protocol

surveys that were required for this particular project.

MS. DENT: So, are there going -- so is there going to be then another series of surveying for those species preconstruction? That seemed to me to be the recommendation in the testimony, that there be preconstruction surveying for those particular species. Is there going to be any further surveying for any other species?

MS. CROWE: Yes.

MS. DENT: Okay.

MS. CROWE: Preconstruction surveys will be conducted in all the impact areas. We'll be looking in burrows with burrow probes along the riparian corridor for tiger salamanders and potentially red-legged frogs.

We'll be doing nest surveys along Coyote Creek and Fisher Creek and on the site before construction begins to determine when construction could begin in those areas.

MS. DENT: And was there any reason why that level of surveying has been done to date?

MS. CROWE: That has already been done for the past two years. We have to do surveys just before construction to make sure no wildlife

has moved into those areas that previously did not contain them.

MS. DENT: Okay, so that level of surveying has previously been done, and you're going to redo it before construction?

MS. CROWE: Yes.

MS. DENT: All right. Then the area of noise. I believe in your testimony today you indicated that the noise estimate that you were using for noise from Metcalf Energy Center in the riparian corridor area was 55 to 60 dba. I think that's what you testified to today.

In your written testimony on page 14, you've indicated a continuous noise level of 68 dba. The 68 dba would be more consistent with the noise testimony that we previously heard in the section on noise which indicated that noise would exceed 60 dba clear over to Coyote Creek.

Would you confirm for me that the written testimony is correct, that the continuous level of noise would be 68 dba?

MS. CROWE: The written testimony has a typographical error. That should be 60, not 68.

HEARING OFFICER FAY: Do you wish to correct that now?

MS. CROWE: Yes.

HEARING OFFICER FAY: This is on page 14 of your testimony?

MS. CROWE: Yes.

HEARING OFFICER FAY: Okay, last paragraph on the page?

MS. CROWE: Correct.

HEARING OFFICER FAY: It's the fifth line down?

MS. CROWE: Yes.

MS. DENT: And so that --

HEARING OFFICER FAY: And it should read 60 dba instead of 68?

MS. CROWE: That's right.

MS. DENT: Now, that's for the Fisher Creek riparian corridor area, as well as the Coyote Creek riparian corridor area, correct?

MS. CROWE: Coyote Creek would be less than Fisher Creek. Fisher Creek is closer to the site.

MS. DENT: Well, now if I showed you noise testimony that Calpine introduced in the noise section of the hearing that indicated that at Coyote Creek the noise would be in excess of 60 dba, were you relying on noise estimates of

others, or did you perform your own noise estimates?

MS. CROWE: I'm relying on the noise estimates done for the project.

MS. DENT: So, if the noise testimony that was introduced earlier showed noise from Metcalf Energy Center in the Coyote Creek area of 60 dba or greater, that would -- you would then adopt that testimony, if that's what Calpine's noise evidence showed?

MR. HARRIS: I think I want to object on the basis you've assumed facts that aren't in evidence.

MS. DENT: Well, I guess I can show you your -- I guess I can show you and show her your exhibit.

MR. HARRIS: That would be my preference.

MS. DENT: Okay.

HEARING OFFICER FAY: That's sustained and we'll take a moment to clarify this.

Please identify any documents that --

MS. DENT: This is a document entitled attachment number 182R revised for supplement C, Metcalf Energy Center noise impact assessment,

prepared for Calpine/Bechtel, prepared by Hessler and Associates, dated February 15, 2000.

SPEAKER: I think we have it, what page are you looking at?

MS. DENT: Hey, I'm a layperson, I just look at the little map.

SPEAKER: And which figure number? 2?

MS. DENT: Figure 1. Shows circles.

HEARING OFFICER FAY: Does that have an exhibit number?

MR. HARRIS: Yes, supplement C I think is exhibit 3; it's a portion of supplement C. Exhibit 5, I'm sorry. And what's the name of the table, I'm sorry? Appendix 3.5. And what is the table entitled?

MS. DENT: It's figure 1.

MR. HARRIS: I'm sorry, figure. Okay, so it's site vicinity showing expected plant day/night time average, DNL, is that correct?

MS. DENT: Correct.

MR. HARRIS: Okay, DNL, not dba.

MS. DENT: Correct.

MR. HARRIS: Okay.

MS. DENT: And you were relying on the evidence that was produced in these noise surveys

by Calpine in terms of looking at noise impacts on biology, is that correct?

MS. CROWE: Yes, I was referring to figure 2 of that same document.

MS. DENT: And the DNL figure 2, okay, --

MR. HARRIS: Actually figure 2 is dba, not DNL. I think that may be the source of the confusion here.

MS. DENT: Figure 2 is on page --

HEARING OFFICER FAY: What page is figure 2?

MR. HARRIS: It's immediately following page 7, so I guess that would be 8.

MS. DENT: Thank you very much. So, Fisher Creek is located within the circle 55 dba and above, correct?

MS. CROWE: Yes.

MS. DENT: Okay, and portions of Coyote Creek are also within the circle, 55 dba and above, correct?

MS. CROWE: Yes.

MS. DENT: And Metcalf Energy Center is, of course, in the center of that circle or more less. Do you know if the noise generated in the

center of the circle is 55 dba or 58 dba or 60 dba, or any other number? Do you know what the noise is closest to the center of the circle?

MS. CROWE: Before or after the project?

MS. DENT: With the project in continuous operation.

MS. CROWE: My understanding that it's 60 dba at the center of the project.

MS. DENT: Dropping out to 55 dba at the edges, that's your understanding?

MS. CROWE: That's my understanding.

MS. DENT: Thank you. And now the background noise levels in Fisher Creek and in the Coyote Creek riparian corridor, are you aware of the background noise level surveys that were performed and of the ambient low background nighttime noise levels?

MS. CROWE: I'm not.

MS. DENT: Would it make a difference to you, as a biologist, to know what the ambient, low ambient nighttime background noise levels were in terms of comparing current conditions to the condition that will exist after the plant begins operation?

MS. CROWE: No, because once again the

impacts to wildlife occur starting about 80 decibels.

MS. DENT: So now is it your testimony then that there are no impacts to wildlife at all under 80 dba?

MS. CROWE: Of continuous noise, I'm not aware of any.

MS. DENT: So none of the species that could potentially be affected by this project would be impacted by noise below 80 dba, that's your testimony?

MS. CROWE: Not that I'm aware of.

MS. DENT: Now, and that's continuous noise level. So as long as the project operated at under 80 dba it's your testimony that there would be no adverse impact whatsoever on any species?

MS. CROWE: Yes.

MS. DENT: I'm going to ask the other witnesses if they agree with that, the other Calpine biological witnesses.

MR. HARRIS: To the extent they know they can answer.

MS. DENT: Well, to the extent that they purported to be experts on at least a few species

I'm going to ask them if they have an opinion, yeah.

If you would agree that continuous noise at 80 dba and above would not have any impact on the species that you are familiar with.

DR. WEISS: Speaking for the butterfly, I don't --

MS. DENT: They don't care.

DR. WEISS: Well, yes, I don't think they would. And certainly I don't think we'd have an impact on the rare plants in the serpentine.

DR. JENNINGS: As far as I know there's no evidence for fishes, amphibians or reptiles for anything that's under 80 being a problem.

MS. DENT: Okay. Now, that's addressing continuous noise. Did you take a look at the noncontinuous noise that would exist as a result of startup and operation of the plant?

MS. CROWE: No.

MS. DENT: So the fact that the plant's being certified to -- or being requested to be certified to startup and shutdown 600 times a year was not taken into account in terms of the impact of startup and shutdown noise on species?

MS. CROWE: No.

MS. DENT: And yet you testified that sharp and unexpected noises are more disturbing to wildlife than continuous noises?

MS. CROWE: Yes.

MS. DENT: And would the other witnesses agree with that in terms of your familiarity with the species that you've testified to. I'll exclude the butterfly at this point.

(Laughter.)

DR. JENNINGS: It makes no difference with fishes.

MS. DENT: Well, let's go to frogs and salamanders.

DR. JENNINGS: As far as I know it makes no difference to frogs or salamanders, either.

MS. DENT: Whether or not it's a --

DR. JENNINGS: Noise is not an issue.

MS. DENT: So, if it goes over 80 dba and it's a -- because of a condition where it takes it up and then it comes back down, just going over 80 dba would be disturbing to them?

DR. JENNINGS: All I can say is you've got red-legged frogs in places like the San Francisco Airport. They're still breeding.

MS. DENT: Okay.

(Laughter.)

MS. DENT: Now I wanted to have a few questions now about the butterflies and serpentine.

First of all the serpentine habitat on Tulare Hill, Tulare Hill is approximately 339 acres, is that right?

DR. WEISS: Right.

MS. DENT: And it's currently serpentine habitat and does support some butterfly population?

DR. WEISS: We assume that the butterflies are there. Now, the last confirmed sighting of a butterfly out there was in 1995. And there's been a very low level of effort of surveys since then. But the assumption that we've been working under, and Fish and Wildlife has been working under, that there likely is a small population of butterflies on the site.

MS. DENT: So you did not survey for butterflies, then, on Tulare Hill?

DR. WEISS: No, but we made the assumption that they're there.

MS. DENT: You made the assumption that they're there because the host plant species --

DR. WEISS: Right, and that they've been historically there. And we've had a confirmed sighting five years ago.

MS. DENT: And that area is acknowledged to be -- will be impacted by nitrogen deposition from Metcalf Energy Center?

DR. WEISS: Yes.

MS. DENT: The entire 339 acres.

DR. WEISS: Correct.

MS. DENT: Okay. Then we also have Coyote Ridge, and the acreage on Coyote Ridge that you estimated would be impacted by nitrogen deposition from Metcalf Energy Center was what amount?

DR. WEISS: The sum on Coyote Ridge is 3649 hectares, which if you multiply by 2.5 is about 9000 acres, but we also dropped out areas such as the Kirby Canyon landfill, which in the long run is not going to count as butterfly habitat.

MS. DENT: Well, now the CEC testimony on the FSA at page 485 indicates that you have a revised estimate of remaining undeveloped serpentine habitat in Santa Clara County of 3176 acres. I'm assuming that not all of that

undeveloped serpentine habitat is on Coyote Ridge, and not all of it is within the area that would be impacted by Metcalf Energy Center. But I'm trying to get a picture of the amount of acreage on Coyote Ridge that you thought would be impacted. And we'll get to the level of impact in a minute, but --

DR. WEISS: Right. We're talking about -- right, areas that would have impacts are on the order of 2000 to 3000 acres.

MS. DENT: Okay. So we have a total of somewhere between 2500 and 3500 acres, round numbers, that would be impacted by the additional nitrogen deposition?

DR. WEISS: Yeah, correct. There's certain areas that are out of the plume, and just are going to have, you know, just really not have an impact.

MS. DENT: And all of that habitat has been designated just recently by the U.S. Fish and Wildlife Service as critical --

DR. WEISS: It's been proposed as critical habitat; the final ruling has not been --

MS. DENT: So that was the October --

DR. WEISS: Right.

MS. DENT: -- was the published publication of the proposal.

DR. WEISS: Right, the area that we assume is going to be impacted all lies within the critical habitat.

MS. DENT: Now, the Tulare Hill area being much closer to Metcalf Energy Center, you have indicated would be more impacted by Metcalf Energy Center and by nitrogen deposition --

DR. WEISS: Right, right --

MS. DENT: -- than the Coyote Ridge that is further away?

DR. WEISS: Right.

MS. DENT: Now, again we see the host plants on Tulare Hill that would indicate butterfly habitat, so whatever current smog levels are, whatever current nitrogen deposition levels are, they are apparently not bad enough to have crowded out the host plants yet on Tulare Hill?

DR. WEISS: Well, again, it's a matter of the grazing regime on the site. If the cattle were removed I would expect within two or three years a massive growth of grasses and the habitat quality would be greatly reduced.

MS. DENT: Now, is there some -- and I

believe it was perhaps in the staff testimony, some estimate of the nitrogen levels in soil, the level that they need to stay below in order for the nonnative grasses to stay out of the area, some level that is acceptable to the host species but will not allow the nonnative grasses to move in?

DR. WEISS: I don't believe that we ever stated a level. I know that --

MS. DENT: Well, I'll just reference you to page 373 of the biological resources section; it's the staff report.

It indicates that --

MR. HARRIS: I'm sorry, what was the page number, 3?

MS. DENT: It's page 373 of the PSA.

MR. HARRIS: The PSA is not before us; we don't have that.

MS. DENT: Well, it's filed.

HEARING OFFICER FAY: The staff's testimony is the FSA.

MS. DENT: Okay, I'll just say page 373 of the PSA, I'll ask you to -- I'm going to ask a question on that, okay.

MR. HARRIS: I'm going to object on the

basis that the witness doesn't have that information before them, and --

MS. DENT: Well, I'm going to ask --

MR. HARRIS: -- and not --

MS. DENT: -- him a question, just ask him if he agrees with the statement in here.

MR. HARRIS: And I'm going to object to the question on the basis that the information is not before the witness.

MS. DENT: All right, I won't even refer to this document.

Do you agree that a nitrogen deposition rate of 3 to 10 kilograms per hectare per year is considered sufficient to affect ecosystem structure and diversity?

DR. WEISS: Yes.

MS. DENT: Thank you.

HEARING OFFICER FAY: On that basis do you withdraw the objection?

MR. HARRIS: What if I don't. It's a serious question. I mean --

HEARING OFFICER FAY: I think she's resolved it by just asking --

MR. HARRIS: Yes, I think she has, too. The rephrase seemed to deal with it. So, yeah, I

guess if it helps, yes, I'll withdraw.

MS. DENT: So, we have now then some indication about what deposition, nitrogen deposition rate would affect the ecosystem structure and diversity?

DR. WEISS: Right, and it's clear that the current deposition levels in the South Bay are affecting the ecosystem structure.

MS. DENT: I understand that that's your testimony, and you used an average of 7.5 pounds per year, I think, was --

DR. WEISS: Pounds per acre --

MS. DENT: -- or pounds per acre per year?

DR. WEISS: Yeah, that's our current best estimate of the background levels without Metcalf Energy Center.

MS. DENT: And now do you -- that was an average, though, for all of Santa Clara County, based on an average for all of Santa Clara County. Did you look specifically at the Metcalf Energy Center -- well, not the Metcalf Energy Center site, did you look specifically at current deposition rates on Tulare Hill and current deposition rates on Coyote Ridge?

DR. WEISS: No. The way we came up with the figure that's documented in my paper on conservation biology, we took data that were compiled for Fremont, which is the only place dry deposition has been estimated in the San Francisco Bay Area. And we adjusted the pollutant levels to represent the increase NOx and other pollutant levels in South San Jose, based on air pollution data from San Jose stations.

And we also adjusted the surface composition of the receiving surface to represent a seasonal grassland, whereas the original Fremont study that actually included a lot of other sites around California, used an urban mix, which was about 70 percent inert surface, such as concrete, roofs, 15 percent lawn and 15 percent tree.

So I went through an adjustment process in consultation with experts in the field to come up with an initial estimate of nitrogen deposition loads in South Bay on a seasonal grassland.

The Fremont data were based on 1985 to 1994 air quality data. So my initial figure came out in the range of 10 to 15 kilograms per hectare per year.

Okay, the air has been getting a little

cleaner in the South Bay, so we revised those methods to -- we didn't revise the methods, we revised the inputs to reflect a general trend towards decreasing NOx levels.

So that's how we came up with 8.4 kilograms per hectare per year, which translates into 7.5 pounds per acre per year.

MS. DENT: And so that's the revised -- when you say -- the reference that's made in the final staff assessment is background annual NOX concentration. What you're actually -- it's not a background level in the soil, it's a --

DR. WEISS: No, --

MS. DENT: -- background deposition --

DR. WEISS: -- background deposition level, yes.

MS. DENT: That is the background deposition level?

DR. WEISS: Yes, right.

MR. HARRIS: One exchange at a time.

MS. DENT: So we have an average in the South Bay background deposition level of 7.5 pounds, or 8.4 --

DR. WEISS: Kilograms --

MS. DENT: -- kilograms per hectare per

year. And again, that is not adjusted specifically for Tulare Hill or for Coyote Ridge?

DR. WEISS: No, that's a general figure for the South Bay, which is basically an extrapolation from Fremont figures.

MS. DENT: Now, we just went through the fact that when you're looking at Metcalf Energy Center as a source, you would consider that because it's closer to Tulare Hill, its deposition rate on Tulare Hill is going to be higher than the deposition rate on Coyote Ridge, which is further away.

DR. WEISS: Right, correct.

MS. DENT: Well, the other sources of nitrogen deposition being primarily I guess automobile traffic or other stationary sources --

DR. WEISS: Basically everything upwind.

MS. DENT: Right. The further away a particular site is from some of those sources the lower the nitrogen deposition on the site would be expected to be, is that correct?

DR. WEISS: Correct.

MS. DENT: And so Tulare Hill being in a relatively undeveloped part of Santa Clara County at this point in time, would -- and the existence

of the serpentine habitat in a better condition than it exists elsewhere, wouldn't that indicate that that area doesn't suffer quite the same level of nitrogen deposition as other more urbanized disturbed parts of the Bay Area or Santa Clara County?

DR. WEISS: No, I don't think so. Because Tulare Hill lies right there where with the prevailing northwest winds in the region, the level of smog that blows in towards Tulare Hill through the -- is a summation of everything upwind.

MS. DENT: So, now --

DR. WEISS: And, again, the current condition on Tulare Hill, the fact that there still are butterfly host plants and nectar sources, and again this applies to all of the serpentine in the South Bay, is a function of the fact that it's still being grazed by cattle.

MS. DENT: Now what about Coyote Ridge, that's much more -- much further remote in terms of from other air pollution sources.

Would you expect that the current --

HEARING OFFICER FAY: Is that a question?

MS. DENT: I haven't finished it yet. Assuming Coyote Ridge is more remote from other current sources of nitrogen deposition would you expect that the current background levels of deposition on Coyote Ridge are less than they are areawide?

DR. WEISS: No, not really. Because we're talking about a regional plume of smog coming down, and I think Greg Darvin can talk about the complications of air pollution chemistry, but very often you can find that the maximum amount of nitrogen deposition will be well downwind of the aggregation of sources because of chemical transformations in the air.

So there were some data in my 1999 paper that suggested that levels on, you know, the Kirby Canyon landfill on the south end of Tulare Hill were as great or perhaps even a little greater than up in the Silver Creek Hills.

And that's because of the complications of air pollution chemistry and the fact that we're sitting in a big regional smog plume.

MS. DENT: So your testimony then is that the 7.5 pounds --

DR. WEISS: Per acre per year.

MS. DENT: -- per acre per year, we'll use that one, areawide should be good for Tulare Hill and Coyote Ridge, also?

DR. WEISS: Yes. You have to realize that even the best, any scientist who works with dry nitrogen deposition, the first thing you admit is that there's a lot of uncertainties in any given number.

There are methods for, you know, comparative levels, but any absolute number really has to be taken with a grain of salt.

MS. DENT: Now, in terms of the impact from MEC, if I'm reading -- again, it was just easier for me to follow the final staff assessment in terms of the numbers -- page 486 of the final staff assessment indicates that the direct contribution of nitrogen to Tulare Hill from MEC would be 1.13 kilograms per hectare per year.

And I believe that was based on analysis that was provided to the CEC by Calpine/Bechtel. Do your witnesses agree with that statement?

DR. WEISS: Yeah, that's what's in the report here, so --

MS. DENT: So, then, again I'm going to now go back to the kilograms per hectare per year

because we can compare them that way.

DR. WEISS: Right.

MS. DENT: So we have 8.4 currently; MEC is going to add 1.13 to that --

DR. WEISS: Right.

MS. DENT: -- on an annual basis.

DR. WEISS: Um-hum.

MS. DENT: And then we have, again going back to the earlier testimony, the acknowledgement that somewhere between 3 and 10 you have impact enough to affect the habitat.

DR. WEISS: Right.

MS. DENT: So, we're now edging up close to the very top of the range in terms of impact on habitat, aren't we?

DR. WEISS: Yes.

MS. DENT: Okay. And at Coyote Ridge the deposition from Metcalf Energy Center is much less, it's .13. It's much slighter increase on an annual basis.

DR. WEISS: Right, because it's farther from the source of the plume --

MS. DENT: But -- and now apparently for this source being further from the source makes a difference, but for the general calculation of the

background you didn't think that made too much of a difference?

DR. WEISS: Right. You need to distinguish between a point source like Metcalf Energy Center, and your tracking the contribution of that plume, versus a large regional smog plume whereby levels of NOx and ozone and other things are actually very spatially spread out.

MR. SCHOLZ: Well, we'll do the air quality -- we'll be doing air quality soon.

MR. DARVIN: If I could interject real quick, actually the difference between Metcalf and its proximity to Tulare Hill and Coyote Ridge is that we may have more distinct plumes with Metcalf whereas we look at all the background sources throughout the region, they've had time and distance to mix together, so in a sense you don't have distinct plumes anymore from background sources. It becomes much more of an almost merged haze, if you will, that's contained within the airshed.

So, in a sense Coyote Ridge and Tulare Hill will be similarly exposed to background air pollution. But with regards to Metcalf, since we have more of a distinct plume, because of our

proximity to those two, that would account for the primary differences.

MS. DENT: So, there is a much greater impact from the plume on Tulare Hill than there is on Coyote Ridge?

DR. WEISS: As measured, yeah.

MS. DENT: As measured. And --

DR. WEISS: Or as modeled.

MS. DENT: And there is a -- modeled. Correct. And there is -- but Coyote Ridge is considered to be higher quality habitat currently?

DR. WEISS: Yes.

MS. DENT: And there's much more of it impacted.

DR. WEISS: Right.

MS. DENT: Now, the next area would be serpentine that I want to get to.

MR. HARRIS: Can I interrupt for a second. My witnesses may need to take a short break.

MS. DENT: That'd be good.

MR. HARRIS: Can we let them do that?

HEARING OFFICER FAY: Sure.

MR. HARRIS: Give them five minutes.

HEARING OFFICER FAY: Five minutes,

okay. Take a five-minute break.

MR. HARRIS: This is biology, so.

HEARING OFFICER FAY: How much more do you have, Ms. Dent?

MS. DENT: I just -- I'll tell you, the area that I want to just get into is how the calculation was done for the mitigation acreage. It probably shouldn't take any more than five or ten minutes.

HEARING OFFICER FAY: Okay. Soon as we return then, after a five-minute break.

(Brief recess.)

MS. DENT: I am sorry, because you gave me a minute, I'm going to have to go backward on one thing.

Before I get to the calculation of the acreage, I'm still a little perplexed by the depositions at Tulare Hill, nitrogen depositions at Tulare Hill without Metcalf Energy Center project.

And again, looking at page 486 of the final staff assessment there's an estimated annual direct and cumulative depositions of nitrogen in the middle of the -- actually the end of the top paragraph -- at Tulare Hill and at Coyote Ridge.

And the statement is that these maps show estimated annual direct and cumulative depositions of nitrogen to be 1.13 and 1.5 kg per hectare per year on Tulare Hill, and .13 and 3 kg per hectare per year on Coyote Ridge.

Now, I would read that to mean that the direct contributions from Metcalf Energy Center are 1.13 and cumulative depositions from Metcalf Energy Center and other sources are 1.5, which is, if I'm -- if that is the correct reading, is far lower than the 8.4 kg per hectare per year which is the background that's referenced at the top of the page.

So, I'm asking for Calpine/Bechtel's, for your indication to me on behalf of Calpine/Bechtel, what the nitrogen deposition is at Tulare Hill and at Coyote Ridge without the Metcalf project versus with the Metcalf project.

MR. HARRIS: Can you restate the question? You lost me on --

MS. DENT: Well, I'll ask the witnesses whether they agree with the statement in the final staff assessment on page 486 that the estimated cumulative deposition of nitrogen at Coyote Hill is 1.5 kg per hectare per year.

HEARING OFFICER FAY: Where on page 486 is this found?

MS. DENT: Well, it's the last sentence of the top of -- it's the last sentence of the first paragraph.

MR. HARRIS: I think you've got different page numbers than I do. It's not in my copy. 488?

MS. DENT: Well, mine's directly off the internet, so --

MR. HARRIS: It's not your fault, Mollie, I just want to make sure we're all on the same page.

MS. DENT: Yeah, --

MR. HARRIS: Literally.

MS. DENT: -- let's see, I'll try to --

HEARING OFFICER FAY: Just for reference, people, if you pulled your copy off the internet as opposed to direct service the page numbers won't match, so we'll have this kind of problem.

MS. DENT: Yeah.

MR. HARRIS: Okay, so what paragraph are we looking at here? In addition to the fact that this is not my witness' testimony, the page number

is giving us problems. So, where are we?

MS. DENT: Well, I'm going to try to find the heading for you, I guess.

HEARING OFFICER FAY: Ms. Willis, can you help us?

MS. WILLIS: Yes. It would be the top of page 488. And there's a bullet, and I think she's referring to the paragraph right below the bullet.

HEARING OFFICER FAY: All right.

MS. DENT: The first -- the bullet at the top of the page of your page 488, the same as my page 486, the bullet indicates a revised background annual NOx concentration from 12.5 to 8.4. Is that at the top of your page, also?

HEARING OFFICER FAY: Does the witness have that before him?

DR. WEISS: Yeah, we have it before us.

HEARING OFFICER FAY: And what is the question?

MS. DENT: My question is related -- my question specifically is whether or not they agree that the estimated annual cumulative deposition of nitrogen on Tulare Hill is 1.5 kg per hectare per year as indicated in the last sentence of the

first full paragraph.

MR. HARRIS: I think I want to object on the basis that this is not this witness' testimony.

MS. DENT: Well, I'm just going to --

HEARING OFFICER FAY: Well, --

MS. DENT: -- ask if they agree with it.

HEARING OFFICER FAY: That's overruled. Answer the question.

MR. DARVIN: Maybe I can clarify things a bit. The 1.5 kilogram per hectare per year on Tulare Hill was from a cumulative modeling analysis that included Metcalf, CVRP, and the Coyote Valley urban reserve, I don't know if that's the exact term, but it included three projects cumulatively.

And what we did when we modeled the project was made the same assumptions that we had on Metcalf alone in that all the NOx plus all the ammonia converts instantaneously to depositional nitrogen.

So the numbers that we have here are pretty large over-estimates. We made a number of very conservative assumptions in order to try to over-calculate impacts to see if there could be a

potential impact due to nitrogen.

But that 1.5 is due to three projects.

MS. DENT: So that 1.5 does not reflect the background levels from the smog that we heard testimony --

MR. DARVIN: Correct.

MS. DENT: -- about previously?

MR. DARVIN: Right, these are proposed new sources.

MS. DENT: So you modeled for that particular estimate CVRP, Metcalf Energy Center and one other, you said?

MR. DARVIN: An urban reserve, and I don't know the exact title of it, but that's what I've been calling it. I think an establishment of homes.

MS. DENT: Okay. Thank you, I just wanted to clarify what that cumulative deposition meant.

Now, in terms of the acreage that is going to be set aside for butterfly habitat, first of all, does Calpine/Bechtel, to your knowledge, control the 116 acres on Tulare Hill that's being offered as set-aside?

MS. CROWE: Yes, they do.

MS. DENT: And Calpine/Bechtel does not control the remaining 339 minus 116 acres, is that accurate?

DR. WEISS: That's accurate.

MS. DENT: Yet that entire 339 acres is going to be affected by the nitrogen deposition from a biological standpoint?

DR. WEISS: Yes.

MS. DENT: It doesn't respect property lines.

DR. WEISS: Right, it doesn't respect property lines.

MS. DENT: Okay, now does Calpine/Bechtel control the 15 acres on Coyote Ridge that are being proposed to be set aside?

DR. WEISS: Not at this point, but they've been in negotiations with Castle and Cooke, the land owner, to set up a conservation easement on the site. And I believe that has to be in place before the project proceeds.

MS. DENT: And again, the acreage that's going to be impacted on Coyote Ridge is much greater, it's in the 2000 to 3000 acre range.

DR. WEISS: It's in the 2000 to 3000 acre range in terms of a slight increment.

MS. DENT: And Calpine/Bechtel doesn't control any of the rest of that acreage in terms of grazing or anything?

DR. WEISS: No.

MS. DENT: In going back to Coyote Hill you're not going to be controlling grazing on the 339 minus 116 remainder of Tulare Hill?

DR. WEISS: Well, currently all of Tulare Hill is under the same grazing management regime. There's a PG&E easement and then there's a little residual area, and then there's the north side of Tulare Hill, so we have -- this is the property line for Calpine/Bechtel's property. There's about a 40-acre PG&E transmission line corridor easement --

HEARING OFFICER FAY: And please use directions as you --

DR. WEISS: Okay, -- running from basically east to west across the hill, and that's directly adjacent to Calpine/Bechtel's parcel on the southern portion. There's a little triangle between the PG&E transmission line corridor, and then the property that's the north side of Tulare Hill.

And currently this is all being grazed

under the same management regime. So, in the long run what happens on the north side of Tulare Hill, a lot of that's up to what the landowners up there agree to.

And I don't know personally whether, you know, they've been contacted or responded to attempts to contact them. So, --

MS. DENT: But if nitrogen depositions from Metcalf Energy Center do impact that side of Tulare Hill and grazing, the property owners on that side of Tulare Hill decide to stop grazing, you would expect to see a decline in butterfly habitat on that side of Tulare Hill, as well?

DR. WEISS: Yeah, anywhere in the South Bay where landowners decide to stop grazing you would see a decline in habitat quality.

MS. DENT: Particularly where nitrogen depositions increase?

DR. WEISS: Yeah, that would, you know, any incremental increase makes the process go a little faster.

MS. DENT: Did you look beyond just Coyote Ridge and Tulare Hill to areas further south in terms of serpentine habitat and impact of nitrogen depositions if it were to move further

south?

MR. DARVIN: We looked within a ten-mile radius around the project site, which covered various types of land use.

MS. DENT: So it would only go five miles south of the project site, then?

MR. DARVIN: Ten-mile radius.

MS. DENT: Oh, I see, okay --

MR. DARVIN: Ten miles in all directions.

MS. DENT: So you did go ten miles south of the project site?

MR. DARVIN: Yes.

MS. DENT: Did you find any serpentine habitat further south of the project site that would be impacted by nitrogen depositions?

MR. DARVIN: Well, if we look at one of the maps that has all the isopleths on it, we see that by the time we get to about the south end of Coyote Ridge we're getting down into the .0103 range of deposition. And again, that is assuming that all the ammonia, all the NOx out of Metcalf is instantaneously converted to nitrogen.

So the idea was that using such Draconian assumptions about nitrogen formation,

and then modeling it, that once we got to a certain distance and the numbers start really dropping down, that we could be reasonably assured that impacts would not occur.

So, again, we tried to over-estimate and derive the impact analysis that way.

MS. DENT: Separating out for a minute the amount of nitrogen deposition, and just looking at the habitat, can you identify for me the acreage and habitat, butterfly habitat further south?

DR. WEISS: There's relatively limited butterfly habitat south of Anderson Dam, which is the south end of Coyote Ridge, as we call it.

I couldn't give you, off the top of my head right now, acreages. Those areas are probably being affected by the regional plume, but the increment from MEC is really minimal down there as seen in the isopleths here.

HEARING OFFICER FAY: Ms. Dent, excuse me. You indicated about five minutes, it's been more than ten minutes now. Can you wrap it up, please?

MS. DENT: I'm so slow, I'm sorry. I'll go on to the calculation then.

HEARING OFFICER FAY: Okay.

MS. DENT: I guess I had some difficulty figuring out how you got down from a 2500 to 3500 acre area of impact to only preserving 131 acres.

And so my question really is what model or method or experience did you apply to coming up with the number of acres? I didn't see any indication of that.

HEARING OFFICER FAY: And I'm going to intercede. If the witness can point to a portion of his testimony or the applicant's testimony that goes through this, that would save us some time. If not, then --

DR. WEISS: Well, first on the general principle is that we were trying to mitigate for the increment that MEC would be having above the background.

And on the calculation of acreage from our estimate of that increment I need to defer to Linda Spiegel and Cecilia Brown, who took our impact assessment and turned it into acreage.

MS. DENT: So it just so happens that the amount of acreage that you're going to preserve, though, is the amount of acreage that Calpine happens to control?

MR. HARRIS: Objection. Argumentative.

MS. DENT: Well, I'm just asking --

HEARING OFFICER FAY: Sustained.

MS. DENT: -- it's identical to the amount of acreage --

DR. WEISS: No, it's not, there's --

MR. HARRIS: Mr. -- okay.

MS. DENT: Again, the amount of acreage that you're going to preserve is 116 acres, is that correct?

DR. WEISS: No, it's --

MS. DENT: On Tulare Hill.

DR. WEISS: On Tulare Hill.

MS. DENT: And that is the amount of acreage that Calpine currently controls.

DR. WEISS: Yes.

MS. DENT: And the amount of acreage that you're going to preserve on Coyote Ridge is 15 acres?

DR. WEISS: Yes.

MS. DENT: Out of a total of between 2000 and 3000 acres that are impacted by the project?

HEARING OFFICER FAY: Is that a --

DR. WEISS: Yes.

MS. DENT: And can any of the witnesses, given your experience, and you all -- at least Ms. Crowe laid out experience with other projects, can any of the witnesses point out to me another project that they've worked on that shows mitigation ratios equivalent to this project?

DR. WEISS: I think the talk of the mitigation ratios used in this project, again I need to defer to Linda Spiegel and Cecilia Brown because they came up with the mitigation ratios for the incremental impact.

MS. DENT: So none of you have any experience in projects that you've worked on with mitigation ratios equivalent to this project?

MS. CROWE: We have not worked on a project before with Bay Checkerspot butterfly and there was no precedence for calculating mitigation necessary.

MR. DARVIN: And in all the projects I've ever modeled I've never done an over-estimate the way I've done on this project to try to over-predict nitrogen impacts. Typically we just look at NOx emissions. In this case we actually almost doubled those to account for ammonia.

So, again, I've never looked at

Checkered butterflies before in my life, but I have done nitrogen deposition analysis, but never to the degree of conservatism that I've done on this project.

MS. DENT: Well, let me ask Dr. Weiss specifically, you indicated some familiarity with the loss of acreage in the Silver Creek area --

DR. WEISS: Yes.

MS. DENT: -- of San Jose with the butterfly habitat loss of acreage --

DR. WEISS: Um-hum.

MS. DENT: -- up there.

PRESIDING MEMBER LAURIE: Ms. Dent, let me ask. Is it your position that the mitigation that's being proposed in adequate?

MS. DENT: It's my position that there's been an inadequate demonstration on the record of the basis for the mitigation that is being proposed, that there is no explanation for the formula that has been used.

And it is my belief that it is not consistent with what I have seen in terms of mitigation for other types of projects. And it's not necessarily consistent with mitigation that has been imposed by the City for Checkerspot

butterfly habitat.

PRESIDING MEMBER LAURIE: Is it your belief that you can apply generic formula to the amount of acreage that is imposed as a mitigation measure on the biology or do you believe that it's determined on a case-by-case basis, depending upon the unique circumstances of each case?

MS. DENT: I believe it does have to be determined on a case-by-case basis based on the unique circumstances in each case.

PRESIDING MEMBER LAURIE: Okay, and so these witnesses have testified that in their opinion the mitigation measures are sufficient to bring the level of impact below significance.

MS. DENT: I'm trying to probe the basis for their opinion.

PRESIDING MEMBER LAURIE: Okay. You have their written testimony?

MS. DENT: I've looked at their written testimony, and that's why I asked the question whether or not they have any other projects where they've used this type of technique, the technique that they used and that they testified to, and that is in their written testimony, is looking at this percentage of increase over background, and

then applying that back to acreage.

And I'm asking whether or not there are any other projects that they've worked on where they've seen that used.

HEARING OFFICER FAY: And that, I think, has been asked and answered. And, Ms. Dent, I'm going to direct you to staff, because apparently the applicant's witnesses relied on staff approach for mitigation acreage.

So, when staff testifies I think you should pursue that with them.

MS. DENT: Well, let me ask it this way. When were the 116 acres purchased by Calpine/ Bechtel?

MR. HARRIS: Objection, this is not a biological question.

HEARING OFFICER FAY: Sustained.

MS. DENT: Fine, I'll ask the staff witnesses.

HEARING OFFICER FAY: Okay, thank you. Anything further?

MS. DENT: Let me look at my notes, just a moment, please.

Oh, yes, I do have some questions about a specific project that Mr. Weiss did indicate

some familiarity with, and that's the Silver Creek project.

Are you familiar with the mitigation that was imposed for the Checkerspot butterfly for the Sierra Silver Creek Ranches project?

DR. WEISS: Yes, I am.

MS. DENT: And did you work on the EIR for that project?

DR. WEISS: I did surveys out on that site in 1992, 1993 and 1994. And those data were incorporated into the EIR, but I have not worked on that EIR for any of the planning out there since 1994.

MS. DENT: So, you don't have any familiarity then with the mitigation acreage ratios that were eventually identified as mitigation for loss of Checkerspot butterfly habitat for that project?

DR. WEISS: I am familiar with the Fish and Wildlife Service biological opinion. I don't have it with me, so I couldn't tell you what the mitigation ratios are.

MS. DENT: Do you know if they are consistent with the mitigation that is being recommended in this project?

DR. WEISS: This is a very different kind of habitat impact. There's quite a bit of difference of basically putting habitat under pavement in discrete acreage versus a diffuse incremental impact from something like nitrogen. So it's a very different animal.

MS. DENT: Correct. There's a very different -- the projects are different. But my question for you is once you identify the amount of acreage that's being impacted by the project, whether or not the mitigation ratios, as they are described, which for this project turned out to be one-half for Tulare Hill for impacted areas, and three times for Coyote Ridge impacted areas, whether or not those mitigation ratios are, in your opinion, consistent with the mitigation ratios that were used in that other Checkerspot butterfly project?

DR. WEISS: I would need to go back, look at the acreage and find out what the mitigation ratio is.

MS. DENT: Thank you. I have no further questions.

HEARING OFFICER FAY: All right. Is CVRP represented here? Apparently not.

All right, Mr. Ajlouny.

MR. AJLOUNY: Yes. Again, just to mention that I didn't prepare cross-examination because of the prehearing statements on November 30th led me to believe that if the U.S. Fish and Wildlife document was not out by then we wouldn't be having this. That's what I led to believe. So I just wanted to open up with that.

HEARING OFFICER FAY: Okay, I have to point out that the notice clearly identified biological resources, the testimony of the applicant and the staff, as part of the subject of this hearing.

MR. AJLOUNY: I understand, but I just didn't really --

HEARING OFFICER FAY: Okay.

MR. AJLOUNY: When we were setting up the dates it was stated that the U.S. Fish and Wildlife might be delayed some. So they put it in group 3, hoping that it would be in by now. Knowing that it wasn't in, I thought we'd come here and it would be a continuance, and then we'd go on to visual.

HEARING OFFICER FAY: Okay.

MR. AJLOUNY: So, anyways --

CROSS-EXAMINATION

BY MR. AJLOUNY:

Q In all the modeling of the NOx -- and I'm going to use common lay terms, because I'm not into this profession, okay, so just bear with me, if you could.

But all the emissions coming out and all these calculations that we've been talking about, was the meteorology looked at? I mean is that what you use? It's like what's going on in the air for that area?

MR. DARVIN: Yes, we used one year of hourly meteorology to run the models.

MR. AJLOUNY: Okay. And this is just hypothetical for now. But I'm going to read a statement and then tell me if that would change some of your testimony or your feelings, or what you've been testifying today.

MR. HARRIS: Do you have copies of that statement for counsel?

MR. AJLOUNY: It's something that I'm going to read from that has no bearing of where it's coming from. I'm just going to read a statement. But you all have it --

MR. HARRIS: If you want the witness to

react to it I'd like the witness to be able to see the statement.

MR. AJLOUNY: Sure, if that makes a difference.

MR. HARRIS: It does make a difference.

MR. AJLOUNY: It's a one-sentence statement, but I'll read it, and then I'll give it to them.

PRESIDING MEMBER LAURIE: Just read the statement.

MR. AJLOUNY: In this situation the entire valley is like a closed pipe and pollutants are trapped from all sides.

If that was, and that's hypothetical --

PRESIDING MEMBER LAURIE: Is this a statement out of some document?

MR. AJLOUNY: Yeah, and I wasn't going to carry on, I just didn't want to bring it up and then I get a objection because it isn't their knowledge. But it's the one, it's the testimony of the five professors that was just docketed, you know, sent to everyone a few days ago on air pollution --

MR. HARRIS: Air quality --

MR. AJLOUNY: -- the air quality from

the five doctors and stuff like that.

MR. HARRIS: And I'm going to object on the basis that's air quality testimony.

MR. AJLOUNY: See, there you go.

MR. HARRIS: These are biological witnesses. Well, just because I'm right doesn't mean it's bad.

HEARING OFFICER FAY: Is this a biological question you're --

MR. AJLOUNY: Yes, because my first question --

HEARING OFFICER FAY: Go ahead, --

(Parties speaking simultaneously.)

HEARING OFFICER FAY: -- phrase it.

MR. AJLOUNY: Okay. The first question is again you did all your analysis based on how air moves in that area, correct?

MR. DARVIN: Yes.

MR. AJLOUNY: Okay, and then if you happen to find out -- and I'm not going to go far with this, I'm just trying to bring something up, so when we do get to air quality we can take it for what it's worth.

HEARING OFFICER FAY: But it's the impacts on biology that you're getting at, right?

MR. AJLOUNY: Yes.

HEARING OFFICER FAY: Okay.

MR. AJLOUNY: But the impacts were calculated by how air moves in the area. And because biology is done before air quality, which seeing this now I almost think it should be reversed, just my opinion, so based on you doing your analysis on how air moves and the plumes and all that kind of stuff, would your testimony change quite a bit if you felt that the valley's like a closed pipe and pollutants are trapped from all sides? It's not moving like maybe your analysis assumed it did --

MR. HARRIS: I'm going to object because it calls for this witness to speculate on testimony that's not --

MR. AJLOUNY: I mentioned hypothetical. I thought that covers --

MR. HARRIS: Still calls for speculation.

MR. AJLOUNY: Okay.

HEARING OFFICER FAY: Well, let's just cut through this. What assumptions did you make in terms of the movement of air and pollution in the area?

MR. DARVIN: I really don't make assumptions in terms of how the air moves. What I do is rely on a few different tools of techniques that EPA provides to try to assess, you know, dispersion within airsheds. One of those is the use of representative onsite meteorology as input into the model, which basically contains one year of hourly wind speed, wind direction, temperature, mixing height, stability data.

That information is used in the model to calculate the downwind concentrations. Now, the models that I'm required to use by EPA and Bay Area are called gaussing models. And they incorporate in them a number of supporting assumptions. And one of the most important is that the atmosphere and source are in steady state for one hour time periods.

Another one, too, is that all mass is conserved. In other words, whatever we stick out the stack is always available for dispersion.

So, in a sense I don't analyze three dimensional wind fields within the area because that type of analysis would require all sorts of information that would take not only time to gather, but then you'd have to find a model that

EPA could accept, along with Bay Area, that would represent the general area.

We tend not to do that because these gaussing models are screening models. They are designed to over-predict impacts. And if you don't show an impact with a screening level model there really is no need to go and collect three dimensional meteorology, or three dimensional stabilities and try to identify what the exact flow is in the region.

Now we know that the area's not a closed pipe because if it were, you know, in time people would obviously become -- I can never say the word -- but, you know, pollutant loading with build up over time, and you'd see some major problems.

Clearly there is ventilation in the area. And the gaussing model does a very good job at predicting potential impacts from these types of projects in areas with terrain.

So that statement that you read would not change my testimony.

MR. AJLOUNY: Because you don't believe the statement could ever happen? From what I just heard you say, that just a --

MR. DARVIN: It's not that it doesn't ever happen, but it does not happen over time periods of concern.

MR. AJLOUNY: What I'm trying to lead to is the modeling that you did use from the EPA or whatever numbers you get, if that was proven incorrect in future dates, would it change your testimony of the deposition of all this NOx and, you know, ammonia falling down and growing the grass and all that? I just --

MR. HARRIS: I'm going to object again to the question calling for speculation.

HEARING OFFICER FAY: I'm going to sustain that because you're basically saying if the basic assumptions of your testimony changed would the result change. And that could be the case for anybody's testimony. But without some specifics, it's pretty general speculation for them to get into that.

MR. AJLOUNY: Mr. Fay, my biggest concern is I feel in the air testimony modeling has been inaccurately done. And we're not there yet. So I guess what I'm trying to do is be systematic in working with the structure of this whole testimony, is that if it does change, then I

really emphasize that all their testimony change, that's all --

MR. HARRIS: Can we be off the record?

PRESIDING MEMBER LAURIE: No, no, that's not necessary. That's okay. But that's all right, and if your argument, when we get to air, is that the testimony is based on false assumptions, well, you can then argue it then follows that everybody else's testimony, based upon these assumptions which you will allege to be false must fail. That will be your argument.

These folks have gone as far as they can go.

HEARING OFFICER FAY: I think what you're talking about --

MR. AJLOUNY: And that's the point I wanted to make, Commissioner, is do we leave something like this open for that testimony? Because I think there's --

HEARING OFFICER FAY: No, no. We'll take the evidence. You can argue in your brief that if something that is taken later puts in doubt some of the testimony that was presented previously, then that's something you argue.

MR. AJLOUNY: Okay. And I'll just ask a

general question then. Are you familiar with this document regarding the five professors from Morgan Hill on the air quality? Have you see it? Are you familiar with it?

MR. DARVIN: I'm familiar with one document that came out five months ago, four --

MR. AJLOUNY: No.

MR. DARVIN: -- months ago. I don't --

MR. AJLOUNY: Okay, that's fine. Okay, let me go through my notes here.

I just heard recently from testimony that estimates were doubled because of ammonia emissions, the slippage. Did I hear that -- I heard that from somebody.

MR. DARVIN: I included ammonia emissions in the modeling of nitrogen.

MR. AJLOUNY: And when you included that, by what factor, because of ammonia emissions versus I guess NOx emissions, or is NOx part of ammonia, I heard a comment that it was doubled because of ammonia.

MR. DARVIN: It basically doubled the emission rate per turbine. I don't have the exact number in front of me, but what I did was took the NOx emissions, added the ammonia emissions to

those, and then modeled that as nitrogen.

MR. AJLOUNY: Okay. So, would it be your testimony then if there was absence of ammonia it would be half as much impact on the surrounding area?

MR. DARVIN: Based on the methodology that I used, the impact in the modeling route would be less.

MR. AJLOUNY: Okay. And as an expert, would you prefer half of the emissions versus having to double -- I mean what would you prefer?

MR. DARVIN: I don't understand the question.

MR. AJLOUNY: Well, you -- how am I saying this. As an expert witness, and you know, going through and being concerned about the butterflies and the habitat and everything around it, would you --

PRESIDING MEMBER LAURIE: Sir, I don't think his personal preferences in life are relevant. He's testified that if there's a change in circumstances there's a change in impact. What he has personal views on regarding life, I don't find that relevant.

MR. AJLOUNY: Okay, that's fair. But,

again, it's going to be you doubled your impacts, or your calculations because of ammonia being part of this process?

MR. DARVIN: The idea was to try to over-estimate as much as possible what the potential of --

MR. AJLOUNY: Okay.

MR. DARVIN: -- nitrogen effects would be, so we included ammonia in the emissions from the model.

MR. AJLOUNY: So, it sounds like ammonia is pretty significant as far as the impacts?

MR. DARVIN: Well, in a sense we --

MR. AJLOUNY: It contributes.

MR. DARVIN: -- added to it. In reality, it plays a much smaller role than how we modeled it. I assumed instantaneous conversion in the stack of ammonia NOx to nitrogen. In reality it's going to take place over time and distance. In fact, I believe at nighttime the process is actually reversed, but typically you can get anywhere from 8 percent to 30 percent conversion rates of NOx and ammonia to various types of nitrogen species.

But we wanted to just completely remove

that from the equation and just assume that in stack everything converted instantly and so when we modeled the impacts we assumed everything coming out of the stacks was just pure nitrogen.

So, we removed all the chemistry aspects from this modeling analysis.

MR. AJLOUNY: Okay, I want to explore the area of the cows helping out the butterflies.

MR. DARVIN: Yeah.

MR. AJLOUNY: Okay, because as a common layperson I've always had a hard time with that. So, I guess my question is cows eat the grass, right?

MR. DARVIN: Cows selectively eat the introduced grasses.

MR. AJLOUNY: Okay, so the cows won't eat the plant, and I think they called it --

MR. DARVIN: Plantain --

MR. AJLOUNY: What is it?

MR. DARVIN: Plantago, California plantago.

MR. AJLOUNY: Okay, whatever. Cows don't eat that, and that's where the larvae and the butterfly lay it on?

MR. DARVIN: Yeah.

MR. AJLOUNY: Okay. So, when cows go around eating grass, as far as I know the cows I know have four legs and --

MR. DARVIN: Um-hum.

MR. AJLOUNY: -- they're pretty heavy. So and they don't have much of a long neck, correct?

(Laughter.)

MR. AJLOUNY: I mean I'm just trying to figure this out, so if we take a ten foot by ten foot area of grass and put a cow in there, and he's going to eat that grass, keep it low enough so the butterflies can -- that's the theory I'm understanding, would you imagine that 50 percent of that ten by ten square foot is crushed by the feet of the cow? Or, I mean I'm just -- this is a serious question, I never did understand that.

DR. WEISS: Well, if the issue is do caterpillars and pupae and other immobile parts of the life cycle get stepped on by cows, the answer is some do. But Bay Checkerspot butterfly populations are thriving in areas that are grazed on the order of one to ten cows -- no, excuse me, one cow per ten acres, and the populations are doing fine.

Given the proper habitat conditions a population can sustain a certain amount of mortality from cows stepping on it.

The removal of cows, on the other hand, led to the extinction of the butterfly across hundreds of acres of habitat in the Silver Creek Hills.

MR. AJLOUNY: Okay, but just to get back to my question, I mean would the cows -- wouldn't you imagine the cows stepping on what percentage of that --

DR. WEISS: I --

MR. AJLOUNY: You have no idea?

DR. WEISS: -- I couldn't give you a figure on that.

MR. AJLOUNY: But you're just basing all this cow theory as history and what you've known to be true as a specialist in this biology?

DR. WEISS: Yeah, it's, you know, it's my best scientific judgment; it's passed peer review in the scientific literature. And it's consistent with all the observations we have in the area.

MR. AJLOUNY: Okay, it's always been hard for me to understand, but going on to the

other subject of the other acreage that's not controlled by Bechtel and Calpine.

Do you have any scientific explanation or proof of how to guarantee that cows are going to be there eating that grass?

DR. WEISS: Yeah, because that area is adjacent to what's existing conservation easements. It's grazed by the same rancher who grazes mitigation lease for the Kirby Canyon landfill. And there's no reason to believe that he's going to be not grazing that land well into the future.

MR. AJLOUNY: But there's no contracts in place or anything that you know of?

DR. WEISS: There's the grazing lease for the land as it exists, there's a current grazing lease on the land.

MR. AJLOUNY: Okay. So is that lease going to change at all with if the power plant doesn't go in? Best of your knowledge.

DR. WEISS: Not that I know of.

MR. AJLOUNY: So, if we don't have the Metcalf power plant you won't have as great a concern about these butterflies? Because the way it's status quo right now they're doing just fine?

DR. WEISS: No, I'm very worried that land that's not under conservation easements with management guidelines could be mismanaged or eventually developed.

MR. AJLOUNY: Are you aware of the plans of the County or City as far as developing that land, and the restrictions on it right now?

DR. WEISS: I understand there are restrictions, but --

MR. AJLOUNY: So do you have any reason to believe there's going to be any construction on the hillsides knowing the LORS or whatever the rules are of the City or County?

DR. WEISS: I would have to look in and see what the potential development is up there, but there have been development proposals in a fair number of serpentine areas.

MR. AJLOUNY: But on this hillside you don't know if any possibility of any development, do you?

MS. CROWE: Are you talking about Tulare Hill or Coyote Ridge?

MR. AJLOUNY: Tulare Hill.

MS. CROWE: -- to back up.

DR. WEISS: Oh, he's talking about

Tulare Hill. No, I --

MR. AJLOUNY: I'm sorry, all this is on Tulare Hill.

DR. WEISS: Okay. No, I don't know of current development proposals. I don't know if Debra or the other people --

PRESIDING MEMBER LAURIE: Well, if your answer is you don't know, that's your answer.

DR. WEISS: I don't know.

MR. AJLOUNY: Yeah, that's fine. And that's what I find to be true. And you don't know of any planned development or anything to Tulare Hill.

Do you know of any laws or LORS or something that would prohibit building on the hillside of Tulare Hill?

DR. WEISS: You'd have to go through the Endangered Species Act, various hillside zoning ordinances. But I've seen hillside zoning ordinances overruled by the City in the Silver Creek Hills and other sort of projects.

MR. AJLOUNY: You don't know that this hill's already been reserved for --

DR. WEISS: This hill has not been reserved. There's not --

MR. AJLOUNY: You're sure about that?

DR. WEISS: -- there's not a conservation easement over it.

MR. AJLOUNY: Okay, all right.

DR. WEISS: And since we are talking about Tulare Hill I would like to back up very briefly and say --

MR. AJLOUNY: Great.

DR. WEISS: -- that the management plan that goes in under this will guarantee a moderate level of well managed grazing on Tulare Hill into perpetuity.

MR. AJLOUNY: Of the controlled by Calpine land? Or all land?

DR. WEISS: Controlled by Calpine land.

MS. CROWE: Yes, it --

MR. AJLOUNY: And my concern is that I think around 200 acres that's not controlled by Calpine, that's where I was going with all my questioning. So there's nothing that you know scientifically that's going to make those landowners have cows on that land?

MS. CROWE: No.

MR. AJLOUNY: So in your expert opinion could you see how the butterfly might be affected

by the, you know, whatever the chemical is that makes the grass grow?

DR. WEISS: Nitrogen.

MR. AJLOUNY: Nitrogen.

DR. WEISS: Well, in the absence of cattle grazing we'll get lush growth of grass --

MR. AJLOUNY: So that could be significant impact on the butterfly?

DR. WEISS: If the cattle grazing were removed --

MR. AJLOUNY: And there's no mitigation to force those landowners to have cows on that land?

DR. WEISS: I think you'd have to talk to Fish and Wildlife Service about that, but --

MR. AJLOUNY: Okay, best of your knowledge --

DR. WEISS: The best of my knowledge it's the 116 acres that are owned by Calpine are going to be where the management program --

MR. AJLOUNY: Right, and my concern is not the 116, it's the other two-thirds of the land.

DR. WEISS: Right, well, I'm very concerned about the long-term grazing management

of all serpentine lands in the South Bay.

MR. AJLOUNY: Okay. So, --

CHAIRMAN KEESE: But our concern is the mitigation of the Metcalf project.

MR. AJLOUNY: Yes, and because --

CHAIRMAN KEESE: If you want to protect the world you can do that, but we're focusing on what it takes to mitigate the Metcalf --

MR. AJLOUNY: Energy plant.

CHAIRMAN KEESE: Right.

MR. AJLOUNY: Yeah.

CHAIRMAN KEESE: And that's 116 acres.

MR. AJLOUNY: And that -- well, no, see that's only because they own that 116 acres. But as the map says, you have around, I'm going to guess around 300 and something acres. Right? And my point is from testimony I heard earlier today is that the emissions from the power plant --

PRESIDING MEMBER LAURIE: Your testimony is understood. The testimony and your argument is that the nitrogen produced by this project will impact lands outside of the control of the applicant --

MR. AJLOUNY: Yes.

PRESIDING MEMBER LAURIE: -- which your

argument is could have an effect on the butterfly.

CHAIRMAN KEESE: But you're not going to get any further than that on cross-examination here.

HEARING OFFICER FAY: And you may want to pursue it with the staff, too, as to how they address their ratio, similar to --

MR. AJLOUNY: I'm not worried about a ratio, I'm just worried about there's a third of the land protected by cows guaranteed, two thirds is not. And two thirds of the butterflies could be affected on that hill. That's the only point, and I just wanted to know is that what you're testifying today?

MS. CROWE: Currently there is no fence that separates the properties, and all of the cows will be going across the entire hill. Until those landowners decide to separate their properties, and at that point they'll have to go through the consultation with Fish and Wildlife Service for the butterfly.

MR. AJLOUNY: Yeah, and the point is a fence could be put up there at anytime.

MS. CROWE: Yes.

MR. AJLOUNY: Okay, so there's no

control, I guess once I get through this then I won't go back there.

PRESIDING MEMBER LAURIE: Sir, as far as the Committee is concerned, --

MR. AJLOUNY: I made my point?

PRESIDING MEMBER LAURIE: -- you're through with it. I understand.

MR. AJLOUNY: Well, --

MR. HARRIS: Five, six times.

PRESIDING MEMBER LAURIE: Mr. Harris, I don't think I asked for your input on the question. I'm telling you I understand your argument.

MR. AJLOUNY: Okay, thank you.

MR. HARRIS: Can we be off the record briefly?

HEARING OFFICER FAY: Let's go off the record.

(Off the record.)

HEARING OFFICER FAY: Anything further, Mr. Ajlouny?

MR. AJLOUNY: Yes. And I just -- oh, regarding the red-legged frog, what does the red-legged frog eat?

DR. JENNINGS: Anything smaller than it

does, and it moves, --

MR. AJLOUNY: Okay.

DR. JENNINGS: -- including --

MR. AJLOUNY: So could it eat the larvae from the butterfly? I'm just --

DR. JENNINGS: They would probably not be found in the same area. They're found in different habitats.

MR. AJLOUNY: So it won't be any impact on the butterfly?

DR. JENNINGS: Not by red-legged frogs. I want to state for the record red-legged frogs have not been found on the site, or on Tulare Hill.

MR. AJLOUNY: Okay, on the 100-foot setback, the way I understood earlier testimony, I think it's from Debbie -- that some of that 100-foot setback is going to be disturbed, and then replanted or re-set back, trying to get it back to its original state?

MS. CROWE: There will be temporary disturbance during the construction, and then during the planting of the riparian trees.

MR. AJLOUNY: Okay, and in your expertness in this whole area, when you have

trucks coming in and, you know, bulldozing, and you know, moving land around and all that kind of stuff, wouldn't that affect the -- what do you call those guys -- they hide under rocks -- salamanders and what is it -- tiger salamanders and things. Wouldn't it -- I mean my kids play in the backyard it like scares them off and they never come back. I don't have any salamanders in my back yard because my kids are little and finding them all.

Then they tend not to come back. Is that -- that's my experience. Is that your experience, if you're going to disturb the land and all the salamanders run for cover, would they come back to that area? I mean is that going to affect them, have some significant impact?

DR. JENNINGS: The only salamander that's at issue here for this Committee is the California tiger salamander. It has been not found during protocol surveys on site. Therefore, it's not at issue.

MR. AJLOUNY: So, the protocol survey, is that the one where you guys talk about a probe and check things?

DR. JENNINGS: Protocol surveys

conducted under regulations by the California Department of Fish and Game where we go out and visually survey under prescribed time periods to find salamanders if they're present or not.

MR. AJLOUNY: And that's where I was confused, because earlier I heard it was just a visual inspection. And then I heard there was more than a visual --

MS. CROWE: In addition to the protocol surveys that he's conducted, we're going to be doing burrow probes before ground disturbance.

MR. AJLOUNY: So knowing that salamanders, probably the tiger salamander, do they hide under rocks?

DR. JENNINGS: California tiger salamanders are found 95 percent of their life cycle in small mammal burrows.

MR. AJLOUNY: Does that mean little holes or something?

DR. JENNINGS: Yes.

MR. AJLOUNY: Okay.

DR. JENNINGS: Holes in the ground.

MR. AJLOUNY: Okay, so if you did a visual chances are you wouldn't see them anyways?

DR. JENNINGS: The protocols

specifically state that you have to be looking for them at the 5 percent chance in their life cycle when they're above ground. That's why you follow the protocols. Because if you don't follow the protocols you'd have a very hard time in finding these animals.

MR. AJLOUNY: Okay, so 5 percent of the time they're not hiding in the burrows?

DR. JENNINGS: That's correct.

MR. AJLOUNY: All right, and the survey was visual, didn't see any, so there won't be any -- you probably won't see any when you're going to move the ground?

MS. CROWE: Probably not.

MR. AJLOUNY: Okay. Is there any species that you're concerned about that are in that 100-foot setback that's going to disturb?

MS. CROWE: No.

MR. AJLOUNY: None. Are you familiar with the, and I want to -- what I remember is quoted in the noise section, loud whistles in the beginning of building the power plant to clear out some pipes or something. Are you --

HEARING OFFICER FAY: Is that the steam blow you're referring to?

MR. AJLOUNY: I think it's the steam blow, it's loud, about --

HEARING OFFICER FAY: During construction?

MR. AJLOUNY: Yes. Well, I think just before they -- there's a loud, like 120 db or something.

HEARING OFFICER FAY: I think he's referring to the steam blow.

MR. AJLOUNY: Steam blow. Are you familiar with that?

MS. CROWE: No.

MR. AJLOUNY: Okay. Is anyone familiar about that loud noise? I think -- no, okay.

Then I would say hypothetically if there's 120 db loud whistle for I think approximately an hour, would you think that would have any effect on any of the species that we've been talking about, or any concerns of any species?

MS. CROWE: Temporary disturbance, possibly, to nesting birds.

MR. AJLOUNY: And temporary means they'd leave their nests but come back?

MS. CROWE: Probably in the initial

start of that noise, but then they'd habituate to that.

MR. AJLOUNY: Meaning they'd get used to it?

MS. CROWE: Yes.

MR. AJLOUNY: Don't use big words with me. All right. I just, from your testimony I think I heard 75 to 90 db in movement is what's going to happen with the trucks. And I think anything over 80, or anything under 80 wouldn't disturb them. Well, I thought 120 might disturb them, to be a concern of yours.

MS. CROWE: Continuous noise of 80 decibels and above would start to have effects.

MR. AJLOUNY: And continuous means for all the time, or one hour's not considered continuous?

MS. CROWE: All the time.

MR. AJLOUNY: Okay. The recycling water line going over -- the recycling water line that I think you talked about, are you going to be going under Fisher Creek with that at all?

MS. CROWE: Right at this point it will probably go underneath. This is at the junction where Fisher Creek crosses underneath Santa Teresa

Boulevard. So, yes, it will have to.

MR. AJLOUNY: And do you see any impacts when you're doing the drilling there?

MS. CROWE: No.

MR. AJLOUNY: None at all?

MR. AJLOUNY: No, except for again the potential for drilling mud.

MR. AJLOUNY: How many feet would you drill underneath the creek?

MS. CROWE: I don't know the specifics for this particular drill, but normally the directional drill is to the size of gas pipeline, or waterlines is about 70 feet or so.

MR. AJLOUNY: Okay, and are these drills the type of drills that you have a bit and it turns and you use a lot of water to kind of mix up the dirt, and then it pumps out the dirt? Is that the kind of drilling that you know?

PRESIDING MEMBER LAURIE: Before you answer that question, staff, did we have a biological workshop? Did we get into these issues?

MR. RICHINS: Yes, we did. We have a number of biological workshops and we went through these issues and the issues that the City asked.

And the City was also present at the workshop.

PRESIDING MEMBER LAURIE: Well, if you -- I don't want to use this witness for discovery, for educational learning experience. So, from the testimony, from her direct examination you ask specific questions, stick to the specific questions. Yes, sir.

MR. AJLOUNY: Well, --

MR. SCHOLZ: Commissioner Laurie, the biological workshop for this project was before the route change.

PRESIDING MEMBER LAURIE: Okay.

MR. SCHOLZ: September '99 was the biological.

MR. RICHINS: We had PSA workshops that occurred after we published the PSA.

HEARING OFFICER FAY: Also the witnesses or some people on the panel have testified to the potential for the mud to have an influence. So, they've obviously addressed the drilling impacts.

Now, you're getting into details of how the drilling is done. I think they've already covered that subject.

MR. AJLOUNY: Well, I'm just getting to details for a reason, because of my brief, in the

recent acquaintances with people that do the drilling and what they had to tell me.

So I'm trying to get things specifically said so you guys remember, and it's all going to be in transcripts, and then when I do my brief, I capture that and then I bring out some other issues. That's --

HEARING OFFICER FAY: Okay, let's --

MR. AJLOUNY: You see, I don't have the money for testimony and witnesses and I feel at a disadvantage.

HEARING OFFICER FAY: Let's get right to it.

MR. AJLOUNY: So that's the best way I can do it financially.

HEARING OFFICER FAY: See if they know.

MR. AJLOUNY: Okay. So, back to the question of the drilling, the 70 feet under. Is it the type of drilling that you have some bits and it just goes in a circle, and it has like a robot drilling and it puts a lot of water in, and you're sucking out the dirt at that time and putting it in a pile somewhere? Is that --

MS. CROWE: I don't know what type of drill they're going to use at that particular

location.

MR. AJLOUNY: So how would you come to the conclusion that it wouldn't have any impact on the -- on any species?

MS. CROWE: There are no special status species in Fisher Creek at that point. And then we have a contingency plan that we developed for drills where if there was a release of the drilling mud into the creek we stop drilling immediately and contain it. And then pump that mud out.

MR. AJLOUNY: Okay, so your testimony is at that location of the creek there's no species that you're concerned about?

MS. CROWE: Not that I'm aware of, no.

MR. AJLOUNY: All right. Just one moment, please, and I think I'm done.

(Pause.)

MR. AJLOUNY: That concludes my cross-examination, thank you.

HEARING OFFICER FAY: Thank you. Is there a representative from CARE present? All right, would you like to go ahead and cross-examine.

MR. BOYD: Mike Boyd, CARE.

CROSS-EXAMINATION

BY MR. BOYD:

Q My first question is first have any of you had a opportunity to review Dr. Smallwood's comments on the final staff assessment, the preliminary staff assessment and the mitigation and monitoring plan?

MS. CROWE: Yes.

MR. BOYD: So you have knowledge of the issues that he has raised. Have any of those issues in any that he's raised in his written comments in any way changed your position?

MS. CROWE: No.

MR. BOYD: What's your position on the -- I want to know what your position is on whether or not there is sufficient information at this time in the absence of a biological opinion to close the record following this hearing on biological resources?

MS. CROWE: Can you ask that again?

MR. BOYD: I'm asking if following the completion of this hearing today on biological resources, if you believe there is sufficient evidence in the record in the absence of the biological opinion from U.S. Fish and Wildlife

Service to close the record?

MS. CROWE: Yes, but I have not seen the biological opinion. If there are changes from what we expect, then can't answer that.

MR. BOYD: So, and how about the mitigation and monitoring plan? Will that also be affected by the -- possibly be affected by the biological opinion?

MS. CROWE: Yes, because the mitigation plan incorporates all of the conditions of the biological opinion, as well as all the other permits from Fish and Game --

MR. BOYD: So would you agree that in the absence of that biological opinion that mitigation and monitoring plan would not be yet complete?

MS. CROWE: That's right, it's a preliminary draft right now, yes.

MR. BOYD: Okay. Yet you just said that you thought there's sufficient information in the record to close it following this hearing?

PRESIDING MEMBER LAURIE: That's based on the information she has. We know that if the biological opinion comes in different than what's anticipated, a bunch of folks' opinions in the

proposed modification measures would change. That's a given. And that's everybody's testimony, and that's understood.

HEARING OFFICER FAY: We went over that at the beginning of the hearing, that if the requirements are more stringent in the biological opinion then they will control. And the monitoring plan will be modified.

MR. BOYD: Well, my concern is with the meaningfulness of CARE's participation and other members of the public's participation on having an evidentiary hearing when we don't have all the information in the record.

PRESIDING MEMBER LAURIE: Make your objection for the record, and --

MR. BOYD: And I --

PRESIDING MEMBER LAURIE: Mr. Ajlouny already --

MR. BOYD: -- know that Dr. Smallwood has also written to you about this very issue and raised it as an issue of piecemeal --

PRESIDING MEMBER LAURIE: Your objection is noted.

MR. BOYD: Okay. And also Dr. Smallwood asked if we could have a continuance or keep the

record open until such time as the biological opinion has been released and the public has had an opportunity to review it and comment --

PRESIDING MEMBER LAURIE: Well, that --

MR. BOYD: -- is the position of the --

PRESIDING MEMBER LAURIE: You can make --

MR. BOYD: -- on that.

PRESIDING MEMBER LAURIE: That's not appropriate for this witness. You can make the request to the Committee. And you have now made the request.

MR. BOYD: Okay. Basically the only other question I had is about the mitigation. Is the 15 acres that's proposed as mitigation located in the impact zone for nitrogen deposition?

MS. CROWE: Yes.

MR. BOYD: So on what basis can you say that that mitigation is adequate if it could also potentially be, that site, itself, could actually also be potentially adversely impacted by the project? How can you say that's sufficient if it's in the impact zone?

MS. CROWE: I'm not sure I understand.

PRESIDING MEMBER LAURIE: She doesn't

understand your question --

MR. BOYD: Okay, the 15 acres, I asked you, is in the impact zone of the nitrogen deposition, correct?

MS. CROWE: Yes.

MR. BOYD: And you said yes. And then I asked you earlier in your earlier testimony before other intervenors, you were asked if you felt that that mitigation, as proposed, was sufficient for the impact.

MS. CROWE: And that's not my decision. It would be up to the Fish and Wildlife Service --

MR. BOYD: And you deferred that to the Fish and Wildlife Service. Then what is your -- if you don't have a position until the Fish and Wildlife Service takes a position, which will come out in their biological opinion, how can you say that's sufficient?

MS. CROWE: Because I defer to the experts.

HEARING OFFICER FAY: Dr. Weiss, can you shed any light on that?

DR. WEISS: I'm not really sure what the question is.

MR. BOYD: The question is about --

HEARING OFFICER FAY: I think he's wondering why can you have a mitigation area if it's within the impact zone. Is that your question?

MR. BOYD: That's my question.

HEARING OFFICER FAY: Right.

MS. CROWE: It's not just preservation of the habitat, too, it's also having a management plan using cattle to manage it.

MR. BOYD: Okay. Now, in your opinion I heard discussion mainly about the Checkerspot butterfly. You said you've read Dr. Smallwood's written information, and are you also aware that Dr. Smallwood did reconnaissance, two reconnaissance visits to the site, itself?

MS. CROWE: Yes.

MR. BOYD: And also did a survey?

MS. CROWE: Yes.

MR. BOYD: Including probing in ground squirrel burrows?

MS. CROWE: No. I'm not familiar with his results.

MR. BOYD: Okay, and are you aware that there was a disagreement between the applicant's opinion and Dr. Smallwood on the population of

those gopher holes, those ground squirrel holes on Tulare Hill and such?

MS. CROWE: Yes.

MR. BOYD: And if Dr. Smallwood hypothetically is correct, would that change your opinion on the likelihood of habitat for the red-legged frog and the tiger salamander?

MS. CROWE: No.

MR. BOYD: Even with more gopher holes?

MS. CROWE: Yes.

MR. BOYD: And do you base that opinion on actual information that you've gained through probing those holes? Or I heard, I thought I heard you say something earlier about you would only do that before construction, is that correct?

MS. CROWE: It's based on Dr. Jennings' protocol surveys.

DR. JENNINGS: The surveys are done to protocol. Probing is not protocol approved.

MR. BOYD: So you're saying that you don't believe that it's habitat for the red-legged frog, yet you haven't done the necessary reconnaissance to prove that, is that true?

DR. JENNINGS: I'm the expert for the red-legged frog and California tiger salamander.

Done the work by protocol on site. I've also done work in the area off site. All records that are positive for California red-legged frogs have been deposited with the Department of Fish and Game and the U.S. Fish and Wildlife Service with a natural diversity database forms.

If you want to find out where they're positive records of animals in those areas, it's public record, you can look them up. But as far as onsite, there are no records of these animals.

MR. BOYD: My understanding is different, and Dr. Smallwood actually worked for U.S. Fish and Wildlife Service and did surveys --

HEARING OFFICER FAY: We're getting --

PRESIDING MEMBER LAURIE: This is not the time for an argument, sir --

MR. BOYD: No, I'm not arguing --

PRESIDING MEMBER LAURIE: -- if you have a question --

MR. BOYD: -- I'm just saying I disagree with your opinion. And I invite you to look at it, Dr. --

HEARING OFFICER FAY: And, Mr. Boyd, now you're testifying.

MR. BOYD: Okay, --

HEARING OFFICER FAY: This is not the time to testify.

MR. BOYD: My other question has to do, a majority of the site is under Santa Clara County jurisdiction, where the riparian setback is 150 feet.

Why isn't there 150-foot criteria for this riparian corridor?

MS. CROWE: Again, this is the County coordinates for riparian corridor setbacks is 150 feet from natural streams. This portion of Fisher Creek is not natural, it's been modified heavily.

MR. BOYD: Is it in the County?

MS. CROWE: Yes, it is.

MR. BOYD: Is it still considered a riparian stream?

MS. CROWE: It is a stream that's been modified, yes.

MR. BOYD: So it's your opinion that the 150-foot setback does not apply?

MS. CROWE: That's right.

MR. BOYD: Okay. My other question is do any of you have any experience with U.S. Fish and Wildlife Service's biological opinion in any other projects that you may have worked on?

MS. CROWE: Yes.

MR. BOYD: And in your experience is it common for -- have you experienced -- was it with like an Energy Commission siting or was it more like a normal EIR process?

MS. CROWE: Both.

MR. BOYD: Both. And is it your experience that it's normal for a biological opinion to take so long to be released?

(Laughter.)

MS. CROWE: Well, it's common that it goes over the regulation timeframe, yes.

MR. BOYD: Okay. Now, the other thing that I'm curious about, initially there was a discussion of a habitat conservation plan in the initial stages of this project.

Has that been abandoned by the applicant?

MS. CROWE: Which habitat conservation plan are you referring to?

MR. BOYD: Initially there was discussion of the development of a habitat conservation plan that would include this project, in the early stages. And it just disappeared, it just fell off the map. And I was just curious if

that --

MS. CROWE: Yes, it's --

MR. BOYD: -- was still a possibility here?

MS. CROWE: No.

MR. BOYD: And are any of you have any knowledge of the Nopomas (sic) Basin case against the U.S. Fish and Wildlife Service for the habitat conservation plan up there?

MS. CROWE: Can you repeat that? I didn't hear.

MR. BOYD: The question is are any of you have any knowledge about the case that the U.S. Fish and Wildlife Service recently loss regarding the Nopomas Basin habitat conservation plan?

MS. CROWE: The Natomas Basin?

MR. BOYD: Yeah.

HEARING OFFICER FAY: I'm not sure what the relevance is to what we're doing here.

MR. BOYD: Well, basically the relevance, my understanding, if they understand that, then the next question is what I would have asked is if they believe that had any impact on the delay in the issuance of the biological

opinion.

MS. CROWE: I do not know.

HEARING OFFICER FAY: But that's the Natomas case; it's a different environment --

MR. BOYD: Well, I'm just trying to figure out why it's taking so long.

HEARING OFFICER FAY: Well, I think we can state for the record that at the Energy Commission we have had experience with the U.S. Fish and Wildlife Service not meeting deadlines.

Anything further, Mr. Boyd?

MR. BOYD: No, I think that's it. And I'd just --

HEARING OFFICER FAY: Okay, thank you.

MR. BOYD: -- finish by requesting once again that you keep the record open on biological until all the information is in.

PRESIDING MEMBER LAURIE: Thank you, sir.

HEARING OFFICER FAY: Thank you. Mr. Williams. Mr. Williams is --

MR. SCHOLZ: Mr. Williams could not make it today. He's on a consulting trip.

HEARING OFFICER FAY: Okay, and you're Mr. Scholz?

MR. SCHOLZ: Yes.

HEARING OFFICER FAY: And according to what came out of the prehearing conference, you were not scheduled to cross-examine. Did you notify the Committee that you intended to cross-examine on this?

MR. SCHOLZ: My understanding that there's a limited number of questions that all intervenors can ask.

PRESIDING MEMBER LAURIE: And that's correct, we provided flexibility to the point of some degree of flexibility.

HEARING OFFICER FAY: Okay.

(Laughter.)

HEARING OFFICER FAY: All right.

PRESIDING MEMBER LAURIE: Mr. Scholz has been very good about --

HEARING OFFICER FAY: We will indulge Mr. Scholz.

MR. SCHOLZ: Thank you, Mr. Fay. I didn't want to ask for privilege. Thank you for affording this opportunity.

CROSS-EXAMINATION

BY MR. SCHOLZ:

Q Dr. Weiss, you've been studying the

Checkerspot butterfly since 1979. When did you become aware of the proposed Metcalf Energy Center?

DR. WEISS: In the summer and fall of 1999.

MR. SCHOLZ: Who notified you of the proposed Metcalf Energy Center?

DR. WEISS: I first heard about it through the grapevine, because I try to keep on top of Coyote Valley issues. And then I was contacted by -- I received hearing notices and I was contacted by CH2MHILL by Debra Crowe.

MR. SCHOLZ: Do you have any recollection of being contacted by the community much earlier than that?

PRESIDING MEMBER LAURIE: Why is any of that relevant, Mr. Scholz? This witness is a consultant of the applicant. Why is it relevant as to how he learned about the project or who he talked to?

MR. SCHOLZ: I want to know when he became a consultant to the applicant.

PRESIDING MEMBER LAURIE: Why?

MR. SCHOLZ: Why?

PRESIDING MEMBER LAURIE: Um-hum.

MR. SCHOLZ: Because he had severe concerns about this project in September of '99. And I want to know was he a consultant then, or did he become a consultant after those concerns?

PRESIDING MEMBER LAURIE: Ask him.

MR. SCHOLZ: Okay, thank you. In September of 1999 when you came to the biological workshop were you a consultant to the applicant?

DR. WEISS: No, I wasn't.

MR. SCHOLZ: Do you recall a number of concerns you had with this project in September of 1999?

DR. WEISS: Yes, I recall I voiced a large number of concerns with the impact analysis.

MR. SCHOLZ: You were subsequently hired by the consultant -- or as a consultant how much longer after your September '99 --

DR. WEISS: I started working for CH2MHILL as a subcontractor in February of 2000.

MR. SCHOLZ: What has changed in the project, if you can, that somehow makes a lot of your concerns go away since September of 1999?

DR. WEISS: A lot of my concerns were incorporated into the deposition modelings, we came up with a worst case scenario. And I think

that was, and Calpine/Bechtel addressed the issues and came up with a mitigation plan.

MR. SCHOLZ: One of the things you felt was very important in September of 1999 was that there should be one year's worth of data collected at the site. And you were hired in February of 2000. So that's roughly a year now. Did you ask the applicant to do one year's worth of site data? Did you collect any measurements of the ambient deposition?

MR. HARRIS: Can you clarify what kind of data you're talking about, Scott? Because I was at those meetings --

MR. SCHOLZ: Right, I was at those meetings, as well. He said one year of field data should be done if this project is to be constructed. He proposed getting information prior to construction and then additional monitoring once construction began. And he suggested ways to collect that data on the site, too.

DR. WEISS: I believe those are going to be implemented in the mitigation plan. Construction is going to take place over an 18-month to two-year period.

MR. SCHOLZ: So right now you're doing your estimations for the background ambient on, you know, using estimates. At the time in September '99 you wanted to know what that data was before you would start figuring out how to mitigate this.

DR. WEISS: We're using the best available scientific information at this point.

MR. SCHOLZ: How important are the Santa Teresa Hills to the west of the site to the Bay Checkerspot butterfly?

DR. WEISS: Potentially they're very important, but the grazing management in the County park is no grazing, and the habitat is deteriorating.

MR. SCHOLZ: Can the Bay Checkerspot butterfly get from the Coyote Ridge to the Santa Teresa Hills without -- can they get there directly from the Coyote Ridge to the Santa Teresa Hills?

DR. WEISS: Well, I mean they have to fly over something, but, yes. It's a very low likelihood of long distance dispersal in this butterfly.

MR. SCHOLZ: Was Tulare Hill the

important stopping point from Coyote Ridge to the Santa Teresa Hills?

DR. WEISS: Tulare Hill is recognized as an important dispersal corridor by the Fish and Wildlife Service in their critical habitat proposal.

MR. SCHOLZ: I'm just trying to understand, is there another stopping point from the Coyote Ridge to the Santa Teresa Hills other than Tulare Hill for the Bay Checkerspot butterfly?

DR. WEISS: No, I believe it's the only substantial serpentine outcrop between Coyote Ridge and the Santa Teresa Hills.

MR. SCHOLZ: Is it your goal to confine the Bay Checkerspot butterfly just to the Coyote Ridge area?

MS. CROWE: No, --

MR. SCHOLZ: Or would you like to --

DR. WEISS: No, it's not. I would like to see the habitat in the Santa Teresa Hills restored, and I would like to see the habitat on Tulare Hill managed so as to improve the quality of it for the butterfly.

MR. SCHOLZ: If you had a choice for the

sake of the Bay Checkerspot butterfly would you prefer the proposed Metcalf Energy Center were not located so close to Tulare Hill?

DR. WEISS: With the mitigation measures in hand, I don't have a preference for a site further away from Tulare Hill.

MR. SCHOLZ: Thank you.

HEARING OFFICER FAY: Thank you, Mr. Scholz.

We're ready to move into staff direct. Are you ready, Ms. Willis?

PRESIDING MEMBER LAURIE: Do you want to take a break?

MR. HARRIS: Is it redirect now?

HEARING OFFICER FAY: Oh, sorry.

MR. HARRIS: I have a brief redirect.

HEARING OFFICER FAY: All right, go ahead.

MR. HARRIS: One series of questions.

HEARING OFFICER FAY: Sure.

REDIRECT EXAMINATION

BY MR. HARRIS:

Q For Dr. Weiss, I want to talk about cumulative impacts, actually cumulative impacts questions. Are the nitrogen depositions from the

CVRP Cisco project comparable to those of the Metcalf project?

DR. WEISS: In the environmental impact report for CVRP they mentioned a figure of 212 tons of NOx being produced, primarily from traffic.

MR. HARRIS: So they're roughly comparable, or is the Cisco project slightly higher?

DR. WEISS: They're roughly comparable, but I think Cisco is a little bit higher.

MR. HARRIS: To your knowledge has the City required Cisco to mitigate for their contribution to the nitrogen deposition in the Coyote Valley?

DR. WEISS: Quite the contrary. They've been in complete denial that it's even an issue, and hired a consultant to critique my paper, which I had to address.

MR. HARRIS: So the City's mitigation, we had some discussion about whether our mitigation for the Metcalf project was adequate, is it your understanding the City's mitigation is basically zero?

DR. WEISS: Zero or perhaps even worse

than zero by denying that there's even an issue.

MR. HARRIS: So in your opinion should the City be requiring the Cisco CVRP project to mitigate for their contribution to nitrogen deposition?

MS. DENT: I'm going to object to the question on the grounds of relevance. It relates to an entirely different project.

MR. HARRIS: There's a cumulative impacts analysis which is completely relevant to the project.

MS. DENT: You've asked specifically about mitigation for the Cisco project, which is not before the Commission. I'll restate the objection.

HEARING OFFICER FAY: I understand it is before the Commission in terms of cumulative impacts. Is that not right --

MS. DENT: He asked whether the City -- you can restate your question. You asked whether the City should require mitigation for the Cisco project and --

MR. HARRIS: I think my question was fine.

MS. DENT: -- I don't think that's

before the Commission at all.

HEARING OFFICER FAY: Well, Mr. Harris, perhaps you want to rephrase it in terms of not so much what the City should do, but in terms of impacts.

MR. HARRIS: From your perspective as a biologist, would it be biologically beneficial if the City were to require Cisco to mitigate for their contribution to the nitrogen deposition?

MS. DENT: I'm going to object again on the grounds of relevance. That doesn't --

HEARING OFFICER FAY: Okay, --

MS. DENT: -- have anything to do --

HEARING OFFICER FAY: -- that --

MS. DENT: -- with the Metcalf Energy Center project.

HEARING OFFICER FAY: -- objection is overruled. Go ahead and answer the question.

DR. WEISS: Could you just say the question one more time?

MR. HARRIS: I'm not sure I can.

(Laughter.)

MR. HARRIS: If Mollie will leave, I'll try.

From a biological perspective would it

be biologically beneficial if the City had required a cumulative impacts analysis, if the City had required Cisco to mitigate for their contribution to nitrogen deposition?

DR. WEISS: Yes.

MR. HARRIS: A short answer, but thank you. That's all I have.

HEARING OFFICER FAY: That's all you have, okay. Any recross on that narrow question? Go ahead.

MS. DENT: Oh, I'm going to go for it.

HEARING OFFICER FAY: Within the scope of the --

MS. DENT: Within the scope.

HEARING OFFICER FAY: -- redirect.

RECROSS-EXAMINATION

BY MS. DENT:

Q Now, there is a difference between direct and indirect impacts in terms of mitigation, is there not? From a biological mitigation standpoint, the impacts of the Metcalf Energy Center are direct. The nitrogen oxide emissions are going to come from the construction of the project, is that correct?

DR. WEISS: From the operation of --

MS. DENT: From the operation of the facility. The impacts such as they may be from traffic are indirect impacts, not direct impacts from the project. You're not indicating that CVRP is going to have some facility that is going to be a stationary source of air emissions that is anywhere near Metcalf Energy Center, are you?

DR. WEISS: No.

DR. JENNINGS: Excuse me, you will actually have emissions from automobiles contributing directly to nitrogen formation.

MS. DENT: Of course you will, but --

DR. JENNINGS: It's just --

MS. DENT: -- they're not from the facility.

DR. JENNINGS: They're a direct result of the facility.

MS. DENT: It's not a stationary source like Metcalf Energy Center.

DR. JENNINGS: It's a mobile source which contributes a large amount of NOx to the airshed, and contributes a large amount of NOx, especially from the parking lot activities to the local area.

MS. DENT: Now, you indicated -- you've

talked about the CVRP project, but you are aware that the City has required serpentine mitigation for other projects with direct impact on serpentine habitat, aren't you? Specifically the Silver Creek Ranches or Sierra project that you talked about earlier.

DR. WEISS: Actually I believe it's the Fish and Wildlife Service that put the mitigation requirements in --

MS. DENT: Well, similar to this project it was through a biological opinion, correct?

DR. WEISS: Correct, it was the --

MS. DENT: Thank you.

DR. WEISS: -- biological opinion.

HEARING OFFICER FAY: Is that all?

MS. DENT: That's all.

HEARING OFFICER FAY: Okay. Any further recross on this narrow topic?

MR. AJLOUNY: Yes, I do.

HEARING OFFICER FAY: Okay, within the scope of --

MR. AJLOUNY: That's right, and just in regard to Cisco, now that you brought it up.

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RECROSS-EXAMINATION

BY MR. AJLOUNY:

Q If Cisco wasn't built would it change your testimony at all in the cumulative impacts?

DR. WEISS: If Cisco weren't built --

MR. AJLOUNY: Yes.

DR. WEISS: I'm not sure I understand the question. If Cisco weren't built we would take CVRP out of the cumulative impact study.

MR. AJLOUNY: Okay, that's what I felt. And are you aware that there's a great chance that Cisco might not --

PRESIDING MEMBER LAURIE: No, that's speculative.

MR. AJLOUNY: No, that's not speculative.

PRESIDING MEMBER LAURIE: Yes, it is speculative.

HEARING OFFICER FAY: Don't argue with the Committee.

PRESIDING MEMBER LAURIE: I won't allow the question. The evidence is that the project is an approved project. Whether or not it's going to be built there's no evidence in front, and we're not going to allow any.

MR. AJLOUNY: The cars going up and down Santa Teresa, Monterey Highway daily that are there today, the traffic that's there, being held up on Fridays. I don't know if you've done some studies. Isn't that doing the NOx emissions anyways?

DR. WEISS: Yeah, that's why there's such high background levels --

MR. AJLOUNY: Okay, so --

DR. WEISS: -- down in the South Bay.

MR. AJLOUNY: -- so is it going to increase that much more by having the corporation, not just Cisco, but other corporations?

DR. JENNINGS: You'll be concentrating other mobile sources in the area.

DR. WEISS: Right, we're talking 20,000 cars coming to Cisco.

MR. AJLOUNY: Yeah, but we understand that's not going to happen overnight, is that true?

DR. WEISS: Well, we're looking at what the ultimate impact of projects will be.

MR. AJLOUNY: And when do you estimate that ultimate impact to be? One year, ten years, 20 years?

DR. WEISS: That's not -- I can't answer that question --

MR. AJLOUNY: Well, don't you --

DR. WEISS: -- at this point --

MR. AJLOUNY: -- take into consideration when you do your cumulative impact?

DR. WEISS: That was a full build-out.

DR. JENNINGS: Yeah, we take whatever was presented in the EIS or EIR, excuse me, and use that in the cumulative analysis. I do not recall what the exact build-out date was.

But, as a standard practice of a cumulative analysis you look at the worst possible impacts from full build-out and full operation, what-have-you.

MR. AJLOUNY: Okay. Thank you.

HEARING OFFICER FAY: Any other recross? All right. Mr. Harris, anything further?

MR. HARRIS: I'd just like to move my documents into evidence.

HEARING OFFICER FAY: Okay. I think I want to move in, if we could, I'll go through all of them. Exhibit 98, which is a new item. Exhibit 99, which is also a new item. Exhibit 40, which is the PSA comments. Exhibit 100 and

exhibit 101. Exhibit 102.

Exhibit 51. Exhibit 52A. Exhibit 52B. Exhibit 103. And exhibit 80. And exhibit 18. And I will wait on exhibit 95, as we still have our visual testimony.

But those are the ones I'd like to move into evidence at this time.

HEARING OFFICER FAY: Could you just, starting with exhibit 40 and continuing, I lost you there.

MR. HARRIS: Okay, let me find exhibit 40. Okay, exhibit 40 you have. Moving down the list the next one would be exhibit 100, the biological assessment. Then the preliminary biological resources, would be our mitigation and implementation and monitoring plan is 101.

And then the items below as well, exhibit 102, exhibit 51, exhibit 52A, exhibit 52B, exhibit 103, exhibit 80, and exhibit 18.

HEARING OFFICER FAY: All right, is there objection? Okay, hearing none, so moved. Those are received into evidence at this point.

All right, and that concludes your direct testimony on biology?

MR. HARRIS: Yes, it does.

HEARING OFFICER FAY: Okay, then we want to take a ten-minute break and we'll return at 5:30 and begin with the staff's presentation on biological resources.

(Brief recess.)

MS. WILLIS: Staff calls Linda Spiegel and Cecilia Brown and they'll need to be sworn in.

HEARING OFFICER FAY: Please swear the witnesses.

Whereupon,

LINDA SPIEGEL and CECILIA BROWN

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

DIRECT EXAMINATION

BY MS. WILLIS:

Q Ms. Spiegel, could you please state your name for the record.

MS. SPIEGEL: Linda Spiegel.

MS. WILLIS: And spell your last name.

MS. SPIEGEL: S-p-i-e-g-e-l.

MS. WILLIS: Was a statement of your qualifications attached to your testimony in biological resources?

MS. SPIEGEL: Yes.

MS. WILLIS: Could you briefly state your education and experience as it pertains to biological resources?

MS. SPIEGEL: I have two BAs that I received, one in biology and one in chemistry science in 1982. I've been working as a biologist for 20 years on a variety of projects, and have experience on a variety of species and habitat types throughout the state.

And I've prepared numerous biological assessments including I think six or so FSAs for the Energy Commission. And I've helped prepare another several FSAs for the Commission.

MS. WILLIS: Did you prepare the testimony entitled biological resources in the final staff assessment that's been previously marked as part of exhibit 7?

MS. SPIEGEL: Yes.

MS. WILLIS: And do you have any changes to your written testimony that you're proposing today?

MS. SPIEGEL: No.

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

MS. SPIEGEL: Yes.

MS. WILLIS: For brevity's sake I think that we will, instead of asking her some specific questions, I'll just ask if she agrees with what the previous witnesses have testified, if that's okay with the Committee.

First, does the proposed MEC project comply with all applicable LORS for biology?

MS. SPIEGEL: There are some outstanding permits that need to be obtained, but they are all covered under various conditions in either my land use or water resources.

MS. WILLIS: And other than that, does the project comply with all local ordinances and regulations and standards?

MS. SPIEGEL: They don't strictly adhere to two City guidelines, the noise and the 100-foot setback.

MS. WILLIS: And can you explain?

MS. SPIEGEL: In the 100-foot setback the City has requested that no construction occur. This is not in the riparian corridor, itself, it's the setback from -- the 100-foot setback from the riparian corridor. And the applicant is proposing to use a 75-acre area for construction for

laydown, for temporary disturbance.

And from a biological perspective there isn't an impacts associated with that because the area's already very compacted and there's no vegetation there.

MS. WILLIS: In your professional opinion, does the project pose any significant adverse impacts to the environment?

MS. SPIEGEL: Yes. I determined that the project's emissions of NOx will result in significant indirect and cumulative impacts to serpentine soils.

MS. WILLIS: And did you previously hear the testimony of Dr. Weiss?

MS. SPIEGEL: Yes.

MS. WILLIS: And do you agree with his testimony regarding indirect and cumulative impacts of NOx?

MS. SPIEGEL: Yes.

MS. WILLIS: Is staff proposing any mitigation for NOx?

MS. SPIEGEL: Yes. The mitigation entails the purchase and long-term protection and monitoring of 116 acres on Tulare Hill, and 15 acres on Coyote Ridge.

And in addition, will be developing a long-term management plan. And the management, itself, will be funded in perpetuity. The management plan will be written in a manner that insures the protection and enhancement for the Bay Checkerspot butterfly and its host species. It involves a cattle grazing regime that you heard of.

Both Tulare Hill and Coyote Ridge were proposed as critical habitat recently for the Bay Checkerspot butterfly, and therefore we feel that these mitigation measures will actually contribute to recovery efforts.

And the mitigation ratios, just to go ahead and deal with that right here, is that the ratio is three-to-one for Coyote Ridge, because Coyote Ridge is considered a core population. Tulare Hill is considered -- was mitigated at .5-to-one because it's marginal habitat where, in other words, the health of Coyote -- the butterflies on Tulare Hill are dependent on the health of the butterflies on Coyote Ridge.

What we came up with was an acreage that totaled, I believe, it was 131 acres. And we requested that at least 10 of those acres be

purchased on Coyote Ridge. And how the rest came out, whether it's 116 on Tulare Hill or not, had more to do with as long as it was appropriate habitat we were happy. As long as we had at least ten acres of the core.

So that's the mitigation proposed.

MS. WILLIS: Is staff proposing any other mitigation?

MS. SPIEGEL: Yeah, there's an awful lot of mitigation measures actually, but mainly the project was designed to really reduce most impacts other than the NOx impacts, which even that they greatly reduced their NOx emissions to reduce that impact.

But for the riparian area right now, they are going to be taking 80 trees, and to mitigate for that they're going to plant 320 trees and increase the riparian corridor by, almost double it, really, by four and a half acres.

So they'll have to plant those, and then they'll have to monitor the success of that for several years.

MS. WILLIS: During the workshops and throughout this evidentiary hearings concerns have been raised about the possible effects from the

noise levels from this project.

Could you briefly explain the noise levels and their effect on the riparian corridor?

MS. SPIEGEL: As mentioned earlier, it's estimated that average is going to be about 60 decibels. And all the literature I've looked at there is nothing to indicate that that will have any significant impact on the birds or the mammals in the area.

Construction noise will be high, and higher than levels known to disrupt wildlife, but those will be temporary in nature, and they won't be as high, or they'll be very equivalent to, the same noise peaks when the train goes by.

So, again, right now there is -- the construction would be considered temporary. Right now the area is not used widely by wildlife at all. It's very low use. So the impact is not considered significant. During operation it is not considered significant.

MS. WILLIS: Concern was also raised about the effect on biological resources from the lighting. Could you please tell us what you analyzed and what you concluded.

MS. SPIEGEL: The project will use low

pressure sodium illumination in accordance with a City ordinance. Lights will be shielded and aimed upwards and away from the corridor.

And further, the visual resources has a condition that requires all lights be shielded and prohibits light from being visible from the riparian corridor, therefore there's no impacts to the riparian corridor from lighting.

MS. WILLIS: A concern was raised by CARE about avian collision with the proposed 240-foot transmission line. Did you determine that this transmission line would cause a significant impact to birds in the area?

MS. SPIEGEL: No. And there was also a concern raised by CARE about the steam stack, the 145-foot steam stack. And there's no evidence whatsoever that either of these pose a significant risk to bird collisions.

The nocturnal migrating birds usually fly 2000 feet above the ground, except during inclement weather. Then they will fly lower. But even with that, the majority of collisions have been documented at heights of 500. And there's very little records of collisions at anything less than 200.

The greatest collision risk may occur where the transmission line, itself, spans Fisher Creek, which is about 20 feet in length. That is anticipated to be very low. There may be some collision. And with that there may be some fatality from that collision. But none of it is expected to be significant.

MS. WILLIS: Finally, did you review the County of Santa Clara's LORS in regards to riparian setbacks?

MS. SPIEGEL: Yes.

MS. WILLIS: And do they apply to Fisher Creek?

MS. SPIEGEL: No. They apply to Coyote Creek.

MS. WILLIS: And can you explain why?

MS. SPIEGEL: Because it's not Santa Clara parkland.

MS. WILLIS: Fisher Creek is not Santa Clara parkland?

MS. SPIEGEL: Yes.

MS. WILLIS: Okay, thank you. I'd like to turn to Ms. Brown. Could you please state your name for the record.

MS. BROWN: Cecilia Brown, C-e-c-i-l-i-a

B-r-o-w-n.

MS. WILLIS: And could you please state the agency you are representing and your job title?

MS. BROWN: Yes, I'm a fish and wildlife biologist with the U.S. Fish and Wildlife Service.

MS. WILLIS: Are you familiar with the biological opinion in this case?

MS. BROWN: Yes, I am.

MS. WILLIS: And can you tell us what the status of its release is?

MS. BROWN: I have submitted a draft biological opinion to my management for review. They will be reviewing it in an expedited fashion due to the present power crisis. And I expect that it will be released probably within the next ten days.

MS. WILLIS: In your opinion is staff's testimony and conditions of certification that are being proposed consistent with the biological opinion?

MS. BROWN: Yes, it is.

MS. WILLIS: And does the compensation package proposed to mitigate the impact of NOx provide sufficient protection to serpentine

species from these impacts?

MS. BROWN: Yes.

MS. WILLIS: I'd like to, at this time, move our section on biological resources in the FSA into the record.

HEARING OFFICER FAY: Is there any objection?

MS. DENT: I have no objection to the prepared testimony and to the testimony of the CEC witness. I'll state my objection again to the testimony of the U.S. Fish and Wildlife Service witness for the record, because it was not previously distributed or introduced.

HEARING OFFICER FAY: Okay, your objection is note. And we will receive the staff testimony at this point into the record.

MS. WILLIS: Thank you. These witnesses are available for cross-examination.

HEARING OFFICER FAY: All right. Mr. Harris?

MR. HARRIS: I'd like to thank the witnesses for being available for cross-examination. I have no questions.

HEARING OFFICER FAY: Okay. City of San Jose.

MS. DENT: Thank you. I have a few.

CROSS-EXAMINATION

BY MS. DENT:

Q Starting first with the CEC witness, I'm going directly to the issue of the mitigation acreage for the serpentine habitat.

Dr. Weiss testified earlier that the formula and the methodology for determining the amount of habitat and the mitigation requirements for the project were the CEC's. In fact, he deferred to you on that subject.

In fact, that methodology and the formula were not yours, they were the applicant's, isn't that correct?

MS. SPIEGEL: It depends what you're referring to. There was a formula that the applicant proposed that I changed. And that's in my testimony. And then the compensation ratios were developed by Fish and Wildlife Service and myself.

MS. DENT: So, referring to your testimony, specifically to page 491 of your testimony, you indicate in the middle of the page that Calpine/Bechtel proposed the following mitigation package. And that was to acquire and

manage cattle grazing on 116 acres and 15 acres.

So is that your testimony that that was their proposal? They proposed that mitigation package? Or is that an inaccurate statement?

MS. SPIEGEL: I need to find out exactly where you are, but I --

MS. DENT: I'm sorry, you're right. We're going to have the same problem with the pages. Your page is probably going to be like 493.

MS. SPIEGEL: Okay, see, it says as a result of this conclusion. You're not reading the whole thing. And above it it talks about we had a workshop.

MS. DENT: Correct.

MS. SPIEGEL: So they proposed a mitigation package to me at this workshop. And then we tweaked with the -- they actually provided a formula, and that's in their NOx filings.

And then I didn't completely agree with it, because they used a weighted average and I wanted a direct deposition, so I changed it to reflect what I felt was a better way to do it, and with Fish and Wildlife in consultation.

They also proposed originally just

Tulare Hill. And we wanted acres on Coyote Ridge; plus the 116 acres alone did not meet our compensation ratio once we calculated that. So they had to find more acres, and again, we just requested that at least ten be on Coyote Hill.

So, I hope that answers your question. A lot of this was, in fact, my doing.

MS. DENT: Well, again I'm looking, now I'm going to go back a couple of paragraphs in your testimony to an earlier point in time where you indicate in your testimony that to reduce impacts to serpentine endemics on Tulare Hill, Calpine/Bechtel proposed to manage the 116 acre portion of Tulare Hill under its control -- and that's a reference to 1999 -- for 30 years.

So that original core proposal for the 116 acres in 1999 apparently came from Calpine/ Bechtel.

MS. SPIEGEL: Yes.

MS. DENT: Is that correct?

MS. SPIEGEL: Um-hum.

MS. DENT: And then you held this workshop and you further on indicate in your testimony that management of -- Dr. Weiss stated that management of Tulare Hill alone would not

secure the Bay Checkerspot butterfly population due to high sensitivity of the Coyote Ridge area.

And so this is where you indicate that you started looking further than just Tulare Hill in terms of impact on the butterfly, correct?

MS. SPIEGEL: Yeah, it was a result of a workshop we had when we got as much information as we possibly could.

MS. DENT: But the original proposal for the 116 acres on Tulare Hill for the area directly impacted by the plant hasn't changed since 1999, has it?

MS. SPIEGEL: Can you ask me that again, restate that?

MS. DENT: Well, there's been a proposal to manage 116 acres on Tulare Hill since 1999, is that correct?

MS. SPIEGEL: There's been a proposal to manage 116 acres on Tulare Hill, yes.

MS. DENT: And that was the applicant's proposal?

MS. SPIEGEL: That was one of them.

MS. DENT: Now, the compensation formula that you're talking about, that's referenced a little further down in your testimony, I'm sorry

on my copy it's page 491.

MS. SPIEGEL: Okay.

MS. DENT: And the compensation formula was based on a percentage of ambient levels, was based on comparing nitrogen deposition rates from Metcalf Energy Center to nitrogen deposition rates at ambient levels, is that your understanding of the formula?

MS. SPIEGEL: Yes, it's exactly what the formula is. It says right here that whatever the deposition rate on Tulare Hill was, it represented 13.5 percent of the ambient levels.

MS. DENT: Who proposed to use that formula that you would compare ambient levels to deposition rates from the project? Who proposed that formula from the very beginning? Was that your idea? Or was that Calpine/Bechtel's idea?

MS. SPIEGEL: Well, that was a combination. Like I said, they proposed one formula to use a weighted average. I decided that I wanted to use direct deposition. So it's both. And it was also a result of a workshop, and discussions with Fish and Wildlife. Nobody worked in a -- I mean --

MS. DENT: My question relates to the

use of the comparison of ambient to contribution. I understand that they proposed using a weighted average, which indicated higher ambient levels than you thought were appropriate.

MS. SPIEGEL: That's not what the weighted average really dealt with, but what's your question?

MS. DENT: Well, my question is who came up with the idea of calculating mitigation based on comparing ambient levels to contribution levels?

MS. SPIEGEL: The applicant.

MS. DENT: And do you know where they got that idea from? Do you know what other project has ever used that kind of formula? Have you ever --

MS. SPIEGEL: It doesn't really matter to me where it came from. I thought it made a lot of sense. Every time we come up with mitigation we look at the specifics of the project, and you look at everything. Mitigation is innovative, and it's adaptive, and it's specific to a situation. And there was one time no mitigation, and then there was, and some mitigations don't work and you throw them away. And others you think of and you

go I like that. And this, to me, was commensurate with the impacts.

MS. DENT: So, just so that I understand, you're not aware of any other project for which this type of formula has been used?

MS. SPIEGEL: No, but I wouldn't be surprised if it's used in the future.

MS. DENT: And this -- so you start with looking at how much of an increase in nitrogen deposition over ambient levels there are from this project. That's where you start from with this formula for coming up with mitigation acreage, is that accurate?

MS. SPIEGEL: I started with what? I'm sorry?

MS. DENT: Well, you start with a formula that compares nitrogen deposition from this project to nitrogen deposition from other sources.

MS. SPIEGEL: No. We looked at the ambient levels. And we looked at the contribution, the percent of contribution that this project would be adding, what percentage MEC's contribution is in relation to the ambient situation.

MS. DENT: Okay, thank you. You did not being by looking at the total amount of acreage that is impacted by the project?

MS. SPIEGEL: At one point we did. But I thought the biggest impacts in my mind were on Tulare Hill because that was directly adjacent. And then our other big area of concern was Coyote Ridge, so those are the areas that I focused in on.

The applicant actually looked at the bigger -- their mitigation package did look at all the serpentine habitats.

Again, this is what we came up with.

MS. DENT: And, again, in the same section of your testimony, the area that will be impacted by this project, by Metcalf Energy Center, the area of serpentine habitat, is 339 acres on Tulare Hill, and the number for Coyote Ridge does show up here, it's 2328 acres.

MS. SPIEGEL: Yeah, but that's just what represents, 339 acres is Tulare Hill.

MS. DENT: And that entire area will be affected -- equally affected by Metcalf Energy Center. In other words it isn't --

MS. SPIEGEL: Yes.

MS. DENT: -- just that 116 acres is going to be impacted, the whole 339 acres is going to be impacted?

MS. SPIEGEL: Yes.

MS. DENT: And, again, we're adding enough nitrogen from this project to take the nitrogen deposition from 8.5, we're adding another 1.15, to 9.6, is that correct?

MS. SPIEGEL: Where are you getting those numbers?

MS. DENT: Well, that's page 486 on my version of your testimony. I think it's a couple pages later for you.

MS. SPIEGEL: The 8.4 is the ambient, and to the best from our modeling we determined that -- I'm not sure what numbers here, it's all in here, that would be contributed.

And so the simplest way to do it is to add them up, and then come up with a cumulative. But it's probably, you know, it's a model, it's an estimate.

MS. DENT: Right, your testimony indicates the estimated annual direct deposition of nitrogen to be 1.13.

MS. SPIEGEL: Okay, that would be the

estimated annual direct --

MS. DENT: Right, we'll do cumulative in a minute.

MS. SPIEGEL: Yeah, hold on, I want to make sure that this is -- yeah, this was based on these isopleths maps.

MS. DENT: So, now I'm -- you're taking Nox concentrations on 339 acres, up from 8.4 to 1.13 -- up to, I'm sorry, 9.4 or 9.5 to the top end of the range where you expect an impact on plant life, according to your earlier estimate in the PSA.

Why is that not a significant impact on the entire 339 acres?

MS. SPIEGEL: I never said that it wasn't a significant impact. I said it is a significant impact. I do --

MS. DENT: So you --

MS. SPIEGEL: -- believe that the mitigation reduces to less than significant levels.

MS. DENT: So you have a significant impact, then, in your view, on the entire 339 acres.

MS. SPIEGEL: And beyond. Wherever this

isopleth hits in certain areas you're going to have some contribution from the MEC nitrogen.

MS. DENT: I'm just going -- I'm now just going to MEC and Tulare Hill. So there's a significant impact on the entire 339 acres of Tulare Hill.

Now, then you have an increase of .13 in the deposition on Coyote Ridge. Is it your view that that's a significant impact on Coyote Ridge?

MS. SPIEGEL: Yes.

MS. DENT: The increase of .13.

MS. SPIEGEL: Yes.

MS. DENT: So you have a significant impact then on the entire 2328 acres?

MS. SPIEGEL: Yes. There's a significant impact occurring right now.

MS. DENT: I'm asking about this project, because --

MS. SPIEGEL: Well, the reason the project, in and of itself, is not a problem, but it's contributing to an already stressed ecosystem.

MS. DENT: Right, so there is a significant impact just directly from this project. We haven't gone to cumulative yet at

all. We're just talking about from this project.

So, we have a significant -- again, I had trouble following in the testimony, we have a significant impact, then, to the entire 2600-some-odd acres, I guess, correct?

MS. SPIEGEL: Yeah.

MS. DENT: So we have a significant impact to the entire 2600-some-odd acres, but it's your opinion that mitigating on 131 acres is adequate mitigation for a significant impact on 2600 acres?

MS. SPIEGEL: I'm saying that I believe that, for one, without the mitigation there's no protection occurring right now. With the mitigation we will have protection. And I'm saying that you can't make one project pay for the current situation that you're in right now. But you can make them pay for their contribution and their impacts. You have to make it commensurate with their impacts.

MS. DENT: Well, let's talk about that for a moment. The 339 acres, at least, at Tulare Hill does support habitat for the butterfly right now. Apparently the current background annual concentrations, if they indeed are 8.4 kg per

hectare per year, is not preventing the habitat from thriving. There is a butterfly population there currently.

MS. SPIEGEL: I wouldn't call it thriving on Tulare Hill at all. And that's because it's being grazed. If it wasn't being grazed, then the fertilizer from the nitrogen would allow the grasses to come in, and there would not probably be a butterfly population there.

MS. DENT: So current, but current management of the property is allowing that to occur?

MS. SPIEGEL: Is allowing what to occur?

MS. DENT: Is allowing the habitat to occur, the current management of the property and current annual NOx concentrations on the property still permit butterfly habitat.

MS. SPIEGEL: Yes. There is the host species there right now. Butterflies haven't been seen in awhile, but they're there.

MS. DENT: After the project comes in you're going to have higher NOx concentrations, you know that for sure, on the whole 339 acres. And you don't know for sure whether you're going

to have cattle grazing on that entire 339 acres, do you?

MS. SPIEGEL: I do know that we'll be managing the other 116 in perpetuity which we have no, there's no protection in place now to keep it that way.

MS. DENT: So on 116 acres you know that there will be a management scenario in place that will --

MS. SPIEGEL: For 131 acres total, yes.

MS. DENT: On Tulare Hill --

MS. SPIEGEL: 116.

MS. DENT: Okay. Now, looking at the cumulative issue, I just want to make sure that I understand the testimony on that.

Again, the previous witnesses indicated that the cumulative deposition rate of 1.5 on Tulare Hill that's referenced on page 486 of the testimony that I have, is a modeling estimate for MEC, for Metcalf Energy Center, CVRP, Cisco's project, and for residential housing planned for the urban reserve further south.

MS. SPIEGEL: Yes.

MS. DENT: Is that your understanding?

MS. SPIEGEL: Yes.

MS. DENT: So, if MEC is 1.13 of that 1.5, then we are left to understand that the entire Cisco project and 20,000 houses are going to be responsible for .37 of that 1.5?

MS. SPIEGEL: I don't know if that modeling, if you could use the modeling in that way. I don't know if it's additive like that or not. I can't answer that.

MS. DENT: Well, what was your understanding of that model when you put this in your testimony?

MS. SPIEGEL: I looked at the results of the model, and I got, again you look at the isopleths and they looked at the ambient, as well as the other three, but it does not mean that each one is in itself additive. I don't know what goes into the model to make that, to come up with that final --

MS. DENT: But it was your understanding that, again as the previous witness testified, that the cumulative depositions refer to --

MS. SPIEGEL: All three.

MS. DENT: -- all three?

MS. SPIEGEL: Right.

MS. DENT: And that the direct

depositions refer to just Metcalf Energy Center?

MS. SPIEGEL: Yes.

MS. DENT: And that same analysis applies to Coyote Ridge, as well?

MS. SPIEGEL: Yes.

MS. DENT: And you don't -- now the cumulative depositions on Coyote Ridge, did you have any understanding about whether cumulative depositions at Coyote Ridge were considering other sources?

It would appear that if you have cumulative depositions at Coyote Ridge of 3 kg per hectare per year, and only 1.5 at Tulare Hill, that the cumulative depositions at Coyote Ridge must have been considering more sources than the cumulative depositions for Tulare Hill. Would you agree with that?

MS. SPIEGEL: Just a second, I've got to make sure that this is correct here.

HEARING OFFICER FAY: I'd just caution you that unless Ms. Spiegel is qualified as a modeling expert, your questions into the details of the model are really not that helpful.

MS. DENT: Well, --

HEARING OFFICER FAY: I heard her

testify that she relied on the results of the model without having created the model. And so, she may not be the right witness for some of these questions.

MS. DENT: Her analysis was based on comparing depositions from this project to depositions from other projects, and she's testified that she thought that was a proper way to do the analysis and it adequately mitigated.

So, I'm just trying to make sure I know how she understood this model to work.

MS. SPIEGEL: Again, I relied on our air quality people to tell me that they agreed with the assumptions of the model, and they agreed with the results of the model.

And I took the numbers from the model. I had nothing to do with the modeling, itself.

MS. DENT: So, you have no, then, opinion on what went -- you have no opinion on the meaning of the cumulative depositions on Coyote Ridge and what other nitrogen depositions were taken into account in looking at cumulative depositions --

MS. SPIEGEL: I'll tell you, I have an opinion on it that I think that it needed to take

into account the two projects that were mentioned earlier, because those are the two projects we know that could have some major nitrogen contributions to the area, and the Metcalf.

So, yeah, we requested that all those things be modeled.

MS. DENT: I have just really I think one last question, and this is about the background NOx concentrations.

Did the background NOx concentration that again is plugged into the model that you relied on for determining that the mitigation is adequate, the background concentration of 8.4. That is not based on any information on background concentrations actually on Tulare Hill or Coyote Ridge, is it, to your knowledge? It's based on areawide background concentrations?

MS. SPIEGEL: Right. It's based on the best information we have for this area.

MS. DENT: Well, it would be possible, certainly, to take estimates on Tulare Hill and Coyote Ridge, wouldn't it?

MS. SPIEGEL: I don't know. I'd have to talk to -- to ask Stuart how feasible that would be.

MS. DENT: So you didn't have any discussion with the applicant about that?

MS. SPIEGEL: About taking -- I believe we did in a workshop and it didn't appear to be something that we could do right away.

We also felt that the information we had was probably pretty representative.

MS. DENT: Are you -- have you reviewed for the CEC mitigation packages for other similar projects?

MS. SPIEGEL: For other Commission projects, you mean mitigation package --

MS. WILLIS: Could I ask for a clarification. Are you asking for other power plants and certain sizes, or --

MS. DENT: Let's -- we'll start with have you, in your role at the CEC, reviewed any other habitat mitigation packages for power plant projects?

MS. SPIEGEL: Certainly. Every one --

MS. DENT: And how many of those have you reviewed?

MS. SPIEGEL: How many? I've written the assessments on at least six, and I've reviewed or helped on another I don't know how many.

MS. DENT: Now, how many of those, if any, have involved the nitrogen oxide deposition?

MS. SPIEGEL: Right now we've had it discussed in another project down south.

MS. DENT: And does that involve Checkerspot butterfly habitat or some other habitat?

MS. SPIEGEL: A different Checkerspot butterfly, yes.

MS. DENT: And that project, the name of that project is?

MS. SPIEGEL: I think it's Blythe. I'm pretty sure.

MS. DENT: And do you know whether the applicant in that project is proposing the same methodology that is proposed in this project for determining the appropriate amount of habitat?

MS. WILLIS: I'm going to object on relevance. We're going into another project at this point.

MS. DENT: I think it's highly relevant to know whether or not this project is typical in terms of the methodology, since we've really had testimony that there was no precedent --

HEARING OFFICER FAY: Well, I have

doubts about the relevance but I'm going to allow the question because I think, you know, you've got an entirely different environment down there, but I'm going to allow the question. Go ahead, please.

MS. SPIEGEL: I was involved in some of that. They reviewed our mitigation here. The problem was they didn't have as much data as we did here. Some of the work that's been done here that wasn't on serpentine habitat.

They already had areas that were protected, so unlike here, that wasn't something that Fish and Wildlife Service down there wanted to pick up right away. Instead they wanted to get more information.

There was just so many differences between the two that we felt that the calculations used here wouldn't apply there. And we came up with something completely different; related, but different.

MS. DENT: Well, let me ask the question maybe a little bit differently. Are you aware of any other project that you've reviewed where there's been a discount applied to the acreage based on background or ambient levels similar to

the discount that was applied to the acreage on this project?

Your formula, you start out initially by discounting the 339 acres on Tulare Hill to 13.5 percent, because of ambient -- because ambient conditions are such that you think their responsible for the remaining 87.5 percent, or -- my math's not good, but -- are you aware -- have you done that in any other projects where you initially, right at the outset, discount the impacted acreage because there are ambient conditions? Because of ambient conditions.

MS. SPIEGEL: I don't think I discounted anything. I took, like I said we came up with some formulas that we felt made sense. That we looked at their contribution to the existing situation. There's no discount given.

MS. DENT: Well, I'm going to read a sentence in your testimony. Multiplying 3.5 percent by the 339 acres on Tulare Hill that will be directly impacted, yields 14.5 acres.

MS. WILLIS: Could I ask you to refer to the page you have --

MS. DENT: It's 491.

SPEAKER: 493.

MS. SPIEGEL: Yeah, and I know where that is on here.

MS. DENT: So you took the 339 acres to begin with that you say will be directly impacted and you only looked at 13.5 percent of that.

MS. DENT: So you took the 339 acres to begin with that you say will be directly impacted, and you only looked at 13.5 percent of that. And that 13.5 percent comes from comparing nitrogen deposition from this project to nitrogen deposition with ambient levels, and it's really my question is whether or not you, in other projects that you've reviewed, have ever used that type of methodology before.

MS. SPIEGEL: Like I said, every project we're very innovative and different. And this one I don't believe I've used in the past. But I do think it will be used in the future. And I hope it's used in this area.

HEARING OFFICER FAY: I'm going to just interject --

MS. DENT: That's -- that's --

HEARING OFFICER FAY: That's all you have?

MS. DENT: That's --

HEARING OFFICER FAY: Okay, --

MS. DENT: I'm going to look at my notes and --

HEARING OFFICER FAY: -- I'm going to issue a tentative order, subject to support by the Committee, but the parties in this case, I understand, have all been served -- did staff serve its testimony in hard copy on the parties?

MS. WILLIS: Yes, we --

HEARING OFFICER FAY: You don't rely on the website?

MS. WILLIS: No, no. The City of San Jose has received --

HEARING OFFICER FAY: Okay, so --

MS. WILLIS: -- they received --

HEARING OFFICER FAY: -- after this hearing all parties are directed to use the hard copy that they've been served. It avoids this kind of reference problem.

The webpage is a great convenience, but if you're going to cross-examine a witness you've got to tell them exactly where in their testimony the line is that you're quoting. Otherwise, it's very unfair and I think it wastes a lot of time.

So that's an order subject to Committee

approval.

MS. DENT: I had no idea there was a difference in the pagination.

HEARING OFFICER FAY: I understand. I understand. And this is not -- you're not the first one to make this mistake. And it's subtle enough that it's an easy mistake to make.

But I want people to be on notice in the future, because if you download from the web and then print it out, your pagination won't match. And we all need to be on the same page.

(Laughter.)

HEARING OFFICER FAY: As it were. Okay. Is CVRP here? No.

MS. DENT: I'd like a moment to -- you asked if I was done. I said I'd like a moment --

HEARING OFFICER FAY: Oh, I'm sorry, I thought you said you were done.

MS. DENT: I do have a couple questions for the Fish and Wildlife Service witness, since that person testified.

I'd like you to state your position with the U.S. Fish and Wildlife Service, and what the review process will be for your draft opinion.

MS. BROWN: My position is Fish and

Wildlife Biologist. It will be reviewed by my supervisor, and then by the Division Chief of the Endangered Species Division. And then by the Assistant Field Supervisor of the office.

MS. DENT: And will the Assistant Field Supervisor then be the one to sign the biological opinion?

MS. BROWN: Yes.

MS. DENT: So, --

MS. BROWN: It will either be the Assistant Field Supervisor or the Field Supervisor who signs the opinion. One of those two people will do the final review and sign the opinion.

MS. DENT: So, it has two or three levels of review to go through --

MS. BROWN: Yes.

MS. DENT: -- after you? Thank you.

HEARING OFFICER FAY: Anything further, Ms. Dent?

MS. DENT: No, thank you.

HEARING OFFICER FAY: The next party is Mr. Ajlouny.

MR. AJLOUNY: Ajlouny. Just to follow on so I don’t forget my thought there, is there going to be an opportunity to cross-examine the

person that signs that document? Is that part of the process? No? So is that going to be entered as testimony or anything, that document?

HEARING OFFICER FAY: It will be entered as just what it is, the official biological opinion from the U.S. Fish and Wildlife Service. Ms. Brown is here today just to comment on the degree, in her opinion, of consistency between the draft that she's prepared and the staff conditions.

MR. AJLOUNY: Yeah, and I understand, I'm getting the flow of all this stuff. But I'm just wondering, this is a document that's going to be entered into testimony, correct?

HEARING OFFICER FAY: The record, if it is further delayed, it is conceivable the Commission could rule on this power plant before the biological opinion comes out. That has happened in the past.

And as I said before, if the biological opinion requires, if you will, stiffer requirements than the conditions, then those federal requirements will be implemented in the biological plan.

So, it can only get tougher if the feds

impose it. But we do this kind of thing all the time in cases. We take testimony from Fish and Wildlife on the status of their review. And if they've already submitted a draft, as Ms. Brown has, then sometimes the author comes in and explains whether the draft is consistent with the staff position.

MR. AJLOUNY: So it sounds like this has a pretty significant impact on the whole process. I mean there could be a ruling on this plant, and then this thing comes out and says stiffer, and then there will be some maybe changes on the license --

HEARING OFFICER FAY: It's conceivable, although --

MR. AJLOUNY: Okay,

HEARING OFFICER FAY: -- the testimony today indicates it's probably not going to be radically different.

MR. AJLOUNY: Okay. And the fact that it's such a powerful document and it's being signed, you know, whether it's considered testimony, it's just significant in this whole process, I find it very difficult to accept that there's no chance to cross-examine or question.

Just a comment.

I'll go on with my questioning.

CROSS-EXAMINATION

BY MR. AJLOUNY:

Q Linda, do you consider the calculations that were just discussed about the percentages times acreage and all that, to come out with how many acres, I think it comes out to 131 acres for Calpine/Bechtel to reserve for habitat, the butterfly with the cows and everything, is that conservative estimate?

MS. SPIEGEL: No. Conservative? Yes, it's used very conservative assumptions to get there. It over -- the impacts were determined using conservative estimates to over-estimate the impact.

MR. AJLOUNY: Okay, but looking -- okay, maybe I'll be more specific. I should just take Commissioner Laurie's approach and tell you what my issue is, and then you can just answer it.

My issue is looking at the calculations, and I'm going to say pages, top of page 488, first paragraph, it uses numbers like the last sentence: These maps show estimated annual direct and --

MS. SPIEGEL: Cumulative.

MR. AJLOUNY: -- des -- oh, my goodness, of nitrogens to be 1.13 and 1.15 on Tulare Hill and, you know, .13 and 3 on Coyote Ridge.

And I would think, to be conservative, make sure we cover all bases, having that data, I was wondering why the 1.5 was not used in the simple math of 1.5 divided by I think 8.4, comes out to 17 plus percent. And why .3 or 3 wasn't used, you know, I mean it's --

MS. SPIEGEL: That's because we looked at the impacts associated directly -- well, it's an indirect impact, but those that were from MEC, and then what you have is this ratio, that's why you say three-to-one, or one-to-one, and that takes on that cumulative, that helps deal with that cumulative impact.

MR. AJLOUNY: Okay, but what --

MS. SPIEGEL: So you get a lot more if you say three-to-one than if I used 1.5 instead of 1.1.

MR. AJLOUNY: Okay, the way I understood your calculations is what you took is 1.13 over 8.4 and came out with 13-something percent.

MS. SPIEGEL: Right.

MR. AJLOUNY: Multiplied that times 339

acres, because that's how much is Tulare Hill, and you came out with the 45.6 acres. Right?

MS. SPIEGEL: Yes.

MR. AJLOUNY: Okay, so I'm wondering why you chose to use the 1.13 and then use 1.5 to be more conservative. Am I missing the boat here?

MS. SPIEGEL: Yeah, I just answered that. What I said was we were looking at the impacts from -- we're having them mitigate the impacts from their project.

But what we do to deal with the cumulative impacts is we multiply it by a ratio of three-to-one, or you know, two-to-one. That deals with the cumulative impacts.

If I was to multiply by 1.5 instead of 1.13, and did a one-to-one, it really wouldn't, it's not as good a mitigation as if you do the direct -- I keep saying direct, but that means something different here -- if you take the impacts associated with MEC alone, and then you multiply it by a ratio of four-to-one, or three-to-one, or two-to-one, then you have that cumulative impact factored into that ratio. That's why you do that.

MR. AJLOUNY: When I read this and I

went back and forth on the math and thought I understood it. I guess I'm assuming when you say 1.13 and 1.15, I thought they meant 1.13 to 1.15. Does that mean -- 1.13 --

MS. SPIEGEL: One is for indirect and one is for cumulative.

MR. AJLOUNY: So the 1.15 is cumulative?

MS. SPIEGEL: Yes.

MR. AJLOUNY: So that's where I've been messing up, okay. I've been wanting to know that for weeks. So that's good. I thought I was onto something, how about that?

You mentioned earlier in the earlier questions on cross-examination by your attorney there that noise was a significant impact, you know, the first three questions I think she said noise was a significant impact.

MS. SPIEGEL: No, I said it was not significant.

MR. AJLOUNY: No? So there's no significant impact by noise?

MS. SPIEGEL: Oh, I may know what you're talking about. I said during construction the construction noises will be higher, they will exceed levels known to be --

MR. AJLOUNY: The LORS.

MS. SPIEGEL: I'm sorry?

MR. AJLOUNY: The LORS?

MS. SPIEGEL: No. They will exceed levels known that wildlife can -- thank you, known to disturb wildlife. They will exceed that. But they will be temporary in nature, and there aren't much wildlife there now.

So I don't consider it to be significant.

MR. AJLOUNY: Okay. And so you probably agree with the applicant's witness then that whistle, blowing of that whistle or whatever that is, that steam blower wouldn't be --

MS. SPIEGEL: That's actually 100 db. And it will be disruptive, yes. It will be disruptive. But it will be a temporary impact.

MR. AJLOUNY: Okay, so it's not going to be anything significant, okay.

HEARING OFFICER FAY: Could you state --

MS. SPIEGEL: Oh, no.

MR. AJLOUNY: Okay. The way I understand Tulare Hill and how it plays the role of the butterfly is it's used as a hop. From Santa Teresa you hop on Tulare Hill to get to

Coyote Ridge, is that a correct understanding?

MS. BROWN: Yes, that's correct.

MR. AJLOUNY: Okay, so if Tulare Hill was significantly impacted, then Coyote Ridge would be significantly impacted, is that true?

MS. BROWN: Coyote Ridge serves as the source population for any butterflies that would be migrating to Tulare Hill, and subsequently to Santa Teresa Hills, --

MR. AJLOUNY: Okay.

MS. BROWN: -- as Stuart Weiss testified earlier, the --

MR. AJLOUNY: Okay.

MS. BROWN: -- habitat in Santa Teresa is currently marginal to poor due to the absence of grazing.

MR. AJLOUNY: Okay, so it goes the other way, it goes from Coyote Ridge to Tulare Hill to Santa Teresa Hill?

MS. BROWN: That's correct.

MR. AJLOUNY: Okay. And even though it's not a highly populated by the butterfly, if Tulare Hills, two-thirds were significantly impacted by habitat of the butterfly would it significantly impact the Santa Teresa Hill?

MS. BROWN: Currently Santa Teresa Hills, like I said, is poor habitat due to the absence of grazing. And, again, Coyote Ridge is the ultimate --

MR. AJLOUNY: Okay.

MS. BROWN: -- source population. It is possible if Santa Teresa Hills were restored to good habitat and Tulare Hill were restored to good habitat, that there would be some -- that Santa Teresa Hills could provide a source, also, to Tulare Hill.

Again, the habitat quality currently on Tulare Hill is quite marginal. So, I don't, at this time Tulare Hill does not provide a source population for Santa Teresa Hills.

MR. AJLOUNY: Okay, so maybe I'm a little confused. What's all the mitigation for if Tulare Hill is going to be so severely impacted, you know, and it's really --

MS. BROWN: I didn't say it was going to be so severely impacted. It's currently marginal habitat. And the applicant has proposed to manage 116 acres of this marginal habitat to improve it.

MR. AJLOUNY: Could it grow, then, is that what you're saying, by them putting the cows

on it could be more -- it could be a more significant player in Santa Teresa Hill? Is that what I'm hearing?

MS. WILLIS: Can you clarify what you mean by player?

MS. BROWN: I don't understand --

MR. AJLOUNY: Because we just went through this scenario that Santa Teresa Hill is -- the butterflies grow by using Tulare Hill as a stopping grounds, you know, it goes from Coyote Canal to Tulare Hill to Santa Teresa Hill.

If Tulare Hill now increases --

MS. BROWN: Then the butterfly will benefit.

MR. AJLOUNY: Okay. And then so we're in a scenario then the 116 acres gets taken care of better than it was before, increases in butterflies, Santa Teresa Hill increases?

MS. BROWN: Not necessarily. I think that what we need to say is that with better management on Tulare Hill will result in a benefit overall to the Bay Checkerspot species.

MR. AJLOUNY: Okay. And then I'm going to go back to the point I made with the applicant's witness.

If there's no guarantee on the two-thirds that's not mitigated, you know, not guaranteed, if that changes, let's say five years from now all of a sudden the butterflies are healthy and flying around, and work their way to Santa Teresa Hill, and things are going really good for the butterfly, then two-thirds is cut off because someone makes an agreement that, hey, we want to do something different with that land, we don't want cows on it.

MS. BROWN: Currently there's 339 acres --

MR. AJLOUNY: Yes.

MS. BROWN: -- of serpentine on Tulare Hill.

MR. AJLOUNY: Yes.

MS. BROWN: Zero percent of that is protected for the Bay Checkerspot butterfly.

MR. AJLOUNY: Okay.

MS. BROWN: Zero percent of that habitat it protected. All 339 acres are unprotected, unprotected from direct impacts of urbanization, from indirect impacts of nitrogen deposition.

The applicant for this project has proposed to place 116 acres of this 339 acres in a

conservation easement with a grazing management plan that will adaptively manage to improve the habitat for the butterfly.

So whatever percentage of 116 acres to 339 acres will be protected. So that, in Fish and Wildlife Service's view, is an improvement in the overall baseline for that species.

And, again, also on Coyote Ridge there is a certain amount of habitat currently that is protected in conservation easements as mitigation from previous projects. And the applicant has proposed to set aside 15 acres on Coyote Ridge, again, for protection from development pressures, whatever they may be, and also to manage it to improve the quality of that habitat.

MR. AJLOUNY: And you don't have any reason to believe that if Metcalf didn't come in and all the years that the cows have been there and the butterflies have been there, that that's going to change? I mean there's no reason to believe that that's going to even change if Metcalf doesn't come in?

MS. BROWN: I don't understand your question.

MR. AJLOUNY: Well, if Metcalf doesn't

come in is there any reason to believe that anything's going to change from the last 20 years on Tulare Hill?

MS. WILLIS: Are you --

PRESIDING MEMBER LAURIE: Mr. Ajlouny, I will give you five minutes. So choose your questions carefully.

MR. AJLOUNY: Answer the question, please.

MS. WILLIS: I'd like clarification what specifically are you referring to --

HEARING OFFICER FAY: If I may, I want to break in here. Right now there is no requirement on the land.

MR. AJLOUNY: I understand that.

HEARING OFFICER FAY: And so it may not change, but it could change. And I think what U.S. Fish and Wildlife is saying is that if there's a requirement in perpetuity, then at least to that extent for those 116 acres, they know they have some protection for the species.

Right now the protection is serendipitous. It's just by chance that someone chooses to graze their cows there.

MR. AJLOUNY: I guess my investigation

in what I found that land can't be developed anyways, and I'm trying to prove a point that the way it has been for the last 10, 20 years, I mean there's been cows on there for years --

PRESIDING MEMBER LAURIE: We talked about that --

HEARING OFFICER FAY: Put that in your brief.

MR. AJLOUNY: Okay.

PRESIDING MEMBER LAURIE: -- and that point is --

MR. AJLOUNY: Do you have any reason to believe that -- I'm sorry, it's just my five minutes, I'm focusing in on -- do you have any reason to believe that the butterflies are going to improve any more than they have in the last 20 years with the same conditions of cows and everything like that? Yes or no?

MS. BROWN: I don't understand your question.

MR. AJLOUNY: Well, --

MS. BROWN: Do I have any reason to believe that --

MR. AJLOUNY: It's going to get any better? I mean cows have been on there for 28

years, let's say, and you know, you're saying the habitat of the butterflies are not the best right now there, whatever the words were.

MS. BROWN: Right. Yes, --

MR. AJLOUNY: Do you have any belief it's going to change by --

MS. BROWN: Well, --

MR. AJLOUNY: -- by --

MS. BROWN: -- the grazing's change --

HEARING OFFICER FAY: I think you need to let the witness answer.

MR. AJLOUNY: Well, --

MS. BROWN: Currently the grazing level on Tulare Hill is one cow for every three acres of property, and following the placement of the conservation easement on -- so it's grazed quite heavily for this area.

And following the placement of the conservation easement, the number of cows the applicant has proposed is one cow for every ten acres. So it will be a lower level of grazing, it will be a moderate level of grazing, as opposed to a high level of grazing that's occurring right now.

So, it's reasonable to believe that less

intensive grazing, although moderate, would improve the quality of the butterfly habitat on that part of Tulare Hill.

MR. AJLOUNY: I guess I was led to believe, you know, the more cows the better kind of thing, with increase -- but from your testimony they're going to lessen the number of cows?

MS. BROWN: No, it's not the more cows the better. It's moderate, properly managed grazing. And at this time the level of grazing on that property is quite high.

MR. AJLOUNY: Okay, and is there any background numbers or some books or some theories on how many cows per acre? Like where do you get that number? Where do you determine that kind of thing?

MS. BROWN: That was the estimate that Dr. Weiss provided, was the one cow per three acres is based on his experience, has been effective.

MR. AJLOUNY: Okay.

MS. BROWN: And that again -- and also the applicant has proposed not just to put out one cow for every three acres and walk away, but to monitor the property and adapt the grazing plan to

the necessities of the species.

MR. AJLOUNY: Okay, so you used the applicant's expert witness to come out with your conclusions on this?

MS. BROWN: Yes.

MR. AJLOUNY: Thank you.

HEARING OFFICER FAY: Anything further?

MR. AJLOUNY: No.

HEARING OFFICER FAY: Okay, thank you. And is there anybody from -- yes, Mr. Boyd.

(Off-the-record discussions.)

MR. BOYD: Okay. I have a couple of questions of you, Cecilia.

CROSS-EXAMINATION

BY MR. BOYD:

Q First, I heard you mention that you had some sort of draft opinion?

MS. BROWN: Yes, I do.

MR. BOYD: Can you tell me why the parties weren't provided a copy of that in advance of the meeting?

MS. BROWN: Because it's an internal draft, it has not been reviewed by managers. And so therefore it's not available for public release. It will be a public document once it's

signed.

MR. BOYD: Could you explain to me what the public participation process is in the biological opinion?

MS. BROWN: The biological opinion is not a document that is available for public review. It is the Service's opinion on whether or not the issuance of a permit, in this case the air quality permit, issued by the Bay Area Air Quality Management District, will or will not jeopardize the continued existence of threatened and endangered species.

MR. BOYD: So would you say that it also was a permit to do a take?

MS. BROWN: It is not a permit to take. It is the exemption of take that occurs incidental to the project from violations of the Act.

MR. BOYD: So is there any mechanism once the biological opinion comes out for the public to comment or suggest changes to the opinion?

MS. BROWN: No, there is not.

MR. BOYD: So the public has no way to meaningfully participate in this opinion -- in that opinion --

MS. WILLIS: I'm going to object. Ms. Brown has answered questions regarding public participation.

HEARING OFFICER FAY: That's right. Now, what she did say is this is input into the air district's permit, which, of course, is subject to public comment.

MR. BOYD: No, my understanding is the public comment period was foreclosed with the issuance of the final determination of compliance.

HEARING OFFICER FAY: Right, but prior to the DOC --

MR. BOYD: Which it done.

HEARING OFFICER FAY: -- you have --

MR. BOYD: Which is done. Is my assumption correct that the EPA will not allow the air district to issue a PSD permit unless they concur with the biological opinion?

MS. BROWN: I believe -- I don't want to speak for EPA, they're not here. I believe --

MR. BOYD: I'm just talking about a process, not --

MS. BROWN: Right, --

MR. BOYD: -- whether they're going to do it.

MS. BROWN: EPA will not allow the Bay Area Air Quality Management District to issue the PSD permit until it has received a biological opinion, and reviewed it.

And typically a federal agency then will incorporate the terms and conditions of the biological opinion as conditions of that permit that they issue.

MR. BOYD: So you're stating, then, that basically you have a draft opinion that's not public information yet, and won't become public information until it's complete. At that point the public has no input once it's complete, correct?

HEARING OFFICER FAY: That's been asked and answered.

MR. BOYD: Now, the question then is if we were going to have input would we have to provide you that input now in order to have any effect, I guess is what I'm trying to find out, before the --

HEARING OFFICER FAY: Well, she said it's not that kind of a process.

MS. BROWN: There's no mechanism for public opinion in the section 7 biological opinion

consultation process.

MR. BOYD: Okay.

MS. BROWN: For example, one federal agency that we consult with often is the U.S. Army Corps of Engineers. And they issue what are called section 404 permits under the Clean Water Act.

Those permits have a mechanism for public review for all aspects of the project. And so that is the public review that goes into it. Because the action that occurs is -- the federal action that occurs is the issuance of that 404 permit.

So the federal action that is occurring now is EPA's approval for the air district to issue its permit.

So any public comment would have to be through EPA or the air district, whatever their mechanisms for public comment are.

MR. BOYD: Okay. So if my understanding is correct, then our opportunity to comment would have been to the air district, yet the air district did not have a biological opinion yet?

PRESIDING MEMBER LAURIE: I'm not going to spend time going through the federal processes.

What we have before us is a statement from this witness indicating, with her knowledge of the draft, proposed conditions are consistent with it.

What's going to happen is if the final is not consistent either more strict mitigation measures will be imposed, or either at the request of any party or at the request of the Committee we can open it up.

That's where we are with that. And you're not going to --

MR. BOYD: Okay, I won't beat a dead horse, okay? I'll change to another subject, another horse.

I heard you mention the term adaptive management plan. To your knowledge is there an adaptive management plan for this project?

MS. BROWN: I believe it's partially covered in the BRMIMP, I don't know what all the words are for those letters.

MR. BOYD: Resource mitigation and monitoring plan.

MS. SPIEGEL: I can answer that question. It's actually the BRMIMP is in the preliminary draft, and we are receiving comments it on -- or they are receiving comments on it,

including from me and hopefully from Cecilia, and we received some from CARE.

MR. BOYD: Okay.

MS. SPIEGEL: And so those comments are being incorporated. And they don't have to have a final out until so many days before construction, and in that there is an adaptive management plan being developed right now by their consultant, Stuart.

MR. BOYD: Okay.

MS. SPIEGEL: And there will be an adaptive management plan in the final BRMIMP.

MS. BROWN: And then just one other thing about typically in a biological opinion the Fish and Wildlife Service requires things like management plans and conservation easements and proof of the presence of an endowment to be in place before any construction begins.

MR. BOYD: So my question is what's your experience with adaptive management plans? Do you have any prior experience with adaptive management plans?

MS. BROWN: I have some experience with not specifically adaptive management plans, but with management plans during my tenure as an

employee with the State of New Mexico. It was more on an informal basis, looking at project implementation and the results of the implementation and additional protective measures that were needed to -- whatever additional protective measures were needed to protect the resource, then those would be implemented over time.

MR. BOYD: Have you ever had any experience with an adaptive management plan that didn't work?

MS. BROWN: No.

MR. BOYD: Okay. And what would be the effect if, for example, hypothetically, they came up with an adaptive management plan say to graze a certain amount on Tulare Hill to control a nonnative species from encroaching --

MS. SPIEGEL: That's the point of an adaptive management plan, is you look at, you have goals and objectives and then you have milestones that you try to reach. You have monitoring in place. And you look to see if you're getting those. If you're not, the idea is you stop, you reassess, and you have alternatives in place, too.

Your ultimate goal is to get to this

one, is to improve the habitat for the Bay Checkerspot butterfly in this case. And your management regime might be one cow per ten acres. If that's not work, you know, you have these milestones in place. And you have them in place in such a way that it's not too late.

You have to have them in place in time that you can identify and recognize and change your strategy. And adaptive management is really learn by doing. It's not a real voodoo thing. I mean, it's -- actually I have a definition.

It's a method for examining alternative strategies for meeting measurable biological goals and objectives. And then, if necessary, adjusting future conservation management actions according to what is learned.

That is you still meet your goal. That's what's adaptive about it is you don't get yourself stuck in anything.

MR. BOYD: Oh, I have an understanding, and so my question is I assume both of you read Dr. Smallwood's comments on adaptive management plans, is that correct?

MS. BROWN: His comments --

MS. SPIEGEL: I read them but I don't

recall them at this time.

MR. BOYD: Okay. My question is basically this, if there is going to be an adaptive management plan, based on what you just testified to, that means that there should be more than one mitigation option available.

And to my knowledge no more than one mitigation option has been proposed, which is the 15 acres.

So what other methods of mitigation are being proposed short of what is currently before us?

MS. SPIEGEL: I'm not following what you're saying that we have done. We have proposed to manage an area --

MR. BOYD: Using adaptive management.

MS. SPIEGEL: -- to promote and help recover the Bay Checkerspot butterfly. What we're looking at right now is that they have one cow per three acres. We think they're hammering it. We know that one cow per ten is working across the ridge in Coyote Kirby Canyon.

So it will probably be a place that we'll set as a, you know, beginning point. I don't know. We'll have to look at when we develop

it.

And we'll have monitoring in place. And if that's not working appropriately then we'll change the management, the grazing strategy accordingly.

You know, some years we're going to have drought. Some years we're going to have excessive rain. All those things are going to affect it year to year, and it's just going to have to be tweaked all the time.

MR. BOYD: Well, let me get to the concern. The concern is that, and I've said this earlier, the concern we have is the 15 acres that you're proposing to mitigate is what we consider a take, is located in the impact zone.

And our concern is the mitigation plan, if it fails, if the nitrogen deposition isn't mitigated adequately from the plant and we lose the habitat, and we lose that habitat, what other site is being proposed to mitigate that loss of habitat specifically?

MS. SPIEGEL: Well, we have more than 15 acres --

MR. BOYD: Other than the 15 acres that are in the impact zone?

MS. BROWN: Well, there are 131 acres proposed for protection --

MR. BOYD: In the impact zone.

MS. BROWN: Yes.

MS. SPIEGEL: Tulare Hill is an impact zone.

MR. BOYD: That's right, so there's other places in the State of California clearly that support this habitat of the Bay Checkerspot butterfly --

PRESIDING MEMBER LAURIE: What we're going to do --

MR. BOYD: Are any other habitats --

PRESIDING MEMBER LAURIE: What we are going to do is you call your witness and you present your witness' views on the subject.

MR. BOYD: I thought --

PRESIDING MEMBER LAURIE: We're done with this.

MR. BOYD: Okay.

PRESIDING MEMBER LAURIE: Because we're going around in circles.

MR. BOYD: Well, that's fine.

HEARING OFFICER FAY: And I do think you've moved into argument and that should be

included in your brief. If that's --

MR. BOYD: Well, I'm not trying to argue, I'm just trying to get the information, honest.

HEARING OFFICER FAY: Mr. Scholz.

MR. BOYD: I wasn't done, though. I'm done with that subject.

PRESIDING MEMBER LAURIE: Okay, you have five minutes, choose your questions carefully.

MR. BOYD: Well, you know, --

PRESIDING MEMBER LAURIE: Well, what I know is that --

MR. BOYD: -- I'm not going to -- I'm not going to be buffaloed. I have the right --

PRESIDING MEMBER LAURIE: No, but I am, I am giving you --

MR. BOYD: -- as a member of the public --

PRESIDING MEMBER LAURIE: -- I am giving you five minutes. And the problem is that under no circumstances in any hearing in any room in the world can one take simply as long a they want. The point being is that you, and I take responsibility for much of this in that obviously the workshops failed. Because there's been so

much time spent the last two months educating everybody when all this should have been done way before you got there.

And when you get here, your questions are supposed to be narrowed and focused on the most important points of contention. And as far as I'm concerned, you just spent 15 minutes on issues that either have already been addressed, or should not be a priority to you.

So, I'm giving you five minutes.

MR. BOYD: Okay, well, --

PRESIDING MEMBER LAURIE: You can spend that five minutes arguing with me if you want.

MR. BOYD: No, I --

PRESIDING MEMBER LAURIE: And I would encourage you not to do that.

MR. BOYD: -- I don't wish to argue with you, I just disagree. And frankly, I object, I think you're precluding meaningful participation --

PRESIDING MEMBER LAURIE: Well, include that with the rest of your objections.

MR. BOYD: My next question is to staff basically, what -- do you believe -- it's the same question I asked the witness for the applicant,

which is do you believe that there is sufficient information in the record at the close of this hearing today to close the record in the absence of a biological opinion being released?

MS. SPIEGEL: Yes, I don't think the biological opinion will have any new information. They may add more conditions, but they won't add any new information.

MR. BOYD: So you believe that it's complete and the record will be complete on biological resources at the close of the hearing today?

MS. WILLIS: Objection, she's answered that question.

MR. BOYD: Okay.

HEARING OFFICER FAY: Sustained.

MR. BOYD: Okay, that's fine. That's my last question, thank you.

HEARING OFFICER FAY: Thank you. Mr. Scholz.

CROSS-EXAMINATION

BY MR. SCHOLZ:

Q I understand you're consulting with the applicant, primarily and the CEC. The public hasn't really participated in your document that

you're preparing.

Some of the other data that we feel may be relevant comes from the City of Morgan Hill's air quality testimony, public health. I'm not even sure if CVRP's testimony.

Do you review those documents that they're providing and somehow incorporate that into your document that you're preparing for the biological opinion?

MS. BROWN: I'm sorry, the documents that who are providing?

MR. SCHOLZ: Morgan Hill has provided testimony that will be considered after this hearing. And CVRP has done the same, contesting some of the assumptions or data that's being provided by the applicant.

MS. WILLIS: Just to clarify, that's in air quality?

MR. SCHOLZ: Yes. So, does the public -- do you have an opportunity to review those documents before you finish your opinion?

MS. BROWN: If those documents pertain directly to biological resources, then I would review those if they are submitted as information pertinent to the biological impacts, then, yes, I

would review them.

MR. SCHOLZ: I think it goes not necessarily specific to the -- I don't think they make the relationship to biological, but it goes to the assumptions used for your analysis, the biological folks' analysis for the CEC --

MS. WILLIS: I'm going to object --

MR. SCHOLZ: So I'm just trying to understand --

MS. WILLIS: -- I don't believe she's seen those documents, and I actually haven't seen the City of Morgan Hill's air quality testimony or CVRP's testimony, either, to --

MR. SCHOLZ: Would you consider reviewing those before you --

MS. BROWN: I received a copy of the City of Morgan Hill's document. I looked it over and, yes, I will review and see if it's relevant.

MR. SCHOLZ: That's all, thank you.

MS. WILLIS: No redirect.

HEARING OFFICER FAY: Okay, thank you.

MR. HARRIS: Do you have exhibits --

MS. WILLIS: I already entered them.

HEARING OFFICER FAY: Staff already moved their exhibits, and that concludes taking

the testimony on biological resources.

I'm informed by Mr. Valkosky that no other party filed testimony on biological resources. So, that concludes biological resources.

Mr. Harris, do you have anything to say about the stuff back there on the table? Is that up for grabs?

MR. HARRIS: I won't make any judgments on it, but it's available --

(Laughter.)

HEARING OFFICER FAY: First of all, let's go off the record for a minute.

(Off the record.)

PRESIDING MEMBER LAURIE: What I'd like to do is engage in a discussion with the parties to determine what we need to have discussions about this evening.

We have written testimony, we have testimony that has conflicting views. That is as expected, and we respect that.

We have testimony from the applicant asking for some proposed changes to the conditions. We have read that.

We see staff's recommendation that the

project cannot be fully mitigated, which means that this project cannot be approved without a CEQA override. That's known and understood.

And I believe it is not the Committee's desire to engage in a debate tonight as to what the final architectural plan of the building should be.

So what I would ask the parties is, given what everybody knows about the project, architecturally and from a landscape perspective, from all the writings, to what extent do we need to have a witness take an oath and to have that witness cross-examined. And if you want to cross-examine a witness, I want to know what the nature of that cross-examination is.

(Pause.)

PRESIDING MEMBER LAURIE: And so to the extent that there is no cross-examination, or to the extent that there's minimal cross-examination, as we have done before, we're simply going to ask for stipulations.

Then what I'm interested in is an educational process for the Committee, since we didn't have an opportunity to sit in in workshops. We want to know, we certainly recognize that any

project, this project or any other project, what it looks like to the world is an important deal.

So we want to have a generic discussion, doesn't even have to be under oath as far as I'm concerned. Matter of fact, like I say, it can't be because we don't have testimony by the architect, right? Okay. Unless somebody needs to have it under oath, I don't need to have it under oath.

I want to have a generic discussion about what's possible under these circumstances. Okay, so, Commissioner Keese, is that consistent with your desires?

CHAIRMAN KEESE: Yes.

PRESIDING MEMBER LAURIE: That's the Committee's interests, so I'd like to have a discussion from the parties as to whether that meets your needs. If it doesn't I'd like to have an understanding why.

Yes, sir.

MR. AJLOUNY: My intentions are just to bring out some of the misleading testimony from Mr. Priestly, and you know, I have specific line items. And objection to VIS10 being removed by I think staff suggested that.

PRESIDING MEMBER LAURIE: If you disagree with something you can just let us know that you disagree.

MR. AJLOUNY: Okay. And then the other thing, the major comment overall everything is I disagree with just your whole perception you're giving us that you'll do anything to favor the applicant in this whole process.

PRESIDING MEMBER LAURIE: And if, again, you feel that is the way the Committee is acting, and you wish to offer objections and note a bias, you're most certainly free to do that.

MR. AJLOUNY: Well, that's exactly how I feel.

PRESIDING MEMBER LAURIE: Fine, put it in writing.

Yes, sir.

MR. GARBETT: My questions would be to the FSA in particular, or the applicant, and some of the testimony given previously tonight on a cross-examination. It does not necessarily have to be on cross-examination, but in which case I would be asking questions and I would hope not to introduce testimony of my own, but through the questions effectively I could probably state --

PRESIDING MEMBER LAURIE: Well, there have been workshops on visual. And so there should be no new questions. The Committee might have questions because, of course, we didn't have the opportunity of the workshop.

To the extent that you have legitimate questions on the points that are discussed that are new to you, those questions would be accepted.

MR. GARBETT: What I would call deficiencies in the FSA.

PRESIDING MEMBER LAURIE: If you have deficiencies, if you think there are deficiencies in the FSA, first of all you are not -- do you feel there's a need to cross-examine staff's witnesses?

MR. GARBETT: That's the mechanism you have set up in the evidentiary hearings.

PRESIDING MEMBER LAURIE: Okay, what is the nature of the specific question --

CHAIRMAN KEESE: Let me ask a question, they're going to tell us what it's going to look like. And if you think, I mean that it's not, that's what it's going to look like, I think. If you wish it looks like something else, then you say I wish it looked like something else.

But, I just wonder, once they tell us what it looks like, are you going to say well, that's not what it's going to look like?

MR. GARBETT: I am not here to argue about the shade of the paint or any of the general features, but there are some things that are very important, what I call --

PRESIDING MEMBER LAURIE: What?

MR. GARBETT: -- in the visual aspect.

CHAIRMAN KEESE: Well, see, but what we're asking, at least what I want to get out of this, what is it, if you want to say something, if you want to say I don't think it should be 120 feet high, I think it should be 100, that's all right.

But if he says it's going to be 120, are you going to cross-examine him on that? See, I'm trying to figure out what --

MR. GARBETT: Yeah, my cross-examination would be not to, if he says 120 feet high, fine to me. However, I might ask questions as to could it be shorter if. And the benefit as far as override might not be necessary in some cases.

HEARING OFFICER FAY: Mr. Harris, how long will it take you to summarize your testimony

on visual?

MR. HARRIS: I think you need to understand a couple things from our perspective. In this area we have a staff FSA that claims significant impacts in basically three areas, one from KOP1, one through a combination of views, and one through cumulative impacts.

Related to that is the VIS10 question, which we've heard alluded to earlier.

Those are our serious and substantial issues. And we're in serious disagreement with staff on the conclusions. And respecting everyone's time, I still need the time to make the case, and make the record to support us on those.

I'm less concerned about the architectural issues; that's actually not the primary focus of our concern and our direct testimony.

We have provided the architect to deal with that issue, but again, where I'm coming from are we have three areas I've identified as significant impacts under CEQA. We need to address those issues, and we need to cross-examine staff on their assumptions about those issues.

This is one of only two areas in the FSA

where we do have a disagreement with staff. And so, based upon that, we're going to need some time to both put on our case and --

PRESIDING MEMBER LAURIE: Okay, well, --

MR. HARRIS: -- cross-examine.

PRESIDING MEMBER LAURIE: -- go ahead and do it. All I can tell you is that in my experience visual is by far the most subjective element of any environmental analysis.

MR. HARRIS: Agreed.

PRESIDING MEMBER LAURIE: And it is more common than not for an environmental analysis to make a finding of unmitigatable impact. It is a pretty common view. Coyote Valley had the same. So, you're free to make the argument and seek to establish a record that, in fact, the impact is not significant, if that's where you want to go.

MR. HARRIS: I think that's where we need to go, because of the concerns about whether there are significant impacts. We're of the opinion that there aren't.

And then the plume condition, as currently posited by staff, although I know there's some flexibility in that position, --

PRESIDING MEMBER LAURIE: Okay, go ahead

and present your witness.

HEARING OFFICER FAY: Can I ask, though, could you limit your presentation to the matters that are literally at issue regarding significance.

MR. HARRIS: I'm going to have to ask my witnesses to adjust their testimony on the fly, somewhat. We were aware that you all wished to finish tonight and we've already substantially cut back testimony in this area. And we're prepared to cut it back even further. And it may be a little bumpy because of that, but we will make it as quick as possible.

HEARING OFFICER FAY: Appreciate that.

MR. AJLOUNY: I was not aware that you wanted to finish everything tonight. I wish I did, so I could have made plans to --

HEARING OFFICER FAY: All you have to do is look at the schedule.

MR. AJLOUNY: Well, he just stated that he was aware that you wanted to finish tonight.

HEARING OFFICER FAY: We announced it at the beginning of this hearing.

MR. AJLOUNY: The way you made it sound like you were aware, --

MR. HARRIS: I'm aware from the --

MR. AJLOUNY: -- I thought previous to today.

MR. HARRIS: I'm sorry, from the filing, from the notice of the hearings, it says that both subjects are covered tonight, --

MR. AJLOUNY: I understood that.

MR. HARRIS: -- might carry over. So, we're prepared to finish both --

PRESIDING MEMBER LAURIE: To the extent that it's necessary. I don't believe that it's necessary.

HEARING OFFICER FAY: So why don't you present your witnesses and we'll get started.

MR. HARRIS: Okay. I'll ask my witnesses to bear with us; we'll go through this rather quickly then.

We have a panel of five witnesses who are available for various topics, and I will abbreviate all of their testimonies. I'd ask that the witnesses be sworn.

HEARING OFFICER FAY: Okay, please swear the witnesses.

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Whereupon,

THOMAS PRIESTLEY, JAMES DUNSTAN,
KENNETH ABREU, GARY RUBENSTEIN
and PAUL STOCKS

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

MR. HARRIS: Thank you.

Mr. Priestley will present the majority of our direct testimony; it's actually the majority of our entire testimony here tonight. And I'll ask him to answer the general litany on behalf of the panel.

DIRECT EXAMINATION

BY MR. HARRIS:

Q So, Tom, what subject matter are you here to testify about today?

DR. PRIESTLEY: Visual resources.

MR. HARRIS: And which documents are you sponsoring as part of your testimony -- excuse me, were the documents that you're sponsoring previously submitted in prior filings for this proceeding?

DR. PRIESTLEY: Yes.

MR. HARRIS: I'd like to go through

those previous exhibits and let you know which ones they are, and I'm stalling for just a second. Give the list to the Committee. The previous documents are section 811 of the AFC, which is exhibit 1; exhibit 3; exhibit 5; exhibit 13 -- Mr. Fay, do you have the list now?

HEARING OFFICER FAY: I'm sorry?

MR. HARRIS: Do you have the list now?

HEARING OFFICER FAY: Yes, I do.

MR. HARRIS: Okay. Not the first blank one; it's responses to CEC data requests numbers 89, 90, 95 to 99, and 102 to 105 set 1C is a new exhibit. I'd ask that that be given a number.

HEARING OFFICER FAY: That's exhibit 103.

MR. HARRIS: And responses to CEC data requests numbers 83, 91 to 93, set 1D, and that's a new exhibit. I ask that that be given a number.

HEARING OFFICER FAY: Exhibit 104.

MR. HARRIS: Continuing on, exhibits 46, exhibit 27, exhibit 14, exhibit 16A, exhibit 16B, a new exhibit PSA comment set 4, I'd ask that that be given a number.

HEARING OFFICER FAY: Exhibit 105.

MR. HARRIS: Exhibits 23; exhibit 66;

exhibit 30; and I understand that there are three corrections, as well, by Mr. Priestley. The gas metering station which is exhibit 12. Applicant's 3A testimony, which is the whole of this testimony for these topics. And applicant's additional visual testimony which was previously marked as exhibit 97.

So, with those understandings, are there any changes or corrections to your testimony?

DR. PRIESTLEY: No.

MR. HARRIS: And were the documents prepared either by you or at your direction?

DR. PRIESTLEY: They were.

MR. HARRIS: Are the facts stated therein true to the best of your knowledge?

DR. PRIESTLEY: Yes.

MR. HARRIS: And are the opinions stated therein your own?

DR. PRIESTLEY: Yes.

MR. HARRIS: Do you adopt this as your testimony for the proceeding?

DR. PRIESTLEY: I do.

MR. HARRIS: Can you briefly summarize your qualifications?

DR. PRIESTLEY: My name is Thomas

Priestley, T-h-o-m-a-s, Priestley is P-r-i-e-s-t-l-e-y. In terms of education I have an undergraduate degree in city regional planning from the University of Illinois. I have a masters in city planning from the University of California at Berkeley. I have a masters in landscape architecture with an emphasis in environmental planning from UC Berkeley. And I have a PhD in environmental planning which was awarded by the Department of Landscape Architecture, also at UC Berkeley.

I have about 20 years of professional experience which includes University teaching, giving courses in environmental planning, urban design and design research methods.

I've done research on public perceptions of transmission lines; land use and property value effects of transmission lines. Research on the various design and siting and architectural methods that have been used to improve the appearance of transmission lines and substations, and integrate them into their settings.

MR. HARRIS: Mr. Priestley, I think we'll abbreviate by saying your experience is in the record. Let me get one last thing, though,

which projects have you worked on for the Energy Commission?

DR. PRIESTLEY: I've worked on a number of CEC projects, more specifically Sutter, Delta, Elk Hills, Metcalf and Rio Linda.

MR. HARRIS: Will the staff stipulate that Mr. Priestley is an expert on visual resources?

MS. WILLIS: Yes, we will.

MR. HARRIS: All right, thank you. Tom, instead of going through the project setting, there's been quite a bit of discussion about that during the biology session, we'll pass over that.

I want to talk about the idea of KOPs. Can you give us a summary of how those KOPs are selected?

DR. PRIESTLEY: Okay, I think as I'm introducing the subject perhaps Steve will give everyone a copy of figure 8.11-1BR, which was a part of AFC supplement C, which is essentially a map of the project site, the project area. It includes the viewshed that is the area from which the project can be seen. And it also indicates the locations of the key observation points.

MR. HARRIS: So it's my understanding

that there were initially 11 key observation points that were selected?

DR. PRIESTLEY: Yes, there were. These were selected in collaboration with the staff of the CEC.

MR. HARRIS: And what objective do you have in logic for selecting a KOP?

DR. PRIESTLEY: Well, KOPs are a very common feature of procedures for evaluating the visual impacts of projects like this one. And the idea is that they are representative viewpoints of the project site as it might be seen from various locations around the viewshed.

And the idea is to pick a collection of sites to serve as KOPs that are going to be kind of representative of the different kinds of viewing situations that exist. And presumably they incorporate those locations where the views are deemed to be like most significant; where there is most likely a -- where there is the highest probability that there would be an effect by the project.

MR. HARRIS: Now, my understanding that there were again, 11 KOPs initially selected for the project, is that correct?

DR. PRIESTLEY: That is correct.

MR. HARRIS: And are you generally in agreement with staff's assessment on those KOPs in terms of impacts?

DR. PRIESTLEY: Yes. Of the 11 KOPs, staff has found a significant impact with only one. So it's clear that on let's say nine or eight of the KOPs staff and I have reached exactly the same conclusions that the project's impact would be less than significant.

MR. HARRIS: And I understand that there were two KOPs that were initially selected by staff, but staff didn't any further analysis of those, is that correct?

DR. PRIESTLEY: That is correct. These KOPs were selected in collaboration with staff. But as the project proceeded, it became clear that since these viewpoints were ones where viewers did not exist at present, they could not be considered to be part of the existing environment under CEQA, and therefore would not be subject to evaluation of impact under CEQA.

MR. HARRIS: And was that --

DR. PRIESTLEY: So, for that reason the staff, at least in its analysis, dropped these

locations.

MR. HARRIS: So staff dropped two and ended up with nine?

DR. PRIESTLEY: Yes.

MR. HARRIS: I understand you kept all 11, though, is that correct?

DR. PRIESTLEY: Well, I had done my analysis, I think, before this decision had been reached, so, yeah, I evaluated all 11.

MR. HARRIS: So for the nine the staff kept, they basically found no impacts for eight of those nine, is that correct?

DR. PRIESTLEY: That is correct.

MR. HARRIS: And you found no significant impacts for 11 of the 11 you analyzed, is that correct?

DR. PRIESTLEY: That is true.

MR. HARRIS: Can you quickly point out the KOPs and tell us which ones were eliminated and which ones you're in agreement with staff, again, very briefly now.

DR. PRIESTLEY: Okay, I'll try to be as condensed as possible. If you kind of follow along on your map there are two kinds of numbers. The ones with the black backgrounds are the key

observation points. The ones with the white backgrounds represent views that we included in our AFC just to provide a sense of the general character of the surrounding landscape.

MR. HARRIS: So we should focus on the black numbers with the arrows?

DR. PRIESTLEY: Yes.

MR. HARRIS: Or the white lettering in the black circles?

DR. PRIESTLEY: Yeah. And let's start with KOP2, which you'll find just about right in the middle of your map. That is a view from Monterey Road looking north towards the project site. It was taken just a little bit south of that stoplight at Blanchard Road.

And it was intended to represent views toward the project site from northbound Monterey Road, northbound railroad trains, from the community of Coyote and from a couple residences there on the east side of Monterey Road and the north end of Coyote.

MR. HARRIS: And what were the findings related to KOP2?

DR. PRIESTLEY: The findings was that the impact on this view was less than significant.

MR. HARRIS: And that's your finding and the staff's finding?

DR. PRIESTLEY: Yes.

MR. HARRIS: So you were in agreement on that KOP?

DR. PRIESTLEY: Yes, staff and I agreed that the project would not have a significant impact on this view.

MR. HARRIS: Okay, KOP3.

DR. PRIESTLEY: Yeah, KOP3 would be located at the south end of Monterey, of the community of Coyote, if you can picture that long yellow old feed and grain structure. At that location under current plans there is a proposal to build an overpass as a part of the development of the Coyote Valley, a new interchange would be developed at highway 101, a boulevard would extend westward. It would cross Monterey Road, and the railroad tracks, via an overpass. And then slope down into the new industrial campus.

So this would be the view from that future overpass.

MR. HARRIS: And is this one of the ones staff eliminated?

DR. PRIESTLEY: Yes, it is.

MR. HARRIS: You did your analysis on this. What were your findings?

DR. PRIESTLEY: Our conclusion was that the impact would be less than significant. And, in fact, in the PSA, the staff also concluded that the impact would be less than significant.

MR. HARRIS: Okay, quickly now to KOP4.

DR. PRIESTLEY: Okay, KOP4 is over on Santa Teresa Boulevard. On your map you'll see it, it's just a little bit north of Bailey Avenue. It's a view kind of looking more or less to the north across that open property that will be part of the future industrial campus.

And it's intended to represent views toward the site for northbound travelers on Santa Teresa Boulevard.

MR. HARRIS: What were the staff's findings?

DR. PRIESTLEY: The staff found that the impact on this view from this location would be less than significant.

MR. HARRIS: And did you agree with that finding?

DR. PRIESTLEY: Yes, I did.

MR. HARRIS: KOP5, please.

DR. PRIESTLEY: Okay, KOP5, again you'll kind of find it in the middle of your map, east of Monterey Road where it says Coyote Ranch. This KOP is located on parklands that belong to Santa Clara County.

Coyote Ranch is a historic ranch structure that's leased to a concessionaire who uses it as a facility for company picnics and the like.

So this is a view from the grounds of that company picnic facility looking west towards the project site.

MR. HARRIS: What were the findings related to this?

DR. PRIESTLEY: My finding and that of CEC Staff was that the impacts on this view would be less than significant.

MR. HARRIS: Okay, KOP6?

DR. PRIESTLEY: KOP6 is a view from Parkway Lakes which you'll see kind of about a third of the way down on your map over kind of towards the left.

The area just north of Metcalf Road, that's a recreational facility featuring fishing lakes. And this is the view from that

recreational facility south towards the project site.

MR. HARRIS: Okay, and again the finding?

DR. PRIESTLEY: My finding and the finding of the Energy Commission was that the project would not have a significant impact on the view from this location.

MR. HARRIS: Okay. Just to speed things up, Tom, KOP7, 8, 9 and 10 -- should be and 11, were also found to be insignificant by both you and the staff, is that correct?

DR. PRIESTLEY: That is correct.

MR. HARRIS: KOP10, real briefly, is the Fisher Creek corridor?

DR. PRIESTLEY: Yeah, that's a view from the potential location of a trail that could conceivably be developed at some future point in time along Fisher Creek. We picked a location on the most logical or most likely location of that trail, and it's a view towards the site from there.

And our conclusion was, with the landscape mitigation that we are proposing, that the impact would be less than significant.

MR. HARRIS: Did the staff analyze this Fisher Creek corridor KOP, or did they drop it?

DR. PRIESTLEY: This was dropped.

MR. HARRIS: So it was eliminated from --

DR. PRIESTLEY: On the grounds that at the moment there are no viewers there.

MR. HARRIS: Okay, and you agree with that decision?

DR. PRIESTLEY: Um-hum.

MR. HARRIS: Having gone through all those, again the summary basically is that staff ended up with nine KOPs, they found significance for 8, is that correct?

DR. PRIESTLEY: That's correct.

MR. HARRIS: And you looked at all 11 and found no significance for any of those 11?

DR. PRIESTLEY: That's correct.

MR. HARRIS: So we're really dealing with one KOP out of 11 here upon which you and staff disagree?

DR. PRIESTLEY: That's true.

MR. HARRIS: And which KOP is that?

DR. PRIESTLEY: That is KOP1, which is the view from Blanchard Road, which you'll see is

number 1 on your map just south of the project site.

And I think Steve will pass out some maps right now, and some photos that will --

MR. HARRIS: This is an important KOP, Tom, because it has all of the -- basically the disagreement between staff and you come down to this particular KOP. And so what I want to ask you to do through the pictures is briefly walk us down Blanchard Road, explain to us the views that staff found to be significant, and explain to us your reasoning for reaching a contrary result.

DR. PRIESTLEY: Yeah, my feeling is that we need to take a very very careful look at this area to see what's going on to understand why the impact on this location would be less than significant.

And first if you take a look at this air photo that we've handed out; this was filed in one of our data responses some time ago. You'll see that it includes the outlines of the major plant facilities. And then over on the right side of the air photo you can see Blanchard Road.

MR. HARRIS: Now, this is figure VIS1.2, the larger document you handed out to all of us,

is that correct?

HEARING OFFICER FAY: And this is from the AFC?

MR. HARRIS: And this is from, yes, I believe --

DR. PRIESTLEY: No, it's not from the AFC. It was from a response to a data request.

MR. HARRIS: I'm sorry, it's the response to a data request.

HEARING OFFICER FAY: Okay. Is there an exhibit number on that, do you know?

MR. HARRIS: We'll find it.

HEARING OFFICER FAY: Okay, appreciate that.

DR. PRIESTLEY: So over on Blanchard Road you see some numbers preceded by an R. Those are numbers that we assigned to the residences along the road. The numbers in circles relate to photographs, they're locations of photographs that we submitted as a part of that submission.

Some of those photographs we'll be talking about today. In fact, the first one is photo 20, which is a view looking south down Monterey Road, just so you can get a visual image of where Blanchard Road is --

MR. HARRIS: Tom, you're now on your color photos in the 11 by 8 --

DR. PRIESTLEY: Yes.

MR. HARRIS: Okay, thank you.

DR. PRIESTLEY: Yeah, I'm sorry.

MR. HARRIS: Okay, photo 20 is --

DR. PRIESTLEY: So, anyway, that first photo is if you're looking south, and what you're seeing by the side of the road is a disturbed area that at one time in the past when Monterey Road was a major highway, this was a weigh station. In fact, you can see that really big light fixture down there, which is a leftover from that facility.

So, in fact, if you were going to take a drive down Blanchard Road, you would make a left just beyond that big light fixture and just before you get to the tattoo parlor.

And then as you drive -- oh, I'm sorry, a right. You take a right down the road and first you would cross over a private railroad crossing. And then Blanchard Road, itself, is a private way. It's a narrow, mostly unpaved, one-way lane.

And then along Blanchard Road you come to a complex of structures. And photo 3 is a view

of the first one you come to, which is R5 on our air photo.

So this --

MR. HARRIS: Tom, just for clarification, the people are looking at their air photo. The 3 with the arrow on it is the photo we're looking at right now, is that correct?

DR. PRIESTLEY: That is correct.

MR. HARRIS: So the arrows indicate photos; the R's indicate residences. So R6, for example, is one of six residences, is that correct?

DR. PRIESTLEY: That's correct.

MR. HARRIS: Okay, so by the photo numbers they can reference these views, as well, off the aerial.

DR. PRIESTLEY: Okay, good.

MR. HARRIS: Thanks.

DR. PRIESTLEY: Yeah. So, anyway, yeah, photo 3 is a view towards residence 5. And you can see that this residence is completely surrounded by a board fence. There are these very large California pepper trees out front. So as a consequence, the residents of this home do not have views towards the plant site. Both because

of the barriers created by the fencing and landscaping, and also because of the view obstructions created by the orchard and home on the other side of the road.

And then as you continue down the road, you come to residence 6, which is the Passantino residence, which is located on the north side of the road. Photo 5 in our photo set here is a view looking north into the Passantino property, kind of looking towards their backyard.

And what you see here is that the primary living areas of this home are surrounded again by a very high board fence. So between the home and the fence it blocks the views from the road towards the plant site.

Photo 4 is a view from the Passantino backyard. One day last spring I went down to Blanchard Road and had a visit with the Passantinos, and was able to take a very very close look at the home and exactly what the viewing situation there was.

And it's clear that because of the fencing, in particular, the Passantinos do not have a view towards the power plant site from inside their home. And for the most part they do

not have a view towards the plant site from the primary living areas of their yard.

Behind the home is this enclosed patio with a swimming pool and as photo 4 indicates, when you are in that outdoor living area, because of the fence, because of the trees behind the fence, you are, for the most part, not seeing views toward the plant.

I should point out though if you look on the next page --

CHAIRMAN KEESE: Excuse me, wasn't photo 4 taken from over by the railroad tracks?

DR. PRIESTLEY: No, it wasn't. I think one of the problems here is --

CHAIRMAN KEESE: So this was taken in the backyard --

DR. PRIESTLEY: Yeah, this was taken in the backyard. One of the problems here is that I've put together photos that came from a couple of different submissions, so --

CHAIRMAN KEESE: Okay, that's fine. That's fine, so as long as I understand we're in the backyard of R6.

DR. PRIESTLEY: Yeah. And then as you turn the page here, I have a couple photos that

indicate that yes, if you are over in the side yard of the Passantino property, which is an orchard, from there you do have a view towards the plant site.

Also as the photo on the bottom of that page indicates, photo 7, if you are in the back area behind the area where the swimming pool is, it's kind of a service yard for the Passantinos, and if you are back in that service yard, you would also have a view towards the plant site.

MR. HARRIS: Tom, I guess the salient point there is for residence 6 there's no views from inside the house, is that correct?

DR. PRIESTLEY: That's correct.

MR. HARRIS: And the only views you have are photo 6, the side yard, and photo 7, the orchard, is that correct?

DR. PRIESTLEY: Well, the orchard that serves as kind of a service yard in the back.

MR. HARRIS: Okay, thanks. Continue, please.

DR. PRIESTLEY: And now actually if we could flip to the last page, page 5 of 5. If you can look at what's called photo 2 on the top of page 5.

And then refer to the air photo -- I'm sorry to make this so complicated, but then as you travel further down the road you pass first, after the Passantino house, you pass a big shop structure.

And then beyond that you come to R3 and R4. And on photo 2, if you look you can see these twin palm trees kind of over on the right side of the photo. You'll see that R3 is the home that's right behind the palm trees. It fronts on Blanchard Road.

So for this residence views towards the plant site are screened. Actually this home is just in front of those palm trees, the building across the street is a structure that had once been used for farmworker housing, but is no longer used for that purpose. So the residence I'm talking about is actually just in front of those twin palms.

But in any case, looking at this photo you can see that from inside this home, and from the use areas behind this home views toward the plant site are blocked by the mobile home behind it.

And then, in turn, for this mobile home,

which is R4 on our air photo, views towards the project site are blocked by all of the parked vehicles in this vehicle storage area that you can see on the photo, but apparently popped up sometime after this air photo was taken.

Then as you move further down the road, at the very right-hand corner of our air photo you come to R2, residence 2.

MR. HARRIS: So you're on page 5 of 5, it's listed as photo 1, is that correct?

DR. PRIESTLEY: And then to get an image of that residence, look at photo 1 at the bottom of page 5 of 5.

So what this, I think, makes very clear is that this home is behind this row of pine trees. And then taking a look at the photo you can see that between the row of pine trees and Tulare Hill, from inside this home, from the use areas in the immediate vicinity of this home you do not have a view towards the project site.

However, as CEC Staff has pointed out to us, if you go stand in the corner of the yard here, just a little bit above where you see R2, if you stand out in this area it's kind of like an informal use area that since this is a piece of a

larger agricultural property, it doesn't exactly have like a yard, but you could say that well, if you stand out in this area that might be available for the use of the residents of this home, if you stand out there in this far corner, yes, in fact, if you stand there you would be able to have a view towards the site of the proposed project.

MR. HARRIS: Okay, so let's walk through it in summary. There are six residences on Blanchard Road, is that correct?

DR. PRIESTLEY: That's correct. The sixth residence is further down the road and it's completely behind Tulare Hill. And its views are completely unquestionably screened by the hill. So that's where the sixth one come in.

MR. HARRIS: Okay. So we have six residences on Blanchard Road. You said of those six residences, none of the six residences have a view within the house or the primary living area, is that correct?

DR. PRIESTLEY: That is correct.

MR. HARRIS: And then of those six, two of them have views from basically from side yards, is that correct?

DR. PRIESTLEY: That's correct.

MR. HARRIS: So essentially two of the six residences from side yards you might be able to see towards the plant?

DR. PRIESTLEY: That's correct.

MR. HARRIS: And Blanchard Road is also oriented to the east and the west, is that correct?

DR. PRIESTLEY: That's correct, and that's very important to note because we know that in evaluating the sensitivity of views from residential areas that the Energy Commission takes into account not only views from homes, but views that residents might have as they are circulating about their neighborhood.

And in this case, because of the street's east/west orientation, and the fact that the power plant site is located well to the north, if you are driving into or out of Blanchard Road, the power plant site would not be in your primary cone of vision.

So, for example, when you drive into Blanchard Road you don't see the -- you wouldn't see the power plant like right at the end of your street, and it wouldn't be like right next to your street, sort of like looming over your

streetscape. It's kind of like well off to the side of your normal cone of vision, at least for someone who would be driving in and out of the neighborhood.

Something else to point out, too, is that because of the configuration of land uses along Blanchard Road, in fact from a big chunk of this road your views toward the plant site would be blocked by the various structures on the north side of the road.

And, again, you can see that very clearly on your air photo.

MR. HARRIS: So, again, traveling up and down Blanchard Road, because of the east/west orientation you're not going to have a lot of -- you won't have a view of the plant, is that correct?

DR. PRIESTLEY: That's correct.

MR. HARRIS: Can we talk about visual quality and visual sensitivity real briefly, since staff has used those as significance criteria?

DR. PRIESTLEY: Yeah. Staff has indicated that the quality of the views from Blanchard Road is, if I'm correct, moderately high. And my assessment is that the quality of

the views from Blanchard Road are moderately low to moderate, and for two reasons.

One, if you are looking straight at the plant site from one of the areas where there's nothing in the foreground, you're just kind of looking across the open field to the plant site. There is some level of visual degradation because of the presence of the existing clusters of transmission lines on Tulare Hill. One of those towers something on the order of 176 feet tall. So there's that.

And perhaps more importantly, or just as important, from many portions of Blanchard Road when you are looking towards the plant site, you know, in those situations where you can see it, in many cases what you are seeing in the foreground is nonresidential activities.

Blanchard Road is not a strictly residential enclave. It's kind of a -- it's a rural area where there is really kind of a mix of activities going on. There are the residences, but there's also a stone shop; there's an RV storage facility; there is some kind of a truck depot. So in many places along the road you're seeing things that are, you know, definitely

nonresidential in character.

And what you can see, say for example, in photo 8, on page 4 of 5, you see, you know, lots of parked trucks on the road. You see stuff from the stonework shop that's kind of out on the edge of the street.

MR. HARRIS: So the general degraded quality then leads you to believe, then, that this area is actually low to moderate visual quality, and not moderate to high, is that correct?

DR. PRIESTLEY: That is correct.

MR. HARRIS: The second criteria staff applies is visual sensitivity. Can you briefly summarize your conclusions on that, as well?

DR. PRIESTLEY: Yeah, my conclusion is that the level of visual sensitivity is low because it is not seen from any residences. And because it is seen only from peripheral areas of two residences. And that it is not visually prominent in the views of people as they are circulating around their neighborhood.

MR. HARRIS: So your bottomline conclusions are then visual quality is low to moderate and visual sensitivity is low, is that correct?

DR. PRIESTLEY: That is correct.

MR. HARRIS: And that's based upon the CEC Staff's criteria for significance in visual sensitivity and quality, is that correct?

DR. PRIESTLEY: Yes.

MR. HARRIS: I understand you had one more set of handouts that you'd like to go through.

PRESIDING MEMBER LAURIE: But before you proceed, Mr. Harris, I need clarification of Dr. Priestley's testimony on the issue of sensitivity.

Why don't you turn to photo 6.

DR. PRIESTLEY: Yes.

PRESIDING MEMBER LAURIE: It's my understanding that the plant would be visible in photo 6, --

DR. PRIESTLEY: Yes, --

PRESIDING MEMBER LAURIE: -- photo 6 location.

DR. PRIESTLEY: Yes, it would. If you can see that transmission tower, the power plant would be a little bit to the right of the transmission tower that you see.

PRESIDING MEMBER LAURIE: I may have a challenge articulating my question, so bear with

me.

DR. PRIESTLEY: Okay.

PRESIDING MEMBER LAURIE: If you have a standard subdivision lot and you want to know what the impact of the view is on that particular resident, would you primarily focus on the residence, itself, on the view from the residence, itself?

DR. PRIESTLEY: I would take a look at the view from the residence and a view from the primary use areas on the vicinity. So I would really kind of consider the residence in the context of the neighborhood, as well. I would look very carefully, you know, try to pinpoint both factors.

PRESIDING MEMBER LAURIE: Okay. Let's say you had a residence on a 20-acre parcel. And the 20-acre parcel offered different views from different locations on that parcel.

Where would you focus your examination? For example, if a project was invisible from the residence, but highly visible from the southeast corner of the 20-acre parcel, would that be significant?

DR. PRIESTLEY: I would want to do kind

of a careful analysis of well, what is the use of the parcel. Take a look, where is the primary use area. If there were a corner where you might have a view of the project, I'd try to evaluate, well, just how frequently is that corner used. And, you know, what is the nature of that use. Is this where they have their, you know, like their little meditation den, or is this where they fix their cars.

I'd try to take all those things into consideration.

PRESIDING MEMBER LAURIE: Do you believe that to be a CEQA standard? That is, nature of the use of the location being examined.

DR. PRIESTLEY: CEQA provides us very very little guidance in terms of evaluation of the significance of impacts, so what I have chosen to resort to in evaluation of impacts is to adhere to the decision rules that CEC Staff has established in previous proceedings as kind of a formula for evaluating what is and what is not significant.

PRESIDING MEMBER LAURIE: Okay, thank you. And your testimony is that in looking at photo 6, that the sensitivity is not high because of the particular use to which this part of the

owner's property is being put, is that correct?

DR. PRIESTLEY: For that location, yes.

PRESIDING MEMBER LAURIE: Are there any -- there's no doubt, and I applaud you on your credentials, is it fair to say that aesthetics and visual impacts are related to individual psychology? That is, it's how people react to what they're seeing?

DR. PRIESTLEY: Well, based on my professional training and experience I would say it's a very very complicated formula. That, in fact, there are individual differences in the way that individuals respond to things.

But, at the same time, there are some kind of within the context of our culture there are some responses that are, let's say, fairly predictable, or are relatively common.

So it is kind of a mix of the universal and the individual, I'd say.

PRESIDING MEMBER LAURIE: How far is the spot from which photo 6 was taken from the residence?

DR. PRIESTLEY: Oh, the residence is just about next door. If you see the -- well, let's say the Passantino residence is just about

next door. If you see those trees over on the right of the Passantino residence in their fenced area, it is just a little bit to the right of that.

PRESIDING MEMBER LAURIE: A hundred feet?

DR. PRIESTLEY: Yeah, the residence, itself, yeah, I think that's fair.

PRESIDING MEMBER LAURIE: Okay. So, if one were to walk out of their residence no more than 100 feet and engage this view would one not likely be disturbed by the view of the power plant?

DR. PRIESTLEY: That one is a little bit difficult to give a blanket answer to because I think that there are a number of different ways that you could look at and evaluate this.

One is the day I went down to take a look at things, I talked to Mark Passantino. And he was, you know, rather -- he was, well, pleased that somebody actually had come to take a look at what was going on on his property, because a lot had been made about views from his property, but no one had, up to that point, had taken the time to actually come down and take a look.

So, he was pleased. But at the same time, he was a little bit bemused about, you know, what all the stir was about, because at least talking to him his own personal response that he conveyed to me is that, you know, --

PRESIDING MEMBER LAURIE: Okay, well, that's a little too much hearsay.

DR. PRIESTLEY: Okay. Sorry.

PRESIDING MEMBER LAURIE: The point of my question is in anticipation I have, without any evidence in front of me, that people view the entirety of their property as very much their castle.

And it could very well be, again I would surmise that one's view at the end of their ten-acre parcel is just as important to an individual as one's view from their typical subdivision backyard.

You may want to impose some reasonableness standard there. And I'm surmising that that's kind of what you are doing, and if I understand your testimony, is that this location, not being in the immediate, within 100 feet of the residence, is not sufficiently sensitive to make the impact significant.

DR. PRIESTLEY: That is essentially what I'm arguing, yes.

PRESIDING MEMBER LAURIE: Okay, thank you for the clarification, sir.

Mr. Harris.

MR. HARRIS: Thanks. We've got one more set of handouts. We're closing on this point.

CHAIRMAN KEESE: While you're doing that, are we going to use this photo for more than this purpose? Because do I see the entry to the property outlined in black, is that -- the power plant is etched in fine black lines, and the entrance to it goes across Blanchard Road and --

DR. PRIESTLEY: Yes.

CHAIRMAN KEESE: That's what we have? Thank you.

MR. HARRIS: Tom, I understand based upon -- your job was to figure out, you know, what the CEC Staff considers to be significant, and one of the things you did was to look at their findings related to the alternative sites, and compared that to this KOP1.

Okay, we're focusing on the KOP1, the one of 11 or one of 9, depending on how you count them. But you have a significant disagreement

with staff.

And so explain to us all what these photos are that are being passed around, and how you're going to use those.

DR. PRIESTLEY: Yeah, what's being passed around right now is a set of photos that was filed as a part of our alternatives analysis, and in that filing there is a more detailed explanation of exactly what these are, and how they were created.

But to get right to the point, they are views of each of the CEC Staff's, at least of four of the CEC Staff's alternatives sites taken from viewpoints that we thought were important.

We attempted to super --

MS. WILLIS: Excuse me, --

DR. PRIESTLEY: We took the plan for Metcalf --

MS. WILLIS: -- I want to object to this. I mean this is testimony that hasn't -- I mean it's just been filed, but --

MR. HARRIS: We're not offering it into evidence here, we're using it for illustrative purposes to show what the staff has determined to be significant as it relates to the alternative

sites, and the Metcalf site.

MS. WILLIS: And these pictures are from staff's testimony?

MR. HARRIS: These pictures are from applicant's testimony that has been filed for the, I think the alternative section, but again we're not going to move them into evidence --

MS. WILLIS: Well, no, I guess --

MR. HARRIS: We'd use them the same as we would use whiteboards to show those areas.

MS. WILLIS: I'd like to address the Committee. My concern is that pictures can be taken from any number of locations and orientations. And these may or may not be representative of the alternative sites.

So just to clarify that point.

HEARING OFFICER FAY: Okay, we'll take that as clarification. The objection's overruled. Go ahead, Mr. Harris.

DR. PRIESTLEY: So what these --

MS. DENT: I'm going to put in an objection --

MR. AJLOUNY: Wait a minute.

MS. DENT: I want to put an objection on the record, too, to the testimony because it is

testimony on impacts from alternative sites, and we're not here today to address alternative sites.

MR. HARRIS: Actually that's not the purpose of the testimony at all. If you'll let us get to it, although he explained the offer. Essentially what we're doing, the question before us is what does the CEC Staff consider to be a significant visual impact.

We have four alternative sites. We're going to go through them quickly, give you the staff's bottomline determination, and to compare that to this site so you can see how the staff significance criteria is applied.

PRESIDING MEMBER LAURIE: In applicant's view.

MR. HARRIS: In applicant's view.

MR. AJLOUNY: Is that review in the alternative section of their point of view of visual impacts? When you just stated that last sentence.

MR. HARRIS: No, that's not what I meant. If you interpreted it that way, no.

MR. AJLOUNY: Okay, so it has nothing to do with the way the staff looks at alternative sites in the area of visual?

MR. HARRIS: It has everything to do with how the staff determines significant visual impacts. And that's the purpose of the testimony. And I will not be moving these documents into evidence. They're like the whiteboards we've been pointing at all day. I just didn't want to go through and mock-up five giant, or ten in this case, giant whiteboards. If you want me to do that, I can do that.

HEARING OFFICER FAY: We'll overrule the objections and let --

MR. AJLOUNY: But I just --

HEARING OFFICER FAY: -- proceed.

MR. AJLOUNY: Well, I just feel that opens the door for us to talk about alternative sites in that area, that's all. If they can do it, we can do it.

PRESIDING MEMBER LAURIE: Well, I guess that's not where we're going.

MR. HARRIS: It actually isn't where we're going, and, Tom, why don't you proceed and he can be cross-examined obviously on what you present, so go quickly.

DR. PRIESTLEY: So, anyway, in terms of what you're seeing here, to the best we could we

took the layout of the Metcalf facility, configured it so that it would fit on these sites, and then prepared visual simulations to show what a power plant like Metcalf would look like if it was located on each of these sites.

The first one that you see is a view of alternative site 1 from Zanker Road, about a third of a mile north of highway 237. I don't have the exact traffic data; this is a moderately well traveled road. It's used by people going to and from Alviso to the wildlife refuge.

MR. HARRIS: Tom, on the bottom that's the photosimulation, so the top is the as-existing, and the bottom is the photosimulation?

DR. PRIESTLEY: Yes, it is.

MR. HARRIS: And what was the CEC Staff's finding related to significant impacts from this view?

DR. PRIESTLEY: The CEC Staff concluded that a power plant like Metcalf located on Alt site 1 would have an impact that was less than significant.

MR. HARRIS: So, this is an insignificant --

MR. AJLOUNY: I object to the fact that

he's going to testimony that hasn't been --

MR. HARRIS: He's objected and he's --

DR. PRIESTLEY: Well, you see what I'm --

HEARING OFFICER FAY: We've overruled the objection.

MR. HARRIS: The objections are taking longer than this testimony.

HEARING OFFICER FAY: Please, let them go ahead.

BY MR. HARRIS:

Q Okay, Tom, the natives are restless, so quickly to site 2.

DR. PRIESTLEY: Okay, that sheet is Alt site 2 as viewed from highway 237; this is a view north towards that greenhouse area. The lower photo shows you what this site would look like from highway 237.

This viewpoint was selected because this highway has an average daily traffic of 108,000 vehicles per day, making it one of the most heavily traveled routes in Santa Clara County.

MR. HARRIS: So based upon the CEC Staff's criteria for significance, they found this to be what?

DR. PRIESTLEY: Less than significant in impact.

MR. HARRIS: So this is less than significant impact. Go now to sheet 3, Tom, please quickly.

DR. PRIESTLEY: Okay, this is a view toward Alt site 4. As you know alt site 4 is in the City of Fremont --

MR. HARRIS: Alt site 3.

DR. PRIESTLEY: Alt site 3, rather, is in the City of Fremont. About a third of a mile north of there you come to the Newark City limit. And just across Stevenson Boulevard, just inside Newark is a very very dense residential area that exits onto Stevenson Boulevard by way of Parada Street, so this is a view looking down Parada Street towards the project site.

So this is a view towards the project that would be seen from the windows on the upper and lower storeys, the front doors, front yards of a number of townhouses. And would also be seen by the many many residents of this area as they exit the neighborhood via Parada Street.

MR. HARRIS: And, again, applying the CEC Staff's criteria, what was the find about this

viewshed?

DR. PRIESTLEY: CEC Staff concluded that a power plant on this location would have a visual impact that was less than significant.

MR. HARRIS: Okay, now go to alternative site 4.

DR. PRIESTLEY: Alternative site 4 is in Fremont on South Fremont Boulevard just north of Grimmer. This is a view from South Fremont Boulevard looking across the project site.

South Fremont Boulevard carries an average daily traffic of 17,500 vehicles. It has been identified in both the Alameda County scenic route element and in the City of Fremont city plan as a designated scenic route, primarily because of the views towards the East Bay Hills that are possible from that route.

MR. HARRIS: And again, the findings of significance here?

DR. PRIESTLEY: CEC Staff concluded that a power plant like Metcalf on this site would have an impact that was less than significant.

MR. HARRIS: So for all four of these the findings was less than significant?

DR. PRIESTLEY: That’s correct.

MR. HARRIS: And will you turn now to the last page. This is the view from KOP1, is that correct?

DR. PRIESTLEY: Yeah, this is the view from KOP1 which is kind of at the east end of Blanchard Road, in fact you can see the corner of the Passantino orchard there on your left.

So if you were standing on the side of the road and looking due north, this is the view towards the site that you would have.

MR. HARRIS: And, again, this is a view the CEC Staff found to be significant?

DR. PRIESTLEY: Yes, it is.

MR. HARRIS: Do you agree with that conclusion?

DR. PRIESTLEY: No, I do not.

MR. HARRIS: So based upon the application of the staff's criteria for the alternatives sites, what conclusion do you draw?

DR. PRIESTLEY: It reinforces my conclusion that the impact of the proposed project on the views from KOP1 would be less than significant.

MR. HARRIS: And that's in large part due to the six residences, the few number of

viewers and the no major highway, is that correct?

DR. PRIESTLEY: That's correct.

MR. HARRIS: I want to move subjects now. Let's leave KOP1.

PRESIDING MEMBER LAURIE: I have a question. Oh, I'm sorry, go ahead.

MR. HARRIS: Sure. I wanted to move on to the next potential significant issue.

PRESIDING MEMBER LAURIE: In looking at your last page now my understanding is the same residence is in photo 6 in the previous set of pictorials, the last page of the document that you've been testifying from?

DR. PRIESTLEY: Yes.

PRESIDING MEMBER LAURIE: Okay. That's the same residence as photo 6, right?

DR. PRIESTLEY: Okay, I'm sorry, yeah. Photo 6. If you were standing a little bit over to the right of the view that you see in photo 6 you would be seeing this view.

PRESIDING MEMBER LAURIE: And is it your testimony that that's not significant?

DR. PRIESTLEY: Yes, it is. Applying the criteria that the CEC has used for determining significance, and as you recall the formula used

to determine if the preconditions exist for a significance to take place is if the quality of the existing view is moderate to moderately high, and if the level of sensitivity is, let's see, moderately high to high.

And my opinion is because of the small numbers of residences potentially affected in this area, and because the views affected are not primary views, we're talking about two residences. We're not talking about views from homes. We're talking about views from a small portion of these two properties.

For that reason I have concluded that the sensitivity of this view does not meet the test of being moderately high.

PRESIDING MEMBER LAURIE: Okay, thank you, sir.

MR. AJLOUNY: Can I just make one statement.

MR. HARRIS: No.

MR. AJLOUNY: Regarding the surprise --

HEARING OFFICER FAY: I'm sorry, no. Go ahead, Mr. Harris.

MR. HARRIS: Okay, we're moving on now past KOP1, and I want to talk about the issue of

the combination of views. And this was described as being a combination of views throughout the area.

Can you provide us with a little bit of a background on that? Specifically from reading the FSA, could you determine what this combination of views criteria meant?

DR. PRIESTLEY: No, I couldn't.

MR. HARRIS: And could you elaborate on that, please. For example, could you determine from the FSA what views were being combined?

DR. PRIESTLEY: No, I couldn't.

MR. HARRIS: Could you determine which homes were affected by those combined views?

DR. PRIESTLEY: No. Those homes were not identified.

MR. HARRIS: And could you determine who would be seeing these views, who'd be travelling in the area?

DR. PRIESTLEY: There was no discussion of any of these items. Several blanket assertions were made, but there was -- no analysis was presented to provide evidence to back up these assertions.

MR. HARRIS: So you had difficulty

determining which views exactly were being combined, is that correct?

DR. PRIESTLEY: That's correct.

MR. HARRIS: Were any KOPs used in this analysis from what you can tell?

DR. PRIESTLEY: No reference was made to impacts on specific KOPs.

MR. HARRIS: Again, there's no indication of which KOPs were being used at this point?

DR. PRIESTLEY: There was not.

MR. HARRIS: Has staff presented evidence that supports this assertion that there'd be some combination of views that would substantially degrade the visual character of the surroundings?

DR. PRIESTLEY: Again, as I read the three or so paragraphs that constituted this analysis there was a series of assertions, but no specific evidence was presented to indicate, well, what specifically are the views, and how specifically are they being affects, and how are these views different from the views included or represented by the 11 KOPs.

And so, in fact I was a little bit

mystified by this analysis because I really had a very strong feeling that our 11 KOPs did a pretty good job of representing the universe of views towards the project site from around the viewshed.

In fact, if you compare this project to other typical CEC projects, you'll see that we have a lot of KOPs, 11. And like in Delta I think there were a total of four, one of which was for the transition station rather than for the power plant, itself.

So, you know, my feeling is that the KOPs do a very good job of kind bracketing all of the views. And what you can say about the KOP based analysis is that for each of those we have quite a lengthy and specific analysis of what it is we're seeing, how many people are affected, what the quality of the view is, how the view is going to change.

We have visual simulations that show us exactly what's going to happen. And I know also, too, we've submitted countless photographs and cross-sections. So, yeah, we have a pretty good record for determining, well, how much are we going to be able to see and how is the presence of the project going to affect these views.

That's why I was a little bit stunned to read this analysis that suggests that, well, there's this universe of views out there that somehow weren't reflected in the KOPs that we missed. And then to have, without any evidence, to have these conclusions being made that, oh, well, because of the effects on these unnamed views we're going to have a significant impact.

MR. HARRIS: So you've never seen this kind of a combination of views analysis in anything else you've ever done, is that correct?

DR. PRIESTLEY: I have never seen one like this one.

MR. HARRIS: Okay. There was some question as to whether this might be a subset of cumulative impacts analysis, but I understand that staff -- is it your understanding that it is not a subset of cumulative impacts?

DR. PRIESTLEY: You know, I can't tell.

MR. HARRIS: Okay, fair enough. With regard to this whole issue of the combination of views, what's your bottomline analysis?

DR. PRIESTLEY: Well, I guess my bottomline analysis is that I would entertain, I suppose, this kind of a finding if I could see the

data on which it is based.

If I saw the views that were being talked about, if I were presented a matrix showing me how exactly the effect on each of the views that was being combined was being affected, and in what way, and if I saw, for example, some justification that weights might be attached to each of these effects to somehow combine them to create a cumulative effect or an overall effect, then, yeah, then I would be willing to talk about it, you know, to consider it very very carefully.

But, again, what I see is a whole series of assertions without any supporting evidence.

MR. HARRIS: So without that supporting material you basically can't support this view, is that correct?

DR. PRIESTLEY: No, I can't.

MR. HARRIS: I want to move to the third area now that was considered by staff in the cumulative impacts of the Metcalf project.

Let's begin with the Metcalf project, itself. Can you talk about how Metcalf has mitigated its contribution to the area's cumulative impacts.

DR. PRIESTLEY: There are a number of

things that are relevant here, and you know, in fact you'll be hearing a little bit more about this in detail from Paul Stocks, the project architect, a little bit later.

But Calpine has gone to extraordinary lengths on this project to hire world class talent to come in to figure out a way to make the structures involved neat, attractive, designed them in a way that's going to fit into the evolving landscape in this area.

At the same time the project has been, you know, really lavishly landscaped. We have a landscape plan that shows hundreds of plants. Calpine hired the landscape architect who works for the firm that developed the guidelines for the North Coyote Industrial campus, so he was very very well versed in exactly what the landscape design idiom for this region is.

And he took great pains to follow the design guidelines to create a planting scheme that would be consistent with that which is being called for for the adjacent properties.

And then there are other kind of siting things that helped this project that went in. The fact that it is located in this corner of the

valley, up against Tulare Hill, which provides screening for a very large area to the north - well, to the northwest and to the west, and to some degree the southwest. Which, at the same time, provides kind of a visual backdrop so that the taller elements are seen against the hill rather than against the sky.

MR. HARRIS: How about in terms of acreage here, what are we talking about?

DR. PRIESTLEY: The project site is something less than 20 acres, it sits at about 15.

MR. HARRIS: And subject to check would you accept that that represents about 1.5 percent of the land in the future Coyote Valley development area?

DR. PRIESTLEY: Yeah, it’s a very very small amount in relationship to the rest of the area that is now slated for development.

MR. HARRIS: If you also assume in the future the closest row of buildings in the CVRP campus, would those have a screening effect, as well?

DR. PRIESTLEY: If you were looking towards the project site from say the area where the Coyote Valley Parkway would be entering the

site, yeah, the plant would be very very well screened. You know, unless you were just like right at the very north end of that project, for most views the views toward the power plant would be pretty well screened.

MR. HARRIS: So, again, what's your bottomline conclusion related to the cumulative impacts of the Metcalf project?

DR. PRIESTLEY: Yeah, my conclusion is that this project would not combine with the effects of these much much bigger projects to have a cumulative effect.

MR. HARRIS: Okay, thank you. There's some discussion about LORS compliance in the testimony of staff, as well, and I think there were initially 16 LORS that were considered out of compliance with.

Can you, without going through each one of those, please, do you agree with that finding of 16 LORS?

DR. PRIESTLEY: No, I don't.

MR. HARRIS: What was your finding with regard to this?

DR. PRIESTLEY: Well, there are a couple things that we can say about, you know, if you're

counting compliance with LORS, there are a couple things that you can say.

One is since the time that staff prepared its final staff assessment, staff analysis, the City of San Jose has adopted a revised version of the master development plan for the north Coyote industrial campus.

A number of the things that had been included as guidelines in those documents that are counted as part of that 16 are no longer regulations or guidelines, so there's now no question of conflict.

MR. HARRIS: And that's acknowledged in staff's testimony, is that correct?

DR. PRIESTLEY: In the most recent testimony, it is.

MR. HARRIS: So the number 16 is no longer correct?

DR. PRIESTLEY: That's correct.

MR. HARRIS: Do you believe Metcalf is in substantial compliance with the applicable LORS?

DR. PRIESTLEY: Yes, it would be fair to say it's in substantial compliance. There are some things that are guidelines to which the

project does not comply.

For example, the MDP guidelines indicate that the entrances to campuses should be marked by a cluster of four trees, and our current landscape plan does not do that. We have some reasons for not doing it, but if the City would like us to do that, there's really no reason why that couldn't be done.

MR. HARRIS: But in the general hierarchy of LORS, these seem to be things that are more along that order, is that correct?

DR. PRIESTLEY: The ones in which there is clearly, you know, a lack of -- where clearly there isn't exact compliance, they are the elements that are down at the lower end of the hierarchy.

Again, very specific design guidelines which are, in fact, framed in a way in which they sound like they are intended to provide guidance, that they are not strict requirements.

MR. HARRIS: Now, Mr. Priestley, you've offered some suggestions on conditions of certification. Rather than going through each of those, I think we'll just note that here and make you available for cross-examination on VIS1, 5, 9

and 11. I understand others are prepared to discuss VIS10, so with your agreement we'll move past that, if that's okay?

DR. PRIESTLEY: Okay.

MR. HARRIS: You've also reviewed staff's rebuttal testimony, is that correct?

DR. PRIESTLEY: That's correct.

MR. HARRIS: And does that in any way change your conclusions?

DR. PRIESTLEY: No, it does not.

MR. HARRIS: Can you briefly now give us your bottomline conclusions.

DR. PRIESTLEY: Yeah, my final conclusion is that the project would not have a significant adverse visual impact on views from the Blanchard Road area. That the project would not have a significant adverse impact on a combination of views from throughout the area. And that it would not contribute to the creation of a significant cumulative impact.

MR. HARRIS: Thank you. Move to the next witness now and talk about the issues related to the plume, actually the next two witnesses will deal with the plume issue because that's been an issue of specific concern to the community and

others.

And so I want to start with Mr. Jim Dunstan, he's been previously sworn.

Jim, can you again state your name for the record, and spell it.

MR. DUNSTAN: My name is James Dunstan; last name is spelled D-u-n-s-t-a-n.

MR. HARRIS: And can you briefly summarize your qualifications.

MR. DUNSTAN: I hold a bachelor of science and master of science degrees in mechanical engineering from Washington University in St. Louis. I have been a registered professional mechanical engineer in California since 1973. And I've been directly involved in the design of power plants and power plant systems of various types for essentially my entire 30 years with Bechtel.

MR. HARRIS: I'd ask is there any objection to stipulating to Mr. Dunstan's qualifications, and we can stop at that point.

PRESIDING MEMBER LAURIE: Yes, the Committee will accept him as an expert.

MR. HARRIS: Thank you. Jim, you're going to talk about the plume abated cooling tower

and the HRSG, the HRSG, heat recovery steam generator plume abatement.

Can you give us a brief description of the proposed hybrid wet/dry cooling tower?

MR. DUNSTAN: The type of cooling tower proposed for the Metcalf Energy Center is generically known as a hybrid. More commonly known as a wet/dry tower.

There are a number of variations on the design, but they all operate on the same basis, that is that a portion of the total air flow into the tower is not admitted to the wet section of the tower, but rather is admitted through a series of heat transfer elements that increases the temperature of this dry air, ambient air, and then mixes it with the saturated air coming out of the wet section of the tower, effectively reducing the relative humidity of the exhaust air, and therefore its dew point temperature.

The effect is that the plume travels farther from the top of the tower before the water vapor in the plume condenses into visible droplets. And is therefore diluted in the surrounding ambient air so that those droplets do not form.

MR. HARRIS: So you've described how the plume forms. Can you talk about the design limitations for the cooling towers?

MR. DUNSTAN: Wet/dry hybrid cooling towers are generally specified to be so-called plume-free at a combination of ambient dry bulb temperature and coincident relative humidity.

The design of the towers is such that at higher ambient temperatures or lower relative humidities than at nominal design point the water vapor and the exhaust will not condense into visible droplets when mixing with the cooler ambient air.

Below the design point temperature and above the design point humidity water vapor in the exhaust will begin to condense around the periphery of the columns of moist air leaving the top of the tower.

As the temperature drop and the humidity increases, a greater fraction of the total water vapor in the discharged air will condense into water droplets that are visible.

This technology can be applied to a point, and in fact the technology is most commonly used in situations where a cooling tower is very

close to a flight path, where a visible water vapor plume might obstruct visibility; or is very close to a roadway in regions that have very low ambient temperatures, very cold weather, such that the condensed water vapor could form ice on the roadways or could obscure visibility on the roadways.

None of those conditions exist in the north end of the Coyote Valley in Santa Clara County, California.

The extent to which a hybrid tower can be designed to prevent the formation of visible water vapor droplets is limited in that there is only a fixed amount of heat available in the water that is sent to the tower for cooling.

And at a certain set of ambient temperature and humidity conditions the tower, in order to prevent formation of a visible plume, would have to operate entirely as a dry heat exchanger. There would be no water allowed flowing over the wet section of the fill, because in fact the ambient air would be already so close to the dew point that any additional moisture would cause the formation of a visible plume.

In discussion with the manufacturers of

these types of towers, and we've been dealing with three, and one in particular, GEA Thermal Dynamics, which has done -- they've provided lists, all three of these vendors have provided lists of plume abated towers to us, and there are literally dozens of them in use all over the world, almost entirely in cold climates.

GEA has told us that much below the temperature conditions that we've proposed for the Metcalf Energy Center the wet/dry cooling tower may not be possible, total prevention of a plume may not be possible. And that, in fact, the size of the tower would approach and possibly even exceed the size of an air cooled condenser for the same duty.

Therefore, it's my conclusion that the tower that we've proposed for the Metcalf Energy Center is pushing the envelope for the size and thermal duty and weather conditions to be expected in the north end of the Coyote Valley in Santa Clara County, California.

MR. HARRIS: Let's talk about that design. You talked about it being 30 degrees Fahrenheit, and is it 90 degrees relative humidity?

MR. DUNSTAN: 90 percent relative humidity.

MR. HARRIS: 90 percent, I'm sorry. What does that mean in simplest terms?

MR. DUNSTAN: That means it's an extremely chilly damp day in the Coyote Valley. This is a very unusual weather conditions, when it's that cold and that damp simultaneously.

MR. HARRIS: So, put another way then, if the temperature is above 30 degrees Fahrenheit and the relative humidity is below 90 percent, --

MR. DUNSTAN: There will be no visible plume from this tower.

MR. HARRIS: -- that means there will be no visible plume from the tower. And that's the design point which you've set this facility to?

MR. DUNSTAN: That's what we've proposed.

MR. HARRIS: Let's talk a little about the HRSG now, the heat recovery steam generator abatement scheme. Can you give us a brief description of how you're going to physically prevent the formation of plumes there.

MR. DUNSTAN: Again, the potential for the formation of a visible water vapor plume from

a HRSG exhaust stack is due to the moisture content of the exhaust air.

In the case of a combined cycle plant, unlike a fired boiler plant, the percent moisture in the exhaust gas is much lower than in a conventional fired boiler plant.

It's not at all unusual on moderately cool mornings to see very impressive water vapor plumes coming out of the tops of these tall stacks in all the existing fired boiler plants. And that's because they run at very low excess air, because air does not help them generating power. In fact, it absorbs heat from the fuel and does no good.

So, in a combined cycle plant, first we have a better situation as far as plume formation because the moisture content of the exhaust gas is diluted by the excess air that is used to actually produce more power in a gas turbine.

So if a plume is to form it will form at a much lower temperature or higher humidity than would be the case for a plume formation from a fired boiler plant.

Also, in a combined cycle plant it's relatively easy to increase the temperature of the

exhaust gases. The heat recovery steam generator is a very effective heat transfer device. It's very effective at absorbing heat from the exhaust gas; by intentionally reducing its effectiveness more of that energy is allowed to escape to the atmosphere.

In the case of the HRSGs for the Metcalf Energy Center we've confirmed that at the design point conditions we've been talking about, which is 30 degrees dry bulb and 90 percent relative humidity, we can entirely shut off the flow of boiler feedwater to the final stage of the heat transfer sections in the boiler that nears the stack, that is. And immediately effect a 100 degree increase in the temperature of the gas going up the stack.

Specifically we can raise the temperature of the exhaust gas from about 188 degrees to about 288 degrees.

MR. HARRIS: Is this through the use of an economizer bypass system?

MR. DUNSTAN: Correct.

MR. HARRIS: In layman's terms for those of us who had a liberal arts education, can you tell us how that economizer bypass system helps to

eliminate the plume formation?

MR. DUNSTAN: Well, first off it's called an economizer because it captures one last bit of heat from the exhaust gas before it goes into the sections that actually boil the water into steam.

And economizer bypass is a three-way valve that's incorporated in every HRSG. It's used during starting the unit, when the exhaust gas is relatively cold. And we simply bypass the water around that heat transfer section and right into the first evaporator sections.

In the case of Metcalf Energy Center, and by the way we did this in Crockett, too, and it worked great -- that valve is automated rather than having a crank on it, we put an electric motor, a pneumatic positioner on it, and the control room operator can simply punch a button or rely on a control algorithm that knows what the weather is to modulate the flow of water into the economizer such that the stack gas temperature is higher than it would otherwise be.

MR. HARRIS: So by keeping that stack gas temperature high you're able to eliminate the plume?

MR. DUNSTAN: Correct.

MR. HARRIS: Thank you. Again, I want to go off script and just basically move to your bottomline. What are your bottomlines regarding the design of the plume abatement facilities for both the cooling tower and the HRSG?

MR. DUNSTAN: The technologies we've proposed and the design point conditions that we've proposed will be very effective in eliminating the occurrence of visible water vapor plumes to a small number of hours of extreme weather conditions of extremely low ambient temperature and coincident high relative humidity in the Coyote Valley in Santa Clara County, California.

MR. HARRIS: Thank you. Keeping with the plume issue I wanted to go now to Mr. Gary Rubenstein.

Mr. Rubenstein, you filed some rebuttal testimony, including a table that was made available and marked as exhibit 97, is that correct?

MR. RUBENSTEIN: Yes, that's correct.

MR. HARRIS: Before we have Gary begin can I ask that we stipulate to his qualifications

as an expert to avoid that extra time?

PRESIDING MEMBER LAURIE: The Committee has experience with Mr. Rubenstein and can stipulate that he is an expert.

MR. HARRIS: Thank you. Let's go directly into your testimony then, Gary. What did you look at when you looked at the plume issue?

MR. RUBENSTEIN: We took a look at -- well, first of all, there's been several analyses done of plume visibility for both the cooling tower and heat recovery steam generators using different meteorological data sets. And we've attempted to reconcile those different analyses and try to reach some common conclusions with the analyses done by the staff. And we think the common conclusions are many.

First, we think it's clear that the abatement systems proposed for the cooling tower and for the heat recovery steam generator both substantially reduce the potential for plume formation from either system.

Second of all, we think there's a common conclusion that the total number of hours per year when there's a potential for formation of a visible plume will vary. It will vary from year

to year based on meteorological conditions and it will vary from location to location in terms of which meteorological data site you believe best characterizes what's actually happening at the project site.

Third area of commonality is that whether you're looking at the cooling tower or the heat recovery steam generator the vast majority of hours when there is the potential for a visible plume to form are at night.

The next area of commonality is that during the few hours per year when there is a potential for either the cooling tower or the heat recovery steam generator to form a visible plume, during those daylight hours the vast majority of those daylight hours are associated with conditions of either low fog or rain that would serve to obscure the view of the plume.

And then lastly we think it's an area of commonality that the plume abatement systems used for both the cooling tower and for the heat recovery steam generators will make any visible plume during hours that are outside of the design bounds very more translucent.

The best description of that is that

taking a look at the cooling tower, for example, the cooling tower is designed to have no visible plume at condition of 30 degree Fahrenheit/90 percent relative humidity in the ambient air.

The modeling systems used both by the staff and by us would conclude that at 29 degrees Fahrenheit and 90 percent relative humidity there might be the potential for formation of a plume. But it's not like someone turns a flashlight on in a dark room. You will have the beginnings of a formation of a plume, and it will be gradual. And the further you get away from the design point the stronger the plume will be.

But when you talk about conditions that are very close to the design point, if a plume is formed at all, it's going to be fairly translucent in nature. It's not going to suddenly be there, as opposed to not being there a few degrees cooler or a few degrees warmer.

Those are the areas of commonality. In the table that was attached to exhibit 97 we laid out the various analyses that have been done. The top half of the table we compared the results for the cooling towers.

And starting on the left-hand side is

the analysis that was included in data response 90, which indicated that we believe that the cooling towers would result in potential for a visible plume 188 hours per year. And of that total 45 hours per year would be during daylight hours.

The second column indicates a correction of our response to data response 90, still using the same modeling system, but we had prepared that data response in September of 1999. Since that time we have refined and improved our modeling system.

That shows for the original cooling tower design that it would have the potential for a visible plume 380 hours per year, which 84 were during daylight.

The next five columns on the top half all take a look at the new cooling tower designed with the more advanced abatement system. And that's the system designed to eliminate plume formation at 30 Fahrenheit and 90 percent relative humidity.

The first column shows what was in the CEC Staff's testimony indicating that there would be a potential for formation of a plume between

zero and three daylight hours per year with that abatement system based on the 1992 San Jose met data, and 30 hours per year total.

Using our modeling system and exactly the same meteorological data set, we concluded there's a potential for 11 daylight hours per year for the cooling tower, 62 hours per year total. We predicted a greater potential than the staff did.

The central column for 1993 IBM met data is the met data that's been used for all the dispersion modeling for this project, and it's been used in all of the disciplines; and it was used for the engineering design basis for the plant, as well.

So it's not surprising that the cooling tower abatement system is predicted to show zero hours per year with that database, and that's how the plant was designed and that's the data set that was used.

Moving further to the right, looking at the San Martin data, we predicted that there's a potential for 17 hours, daylight hours per year of visible plume, 95 hours per year including night.

In the far right column is the only area

where we really have a substantial disagreement with the staff. They predict, using the San Martin data, with exactly the same design far more hours per year potential visible plume.

The other thing that's important to know is the modeling system that we use has the ability to predict the length of the plume as well as the frequency with which it occurs.

And, again, on those central columns you'll see a distribution of the lengths. One thing that you note is that the frequency of all plumes, look for example at the daylight hour number, where for the San Jose 1992 data we show 11 hours per year, even though there are no hours where plumes are predicted with lengths of less than 400 meters.

The reason, and this is really important, is that both of the modeling systems that we used and the staff used have a mathematical problem dealing with 100 percent humidity. If there is 100 percent humidity then these modeling systems predict a plume of infinite length. Because the atmosphere simply has no capacity to absorb additional moisture. If the humidity was 99.9 percent you'd reach a different

conclusion. But at 100 percent these mathematical models reach the conclusion that a plume length is infinite.

What that means in the real world is that those are conditions when the air is truly completely saturated. Most likely to be either fog or rain conditions where you're going to be obscuring the plume anyway.

And so what the data shows is that again looking at the cooling tower and looking at the range of data sites, most of the hours in the year when there is the potential for visible plume are either going to be at nighttime or they're going to be under weather conditions when there's a likelihood of fog or rain.

There's a similar discussion at the bottom part of the table for the heat recovery steam generator. And the bottomline conclusion I come to is that when you exclude nighttime hours and when you exclude weather conditions where there's the potential for either fog or rain to obscure the view, that the plume abatement systems for the HRSG and for the cooling tower are likely to have a visible plume result -- have a potential for a visible plume to form less than five hours

per year.

MR. HARRIS: That's five hours per year out of 24 hours, nighttime and daytime, is that right?

MR. RUBENSTEIN: That's five hours per year of hours during daylight hours when there is not fog or rain having a potential to obscure the plume.

MR. HARRIS: Okay, thank you for that clarification. Does that conclude your testimony?

MR. RUBENSTEIN: Yes, it does.

MR. HARRIS: Thank you. I want to move to I think our final witness, Mr. Paul Stocks. Paul Stocks is a principal with the Hillier Architecture firm. He is here pinch-hitting for one of his associates, Mr. David Finsey. Paul got on a plane, I think, this morning, 5:00 or 6:00 his time. Last night I found out he was coming out, so he's here.

But he is a principal of the firm. He also has worked on this project. We have his declaration and his qualifications which we'll pass out and make available to everyone, as well. But please do understand that Paul is standing in.

And so we're going to take him briefly

through the architectural issue. And, again, this is one that I know that has been of some interest to folks, and we'll do that very briefly.

But, if you could, Paul, please state your name for the record so I get it straight.

MR. STOCKS: My name is Paul Stocks.

MR. HARRIS: And, Paul, can you briefly go through your education and profession, since we're just handing that out now.

MR. STOCKS: Yes. I have a BA in architecture which I got in 1977. I've got an MA in architecture in 1980, both from Manchester University in England.

I've been licensed, and I'm registered as an architect with the Royal Institute of British Architects since 1982. And I've practiced in London, in Paris, Berlin. For the past four years now I've been practicing in New York.

MR. HARRIS: And we appreciate your coming out on such a short notice from New York.

I want to talk about the Hillier Group. Can you give a real brief summary of what Hillier Architecture is all about.

MR. STOCKS: The Hillier Group is the fourth largest architectural firm in the U.S.

It's the 11th largest in the world. We've been in business now for 34 years. We have nine regional offices, mostly based in the east coast, but we have a regional office in Dallas, in Kansas City, as well.

Our head office is, in fact, in Princeton where Robert Hillier, our founder, has, in fact, been teaching at the School of Architecture at Princeton University for the past 20 years. So that's our main head office.

MR. HARRIS: And what's your approach to your work?

MR. STOCKS: Well, our primary approach is to respond to the client's needs. We have to actually listen quite closely to what they do, in fact, need. Because what we want to end up with is creative practical solutions based upon the function, the task, the site and last but not least, is the aesthetics of the whole thing. We must actually get those right.

MR. HARRIS: By way of background, can you briefly describe some of Hillier's experience with the industrial and power facility designs?

MR. STOCKS: Well, one very well known project that we have, in fact, worked on is the

cogeneration plant at John F. Kennedy International Airport, which is a very central location, right in the middle of the airport.

It's actually a location that has 300 million people --

MR. HARRIS: Understand you have a photo that we can put up behind you there --

MR. STOCKS: Yes, we do.

MR. HARRIS: -- to kind of show the Kennedy Airport. And I guess color handouts of the previously served documents, so you'll have those, as well. We'll pass those out.

MR. STOCKS: This project was particularly well received. It had an AIA design award, which is a very prestigious. We have had a lot of very positive feedback on it.

What it is, essentially is a mechanical unit which we've clad in a way that we think that we've actually made it more comprehensible and more in keeping with the surrounding buildings.

We can see the design of the unit is something that picks up some of the motifs of the surrounding buildings of the airport terminals.

Here, for example, we actually see that there's a very strong dominant structural grid

which allows us to overlay an element of simplicity to what is quite a complex arrangement of machinery behind that overlaying grid.

MR. HARRIS: And I understand you've also worked on similar projects, as well?

MR. STOCKS: Yes, we have. We've actually taken the same philosophy of approach to this mechanical design, and we've decided that -- this is a very small building, but nevertheless in a very similar location, that it's actually also very prominent.

It's in an urban situation, in the heart of New York City, for Rockefeller University. It's seen by a lot of people driving up the FDR Drive on the East River.

MR. HARRIS: Paul, let me interrupt for just a second. These are in the back of the handout that we just got the color photos, towards the end. I think it's three or four pages from the end. It's an unnumbered page that says on the bottom Rockefeller University chiller plant housing. So if you can't follow along with Paul over here, you should have it in front of you, as well.

MR. STOCKS: What we're seeing with that

type of design is, see once again we're showing the mechanical plant actually through a regular structure grid, which gives the simplicity to the units that it's housing.

Here, for example, we have another industrial type solution to a brewery which is actually in a suburban setting. Once again, we can see that we're looking at the mechanical units of the utility. We're displaying those, but we're displaying those in a setting in a way that actually fits in with the architecture, the contextual architecture of the buildings in that area.

MR. HARRIS: Let's turn now to -- I was captivated by the pictures, I'll try to stop -- let's turn now to Hillier's interactions on the concept design for the Metcalf Energy Center.

Can you provide us with a brief history of the work you've done on the Metcalf Energy Center?

MR. STOCKS: Yes. We first came out two years ago, about two years ago, the design team from Hillier, which was myself and David Finsey, our design principal. And we came to see, we saw the potential of the site. And we saw that this

was a very interesting site for us to look at and to actually achieve something that was really worthwhile.

We had a directive from Calpine to actually make a showcase plant in many ways. Calpine was very conscious that this was the gateway to San Jose; and San Jose is their hometown, so Calpine gave us the very strong directive that this was going to be their showcase. And that's what we were looking to provide.

We saw that we could, in many ways, mitigate the effect of the existing transmission towers, which are quite prominent on Tulare Hill, and we thought that that could be done by screening or in some way, something happening at low level which would, in fact, favorably impact the visual appreciation of those transmission towers.

MR. HARRIS: Now can you briefly describe for us your view of the architect's task when they are dealing with these kind of situations with a power plant?

PRESIDING MEMBER LAURIE: I'm sorry, review the architect's?

MR. HARRIS: The architect's task.

PRESIDING MEMBER LAURIE: Task.

MR. HARRIS: What is the task you've been charged with?

MR. STOCKS: Well, our task is to actually make sure that what we end up with is something that is not just the developers of the utility, what they want, but we want to in fact give everybody who interacts with it the maximum visual pleasure possible, that's what we're after really. That's our task.

Our success is measured by the number of people that appreciate what we do, not just the ones that are asking us to get involved in the design of the project.

MR. HARRIS: Of course you have to work within a certain defined envelope I would assume?

MR. STOCKS: Well, yes, we do. In this particular case we were constrained to some extent by the requirements of air quality modeling. But within those constraints we were able to come up with a number of different designs, which were able to express different themes and different concepts.

So, we had constraints, but then again

in many cases all architectural problems do, in fact, have constraints, and the modeling is just, in fact, one of those constraints.

MR. HARRIS: Okay, so working with that envelope, have you identified I guess several different approaches to how you might go forward?

MR. STOCKS: Yes. Well, in fact, one of the initial tasks that we set ourselves was really just looking at just how industrial design and how plant design is actually treated around the world.

MR. HARRIS: You're looking at -- this is the last slide in the handout, if I'm correct, is that right?

MR. STOCKS: That's correct, yes. What we see here is a power plant in Denmark, just outside Copenhagen, in fact, and this reflects in many ways many of the basic methods of working or methods of design that we've actually, we've been thinking about, as well, in fact.

It's got a regular strong grid, and it's got an element of screening to a unit which is made more comprehensible, more sleek. And that is a very successful approach.

What we also have up in the top right-hand corner is a power plant in New Jersey which

also has a very strong screen to it, which once again allows the unit to be rendered into a simple clear form.

MR. HARRIS: I understand that Hillier is aware of about four basic distinct approaches to your task. And can you talk about each of those four, and how they apply here?

MR. STOCKS: Well, that's right. We actually -- we thought there were, in fact, four ways of actually coping with this. And one of the ways, the first way that we could have actually coped with this is just by really leaving the plant alone. And that's just, one way is just to honestly express what it is. And perhaps that could be brought out by different paint schemes and different color schemes. That's one approach.

That isn't necessarily the approach that we spent a long time looking at. Nevertheless it's a, that's the first approach that we actually had.

MR. HARRIS: So the first approach is basically no screening?

MR. STOCKS: That's right.

MR. HARRIS: Leaving it as --

MR. STOCKS: Open, yes.

MR. HARRIS: Okay, what's the second approach?

MR. STOCKS: The second approach, which we haven't actually -- we didn't actually look at in great detail, this isn't the second approach actually, but the second approach really is to actually have the entire plant, if you like, hidden by screens or hidden by walls. The mechanical units, themselves, actually housed inside what could, in fact, be large boxes.

We rejected that approach because we rather thought the large boxes, themselves, are going to actually add to the bulk of the entire project. And that seemed to us to be self-defeating. We actually wanted something which was more expressive, more honest to the actual function of the power plant, itself. And also something that's allowed us to be more sculptural and perhaps more contextual, too.

MR. HARRIS: You rejected that second approach basically --

MR. STOCKS: Largely we rejected that second approach, yes. Very simple, if you like, block screening.

MR. HARRIS: What about your third

approach?

MR. STOCKS: Well, the third approach is this one here, actually. And this is perhaps one of the many iterations of the third approach. In fact, I will say that this does not, in fact, meet the requirements of air modeling, but nevertheless this is something that we looked at very closely, which was an approach whereby screens were used to, if you like, invoke another building form type. And the building form type that we're actually invoking here is an office block to some extent.

The screens in this design consist of stainless steel mesh, panels which are suspended from a space frame at the back. But, nevertheless, they are, with the horizontal striation they actually recall the horizontal striation of an office building.

So, we're trying to actually set this design inside its context, and the context we were looking for was the --

PRESIDING MEMBER LAURIE: And why does it, Mr. Stocks, why does it not meet air modeling requirements?

MR. STOCKS: In fact the requirement is

to -- what we have to actually have, none of our screening structure above 95 feet. So, in fact, this was --

MR. RUBENSTEIN: If I might help with that answer, Commissioner Laurie, the problem with that design is that the stack needs to be separated from the structure below it by a certain distance in order to enhance dispersion. Otherwise you can run into air quality problems, a condition called downwash where the wind blowing past the building can actually bring the plume down close to the ground more quickly before it has a chance to disperse.

PRESIDING MEMBER LAURIE: And so does that effectively mean that you cannot architecturally screen any tower?

MR. RUBENSTEIN: Except under very rare circumstances, yes, I believe so. If you took a look at most of the designs that were shown earlier, you saw that there was a separation between the stack and the rest of the design. And it is to enhance dispersion.

MR. STOCKS: But having said that, though, we actually see here that there is, in fact, a certain amount of screening to the stack,

itself. I mean we formed the stack in such a way that it starts to pick up the strict -- patening that we tend to see on buildings. So there is that level of screening to the stack. It just isn't the full plant screen that we see from top to bottom that we saw in the rejected scheme.

MR. HARRIS: So, Paul, we were walking through the four different philosophies. Now are we on to number four now, or are we still on -- we don't have to go, if you want to go through those first.

MR. STOCKS: The fourth philosophy is to actually screen the plant in a selective way such that we highlight various aspects of the plant which we think are interesting, and frankly, beautiful.

And we can also use the screens to suppress and make less noticeable those aspects of the plant that we think that aren't really in the same league as the first subset.

But what we can also do with frames is we can actually, with frames we can actually have set up these rhythmic and structured grids that we had seen on the JFK scheme, which allows us not just to have the entire bulk of the screen broken

down into comprehensible units, but it also, as I mentioned before, it allows us to actually apply simplicity to the complexity of the units behind.

MR. HARRIS: Okay, I want to take you off our prepared for just a second. You prepared an article which we filed and served on the history of the power plant design. Can you give us maybe two minutes on that history?

MR. STOCKS: Well, that's actually part of our appreciation of just where we were going with our design. It was quite important for us to actually understand the history of power plant design.

At the start of the century power plants were invariably in city centers because of the requirements of usage and transmission. And the architectural response to those power plants was actually quite, was of great interest to us. Architects in those days treated the power plants like cathedrals in many ways. And they had a very strong cadre of details, largely to actually make these very powerful structures acceptable to the people that were living in the cities.

We've actually, because of the changing technology, because power plants are so much

cleaner than they were 90 years ago, 80 years ago, power plants have actually come back into the cities or a close relationship with an urban environment. As we saw with the Danish example, which is very close to the outskirts of Copenhagen.

Consequently there's a, once again there's a requirement to actually develop and express power plants as an architectural form. Which is actually one of the reasons why the AIA has responded so well to our efforts at JFK, because this was one of the first efforts, if you like, to actually take a very large unit, power plant, and give it a relevant meaning, if you like, in its cultural context.

MR. HARRIS: I appreciate that context. And let's move now to your bottomline conclusions about the architecture for the project.

MR. STOCKS: Well, we've actually done a lot of schemes. And all of these schemes that we're looking at here really are studies. And these studies, they show a number of different approaches to how we can actually screen and give a structural and sculptural form to the power plant, itself.

But these studies also tell us that what we're in the middle of is really an ongoing process. We've not come to the end of our investigation, because our investigation must, in fact, be something that's an ongoing thing, which involves the community, the city, the developers, the neighbors and that's what we really want to actually get feedback from, from the Commission, too, to actually work out just where we are going, and just how we can actually put some finite decisions to a lot of these ideas that we actually have.

Having said that, I mean we have an idea that version four of our approach is going to give us the most -- is going to be the most fruitful in the sense of what it gives us in terms of the freedom to actually have different sculptural forms and express the nice parts of the plant and suppress the ones a little bit banal, shall we say.

MR. HARRIS: Thank you. And then finally, Ken Abreu, the Project Manager. I'd like you to briefly discuss the history of how the architectural design has evolved through this development process.

MR. ABREU: Thank you. I think it's just good, in context, to hear a little bit of history of how we evolved the architecture for Metcalf.

From the time that the Metcalf Energy Center was announced, I can tell you our chairman of the board has been very very interested in this being a hallmark plant architecturally. And that's why we hired Hillier.

And actually these first three pictures you see here, which Paul just showed, were the first three different approaches architecturally that Hillier brought to us. And actually it was the number two option that our management chose to go ahead with.

But at that time we decided, in talking with the City and talking with developers, that we also needed to satisfy the concerns of the developers to the south, Cisco and Subrado. So we showed these three architectural designs to the developers to the south. The City said we should make sure what we come up can satisfy them, as well as us.

So in talking to them we evolved the architectural treatment which we originally filed

with the AFC back in April of '99, which is the one here that's listed as 06 in your little package, which is the fourth page back.

That's actually --

PRESIDING MEMBER LAURIE: Do these satisfy air modeling standards?

MR. ABREU: Yeah, that's what we submitted in 1999, in April of 1999, original AFC.

At that time there was still a lot of, let's say, desire on the part of the developers to the south of us to changes, to what really looked like an office building. That's really the direction they wanted to go in. And we wanted to satisfy them, so that's how we wound up with the design that Paul showed later, that we had the building-like design that went all the way to the top.

We submitted that in, I think, October or November of 1999. This seemed to -- we thought at that time would be satisfying the developers in moving forward.

At that time a couple things came out. One is it started to become pretty clear that the developers to the south were not going to support the project. They were going to oppose it no

matter what kind of architecture we had.

And number two, we also got some comments from the City in terms of moving the plant further away from the riparian setback area, and reducing its bulk, and reducing its size, and also an issue on 95-foot height limit.

So all those combined to say, okay, let’s go back and see if we can come up with something that will kind of combine, you know, something that moves the plant, gets rid of some of the bulk, gets the height issue off the table. And that’s when we came up with the design we have today, which we submitted in January of 2000.

And that’s the architecture we have stuck with through the AFC.

The City later told us that they would like to have a design, an architecture that, quote, "celebrates" the plant, makes it look like a plant, doesn’t hide it. Actually there were some articles written by architectural critics here in Silicon Valley that actually criticized our middle design as being a disguise of the plant.

Our management was very sensitive to that, didn’t like that criticism. And that’s one

of the reasons also that we changed to this last design.

So we went back to the City and said, you know, as long as we can work within the physical shapes of what we have now come up with, shown over there, we will be happy to change the form, the color, the patterns to be something that's more celebratory of the plant. And that's something, I think, would be more satisfying to our management, as well as them.

We brought Hillier out, Paul and David, last summer. Spent probably a couple hours with the City planning staff going through, I think we showed them about 30 different architectural treatments. And they got about a half a dozen or so that they thought were potentially ones that they might want to utilize in a final design.

And what we said to them and we said to the CEC Staff is as long as we can work within the physical parameters of where we've located things, because if you start moving buildings around and stacks around, you have to redo the air modeling, you have to redo your air permits. That's not acceptable to us. But as long as you can keep things basically where they are, you know, we're

willing to modify that design, to make something that people would be more satisfied with in the future. And we're happy to do that, it's going to go forward.

PRESIDING MEMBER LAURIE: Okay, well, that is certainly a question that is of importance to us. The question being what impacts, other than visual, are affected by modification to the architectural scheme.

MR. ABREU: Yes.

PRESIDING MEMBER LAURIE: What I'm trying to get to is if a design is determined post project approval, under what circumstances would a modification to the design as proposed in the AFC result in a necessity for a subsequent environmental review. Do you understand the question?

MR. ABREU: I think so. You're talking about other than visual?

PRESIDING MEMBER LAURIE: Yes.

MR. ABREU: I'll let Gary talk to this a little bit. We can't modify the design in a way that would cause us to have to redo the air modeling.

PRESIDING MEMBER LAURIE: Okay.

MR. ABREU: And I'm going to let Gary talk to this a little bit more, but it means we can't raise the screens higher than they already are. So you'll see in the latest design, they'll dig that one out, but you can't have those screens go up higher where that would require us to redo the air modeling.

PRESIDING MEMBER LAURIE: Okay, so, for example, number 35, you can't do that?

MR. ABREU: No. That's right. You would have to redo the air modeling again.

MR. RUBENSTEIN: Commissioner Laurie, if I could get more specific. In addition to the horizontal location on the site that's critical for the air modeling, the other dimension that is key is the distance between the top of the stack and the top of whatever shielding is used as part of the architectural treatment.

As long as that distance remains essentially intact, then there's no effect on the air modeling as a result of different architectural changes below that level.

And to the extent that there are changes that go above that level, that doesn't mean the design is unacceptable, it just means that there

would need to be an additional analysis to make sure that it didn't cause any violations of any air quality standards.

MR. ABREU: The other things you can change are like the stack shape could change. That wouldn't impact the modeling at all. And, Gary, you can tell me if I'm wrong.

But the locations of those key elements like the stacks and the cooling tower is the other area, and the height of the screen. You can lower the screenings, that wouldn't cause a problem.

MR. RUBENSTEIN: That's correct.

MR. ABREU: So you can take those down, move them in and out, but it's just those parameters that we have to work within.

MR. HARRIS: I think I would like to move our documents in if that's appropriate at this time.

HEARING OFFICER FAY: All right.

MR. HARRIS: We have discovered, for one thing, that we have two items 103. What Mr. Valkosky in his wisdom in the past has made them 103A and 103B. But we've identified I think the MEC biological assessment as exhibit 103 in the biological section; and then the first one in this

section is CEC data responses starting with number 89, we've identified that as 103, so I'd like to suggest that we make one of those 103A and 103B.

HEARING OFFICER FAY: Sorry, you're right, we have an overlap. Let's do that, the first one, the MEC biological assessment will be 103A. And the data responses will be 103B. Thank you for that.

MR. HARRIS: Okay, so the documents we'd like to move in, exhibit 103B, exhibit 104, exhibit 46, exhibit 105, exhibit 95, which is our 3-A testimony, exhibit 97 and there is actually an additional document that we've discovered during the break. It's applicant's rebuttal testimony to the CEC Staff. This is our 3-A visual plume resources testimony. We need to assign that a number, as well. So whatever the next number in the sequence would be.

HEARING OFFICER FAY: The next number in sequence is exhibit 106. And that is -- would you identify that again?

MR. HARRIS: It's the applicant's rebuttal testimony to CEC Staff's plume testimony, group 3A visual resources.

And so we'd like to move that item 106,

as well.

HEARING OFFICER FAY: Any objection to receiving these documents into evidence?

MS. WILLIS: The only objection I have are comments is that we did not receive exhibit 97 until this morning on our way out the door. So we're unable to cross-examine. It was filed on the 13th, and everything was supposed to be due on Friday. So it was filed late.

HEARING OFFICER FAY: Okay, I received that three days ago, I guess.

MS. WILLIS: My stamp is yesterday, so it must have been after hours yesterday.

MR. HARRIS: No, it was --

MS. WILLIS: Served on the -- the dockets date is the 13th.

MR. HARRIS: Which is Tuesday, right?

MS. WILLIS: Right.

MR. HARRIS: That's correct, I'm sorry, I'm confused.

MS. WILLIS: And everything was due on Friday.

MR. HARRIS: Right. And rather than bringing it to the hearing we decided to serve it at that point. And we apologize. You should have

been provided a copy ahead of time, and I apologize.

MS. WILLIS: So we're unable to even -- I haven't even consulted with my witnesses on this table at all, because we haven't had that opportunity.

HEARING OFFICER FAY: Mr. Harris, which witness would respond to this, to any cross-examination on this?

MR. HARRIS: Mr. Rubenstein.

HEARING OFFICER FAY: Okay. We note staff's objection and I think we'll give them time to review this. And if they need Mr. Rubenstein back, he's back --

MR. ABREU: In two weeks he'll be here anyway --

MS. WILLIS: That's what I would request, that he be available --

MR. HARRIS: That's more than reasonable and we apologize again. And would accede to that request.

HEARING OFFICER FAY: And the same goes for all the parties. If you do have questions about exhibit 97, Mr. Rubenstein will be made available in two weeks.

Okay, with that, we'll receive the identified exhibits into evidence.

MR. HARRIS: And I'd make the witnesses available for cross-examination.

HEARING OFFICER FAY: Okay. First of all, we want to go around and get an estimate of time from people on their cross-examination.

MR. AJLOUNY: Mr. Fay, can I ask one question as far as the process? I understood surprise to be anything that we didn't know about ahead of time. And the testimony regarding the alternate sites and the visual impacts, I feel the applicant had plenty of time to put that in his testimony so we could -- you know, I studied visual and I'm ready to cross-examine, but I just feel like it was a surprise. I think they call it surprise something, whatever.

Am I missing something here, because I don't feel I had enough time to cross-examine now because it was surprised on us today, when the applicant had plenty of time in their testimony and rebuttal testimony.

Am I off the wall? Help me out.

HEARING OFFICER FAY: No, I think to some extent you're on point, that they have

surprised us because they didn't file this in advance.

However, my understanding is that Mr. Harris is not introducing this, and is not even providing it to prove that these simulations are, in fact, true.

Is that correct? Your position is a challenge to the staff's criteria?

MR. HARRIS: The point of those documents was to take a look at what the staff determines to be significant visual impacts. And we provided those, again, in that form as opposed to a whiteboard, just so people could see where those impacts had been viewed as significant in the past versus the KOP1 that we were dealing with here.

PRESIDING MEMBER LAURIE: So those pictures are not part of the evidentiary record.

MR. AJLOUNY: But shouldn't it have been part of their rebuttal or their testimony?

PRESIDING MEMBER LAURIE: Maybe so, but, Mr. Fay, you may agree with this or not. We are not a jury. If you're in front of a 12-member jury there are certain things that you dare not let them hear, you dare not let them see.

If you're in front of a judge, then there's much greater discretion because the judge, in their experience, know what they're looking for and in their own minds can discern what's relevant and what's not relevant, what they're going to use, what they're not going to use.

And so there is greater flexibility when you have those circumstances. So I would understand the concern if the pictures, which reflect a picture, were part of the evidentiary record. They are not. They are simply used to raise a point. We heard it. If you want to cross-examine from that point out of necessity, you're free to do that to the point that you think it's relevant.

I can tell you that its relevance is somewhat, and so I would discourage an hour and a half of cross-examination on that point.

MR. AJLOUNY: And let me correct the perception. I'm not really worried about the pictures. I'm worried about that the applicant didn't take the time to explain the issues in their testimony and the rebuttal, and then this is a surprise. And it's like my mind now I can't think that quick to sit there and work out cross-

examination and to discredit. I'm certainly surprised that the -- right here, I'm sitting here speaking, I would hope that these words be coming out of the staff's lawyer's mouth.

PRESIDING MEMBER LAURIE: Well, maybe they have a different view of how important that testimony was. If it's not that important, if it's only that important, then folks are not going to spend a lot of time arguing about it.

MR. AJLOUNY: Well, I --

MR. HARRIS: Can I offer something here, as well. Mr. Priestley will be back as part of the alternatives testimony. And just as we did for the staff on the plume analysis, if Mr. Ajlouny wants to cross-examine Mr. Priestley on those pictures during the alternative section, we will make Mr. Priestley available and those documents available at that time, as well.

HEARING OFFICER FAY: Appreciate that. Might you be introducing this at that time into evidence?

MR. HARRIS: It is part of our prefiled testimony for the alternatives section. And so you actually should have a copy in the mail. But we will certainly make Mr. Priestley available

again at that time.

HEARING OFFICER FAY: Okay.

MR. HARRIS: I think that's fair --

MR. AJLOUNY: For everybody?

MR. HARRIS: For everybody.

MR. AJLOUNY: Thank you.

HEARING OFFICER FAY: So you will have a chance to --

MR. HARRIS: You'll get tired of Tom after awhile, but --

PRESIDING MEMBER LAURIE: Mr. Priestley, I thought you had a PhD.

DR. PRIESTLEY: I do.

PRESIDING MEMBER LAURIE: Then it's Dr. Priestley.

DR. PRIESTLEY: Thank you, but it's not something I insist on.

(Laughter.)

MR. HARRIS: I know him as Tom --

PRESIDING MEMBER LAURIE: If you were a Commissioner at the Energy Commission --

MR. HARRIS: -- but I apologize.

PRESIDING MEMBER LAURIE: -- you would insist upon it.

MR. HARRIS: I stand corrected, I get a

little familiar because Tom's such a great guy, but he is Dr. Priestley.

HEARING OFFICER FAY: Okay, getting back to what we need to get through. I need to get an estimate from everybody on the amount of time they are going to need to cross-examine the panel on visual impacts.

PRESIDING MEMBER LAURIE: And not only cross-examine, Gary, we want an understanding of what direct testimony is going to consist of, and cross-examination of everything else tonight.

HEARING OFFICER FAY: Okay, well, there's only direct testimony coming from the staff. How long will that take?

MS. WILLIS: Our direct testimony?

HEARING OFFICER FAY: Um-hum.

MS. WILLIS: Probably about maybe ten minutes, a little -- basically the way we've been doing it, between 10 and 15 minutes. One of the things we did want to do was walk through each of the conditions that had proposed changes, and just make comments, brief comments on those. So that might take a few extra minutes.

And then probably --

HEARING OFFICER FAY: You mean as part

of your 15 minutes?

MS. WILLIS: As part of our 15 minutes.

HEARING OFFICER FAY: Okay.

MS. WILLIS: And then probably another 15 or so minutes of cross.

HEARING OFFICER FAY: Okay. San Jose?

MS. DENT: Maybe 15 minutes of cross on Calpine's witnesses. And I will be glad to give a brief summary of what I'm trying to get at with each of the witnesses in advance if that will help.

And I don't think any cross for the CEC witnesses.

HEARING OFFICER FAY: I'm sorry, I couldn't hear you.

MS. DENT: I don't think any cross for the CEC witnesses.

HEARING OFFICER FAY: Okay. And Mr. Ajlouny?

MR. AJLOUNY: Twenty minutes for the applicant, and ten minutes for staff.

PRESIDING MEMBER LAURIE: And what's the nature of your cross-examination going to be?

MR. AJLOUNY: The areas like I mentioned before, of the -- I would say the word misleading

comments in testimony, bringing those out, and also the issue of compatibility of the plant, as far as visual and being compatible for that site from previous hearings. I thought this would be the time, one point to bring out about it not being compatible because of the visual.

And a few other things, I mean, you know, I got a list -- I got 14 --

HEARING OFFICER FAY: Okay, Mr. Scholz, how long?

MR. SCHOLZ: About ten minutes.

HEARING OFFICER FAY: And is Mr. Boyd still here? Okay, CARE, anybody else for CARE?

MR. WADE: No, I don't think CARE's here. I'm Jeff Wade, an intervenor, and I didn't introduce myself earlier. I have about five minutes or less.

CHAIRMAN KEESE: I'd echo what Commissioner Laurie said at the front, argument about what you like and don't like about visual should not be in the cross-examination.

MR. AJLOUNY: No, I have -- I --

CHAIRMAN KEESE: You make argument later.

MR. AJLOUNY: Yeah, I'm not --

CHAIRMAN KEESE: Because some people are going to like something and some people aren't going to.

MR. AJLOUNY: Yeah, really I'm not going to go there. I'm going to go by specifics in the testimony that I feel is misleading, I just want to bring them out.

PRESIDING MEMBER LAURIE: And that's fine, but as you do that just recall that staff is already recommending that there be a finding of unmitigated impacts.

The applicant is offering testimony that in fact it is mitigated. And, you know, that's differing views.

And so as we get into those questions I'm going to be asking what more is there really to talk about once staff makes the argument that it's unmitigated. Because that's really the kind of thing that we're interested in.

MR. AJLOUNY: And I understand, but I feel that the applicant did a wonderful job on perceiving that this is a beautiful plant. And so I want the opportunity to discredit some of the witnesses.

HEARING OFFICER FAY: Well, you will be

given an opportunity to conduct some cross-examination. I'm not sure if it will be as much as --

PRESIDING MEMBER LAURIE: Staff is free to express their view that it's a beautiful plant, and you're free to disagree.

MR. AJLOUNY: You mean applicant?

PRESIDING MEMBER LAURIE: Yes, or staff, or whoever else.

HEARING OFFICER FAY: So, Ms. Willis.

MS. WILLIS: I'd like to start with Mr. Priestley.

CROSS-EXAMINATION

BY MS. WILLIS:

Q You stated in your testimony that 11 key observation points were analyzed, is that correct?

DR. PRIESTLEY: That's correct.

MS. WILLIS: And you and the staff agree that out of those 11 only one -- I mean that out of those 11 we agree that 10 do not pose a significant unmitigable impact, is that correct?

DR. PRIESTLEY: That is correct.

MS. WILLIS: Would it be fair to say that in your opinion that staff properly analyzed those ten key observation points for visual

impacts?

DR. PRIESTLEY: In my opinion we certainly reached the conclusion. Actually I didn't come here to present a kind of a line-by-line critique of their analysis of those viewpoints.

MS. WILLIS: Okay. In the earlier testimony that staff did object to on alternative visual impacts, and the photos that you showed, is it your opinion then that staff was correct in their analysis of those visual impacts?

DR. PRIESTLEY: I'm not quite sure that I'm following. I'm not quite sure what you're referring to.

MS. WILLIS: I'm referring to the photos of the alternative sites.

DR. PRIESTLEY: Okay, --

MS. WILLIS: That were used for illustrative purposes earlier.

DR. PRIESTLEY: Okay.

MS. WILLIS: Then in your opinion staff was correct in their analysis of those visual impacts for those alternative sites?

DR. PRIESTLEY: Not necessarily. What I was trying to document today is the conclusions

that staff reached about those sites.

MS. WILLIS: Was it the conclusions or was it the criteria used that you were referring to?

DR. PRIESTLEY: It was their conclusion.

MS. WILLIS: So your comments and testimony earlier that there was criteria that was being used that wasn't being applied to KOP1 actually then has no reference to the alternative sites individual impacts that you discussed earlier in your testimony?

DR. PRIESTLEY: Again, I'm not quite following the question.

MS. WILLIS: You stated earlier that you relied on staff's -- that staff had established criteria and to illustrate that you referred to the alternative analysis for visual impacts.

DR. PRIESTLEY: I guess not necessarily; I guess those things aren't necessarily commensurate. We certainly, in doing our evaluation of the impacts of the Metcalf facility, we applied the criteria that staff had developed and used, say, for example, in the Delta case, and that had laid out --

MS. WILLIS: I'm actually referring to

the alternative discussion that happened earlier tonight, not in the Delta case. In this particular proceedings.

You went through each of the figures on alternative sites 1, and you went through each of the sites, do you remember that testimony?

DR. PRIESTLEY: Yes, yes, I do. And I recall that I summarized what was the staff's conclusion about the potential impacts of a Metcalf-like project on those sites.

MS. WILLIS: And wasn't the purpose of your testimony to show that there was criteria that you had agreed with that staff had applied in other analyses?

DR. PRIESTLEY: I think the point of showing those photos was to indicate that, in fact, that staff may not be applying its own criteria in a very clear and consistent way, for one.

And the other, that in the context in which those things are -- which those criteria are applied, if applied the same way that staff applies them, clearly the impact on the views from KOP1 would have to be deemed to be less than significant.

MS. WILLIS: In your opinion was staff's application of its criteria clear and consistent for the 10 KOP that it found not significant, a mitigable impact?

DR. PRIESTLEY: To be able to fully answer your question again I would have to almost do like a line-by-line evaluation of those to give you a, you know, a very clear answer.

MS. WILLIS: Okay. Let me refer you to your written testimony. On page 5 you do refer to the Delta final staff assessment, and you talk about the precedent the Commission has established to determine significant visual impacts.

Are you aware that a final staff assessment is not a precedential decision?

DR. PRIESTLEY: It's my understanding that the conclusions of that FSA were reflected in the final opinion of the Commission.

MS. WILLIS: Okay, you also referred to the CEC Staff as decision rules, you said that earlier. I just want to make sure you understand that a final staff assessment is a staff document, not a Commission decision. Do you understand that distinction?

DR. PRIESTLEY: Yes.

MS. WILLIS: Okay.

PRESIDING MEMBER LAURIE: And do you understand that by rule all Commission decisions are not precedent unless the decision says it is precedent?

DR. PRIESTLEY: Well, I'm now aware.

PRESIDING MEMBER LAURIE: Thank you.

MS. WILLIS: Thank you. You stated earlier in your testimony that the CEQA provides little guidance in developing criteria for visual impacts, and you also, in your testimony, refer to the term scenic vista, used in appendix G of CEQA. Do you recall -- that's on page 5 of your testimony.

DR. PRIESTLEY: Okay, yeah, I see the reference.

MS. WILLIS: When you did your analysis of visual impacts, did you refer to any other portions of the CEQA guidelines under the aesthetics appendix G checklist?

DR. PRIESTLEY: Yes, I did.

MS. WILLIS: Do you mention that in your testimony anywhere?

DR. PRIESTLEY: This was mentioned in my AFC analysis.

MS. WILLIS: So it's not mentioned in your testimony?

MR. HARRIS: I don't want to object but I think we've got a communication problem. What do you mean by his testimony?

MS. WILLIS: The testimony that was filed as testimony.

MR. HARRIS: Because I think he was understanding his testimony to include the prior filings, which would include his AFC.

MS. WILLIS: Okay, I'm referring to the written testimony that was filed and served --

HEARING OFFICER FAY: But if there's a reference in that testimony to the appropriate section of the AFC, then that is part of his testimony.

DR. PRIESTLEY: There is indication here as we noted in our AFC analysis. I was under the assumption that in preparing my testimony I wanted to be reasonably brief, and that there wasn't a need for me to, you know, repeat everything that I had put into all of my previous filings, so --

MS. WILLIS: Let me just get to the point.

DR. PRIESTLEY: -- so correct me if I'm

wrong --

MS. WILLIS: No, that's fine, that's fine. We obviously don't have the volumes that go into three supplements and all of that in front of me.

I'm referring to the section where you refer to appendix G about the scenic vista?

DR. PRIESTLEY: Yes.

MS. WILLIS: And that the views on Blanchard Road don't fall under that category, I believe, is that your testimony?

DR. PRIESTLEY: Not under that category, that's right. It is not a scenic vista, but again, I am looking at some of the other scenic qualities, as well, and again, in my AFC I have laid out, you know, a set of criteria. In fact, I present a sort of a scale that provides kind of an indicator of what I mean when I'm talking about scenic quality.

So it definitely goes beyond some kind of yes, no, black-and-white kind of thing, is it a scenic vista or is it not. In fact, there is a scale that I applied --

MS. WILLIS: Okay, actually I wanted to get back to the CEQA guidelines. Did you review

guideline number C, it says would the project substantially degrade the existing visual character or quality of the site and its surroundings.

DR. PRIESTLEY: If I could, I'd like to refer to my AFC text.

Yeah, if you look in my AFC text supplement C it would be page 8.11-19, there's a section called impact evaluation criteria. And if you look to the next page, 8.11-20, there is a reference to the full set of the CEQA criteria that you are now mentioning, including the last one.

MS. WILLIS: But that analysis is not reflected in your testimony, is that correct? That we have in front of us, not the AFC part of it.

DR. PRIESTLEY: Again, if you look at the beginning of that paragraph there is a reference to the AFC, and you know, perhaps I haven't done enough of this to know, but again, you know, my assumption was that, well, golly, anything that I've already filed kind of represents the approach that I've taken, and that I don't need to, you know, repeat the whole thing

every time. I know that we are under some pressure to make these proceedings, you know, more efficient.

But if I should be doing this, please let me know.

MR. HARRIS: Counsel, I think you have to assume that that is part of his testimony.

MS. WILLIS: I guess my question is I don't see that analysis done -- you refer to the analysis as a scenic vista, and when you're disputing staff's testimony, but you don't consider part C, which -- or even reference that that part exists. And I just wanted to clarify with you if that was part of your testimony, not part of the voluminous documents that we've received over the last couple of years.

I'll move on.

MR. HARRIS: You said part C, Kerry? Part C of what?

MS. WILLIS: Of the CEQA guidelines. It was under number 1, aesthetics. There's actually three questions, and only one seems to be addressed in Mr. Priestley's testimony.

DR. PRIESTLEY: Well, only one is mentioned in my testimony, but again if you would

take a look again at my AFC section where I lay out my approach, the criteria that I'm using, I hope that it's -- I believe that it's all there.

And I've tried then to make a translation of those into the very specific approach I have taken. And I do apologize if I failed to provide, you know, a complete explanation of those things in this testimony.

MS. WILLIS: In your discussion -- this is probably more of a followup to Commissioner Laurie's question -- do you consider impacts to the areas -- I'm referring to the Blanchard Road area in the KOP1 -- do you consider the impacts to those just who are outside of their homes, and not necessarily in their yards?

DR. PRIESTLEY: Yes, I do. Again, as I indicated a little bit earlier in my testimony, yeah, I think it's important when you're thinking about impacts on a residential area --

PRESIDING MEMBER LAURIE: Dr. Priestley, let me interrupt you. Ms. Willis, I think we went over this. And he uses sliding scales, and he uses a subjective standard based upon a number of factors, including time of use and location and all that. And I think we have that.

DR. PRIESTLEY: Thank you.

MS. WILLIS: On page 3 of your testimony you state that the existing PG&E/Metcalf substation located in Coyote Narrows immediately to the east of the site is a major element in the area's landscape.

Could you tell me exactly how far away from the project site is the Metcalf substation?

DR. PRIESTLEY: To be able to give you a very clear figure I'd want to pull out my topo sheet and measure it. I can --

MS. WILLIS: Is it approximately a half a mile?

DR. PRIESTLEY: In the order of a half a mile, I would say, probably a bit less, a bit less than a half a mile.

MR. RUBENSTEIN: Dr. Priestley, if I may help you --

DR. PRIESTLEY: Yes, --

MS. WILLIS: Isn't there other structures in between, such as a railroad and --

DR. PRIESTLEY: Yeah, there is quite a bit of -- yes, you're correct. In this end of the valley there is quite a concentration of significant infrastructure facilities. As you

mentioned, there's the railroad, there's Monterey Road, there is the former weigh station site. There's the very large Metcalf substation. In fact you can kind of see the footprint of it here. In fact, this is just the developed portions. There are parking lots and so on, paved areas, fenced areas that actually occupy a bigger envelope here.

In addition, there are commercial activities along --

MS. WILLIS: I'm actually just asking one question. This isn't a lecture, thank you.

DR. PRIESTLEY: I'm sorry.

MS. WILLIS: If you don't mind. And when I'm looking at this map and looking at the photos that were included, the different various KOPs, from how many of those is the substation visible?

DR. PRIESTLEY: Well, I think probably the most pertinent one to talk about right now is Blanchard Road, and --

MS. WILLIS: Actually, that wasn't my question. How many of the KOPs is the Metcalf substation visible from?

DR. PRIESTLEY: We'd probably have to go

over them, you know, I just couldn't give you the number off the top of my head. But we could do a little review.

Clearly, when you're here at KOP1 on Blanchard Road, --

PRESIDING MEMBER LAURIE: Hold on a second, Dr. Priestley. Why do we care?

MS. WILLIS: I would say, I guess the question is why is it a major element in the landscape if it's not visible from maybe only one KOP in the area.

PRESIDING MEMBER LAURIE: Okay, do you have any comment to that question?

DR. PRIESTLEY: I know a lot about this area and I'd certainly be happy to talk about. It's just kind of up to the sense of the meeting here whether we should devote the time to do it. But I think anyone who has spent any time down in that area would have seen the substation and would be aware that, yes, when you are traveling around up and down highway 101 and in the north end of the Coyote Valley you can't miss the fact that the substation is there.

PRESIDING MEMBER LAURIE: Thank you.

MS. WILLIS: Does CEQA specify that

views be analyzed from key observation points?

DR. PRIESTLEY: It is silent on that question.

MS. WILLIS: Are you familiar with visual assessment systems used by federal agencies?

DR. PRIESTLEY: Yes, I am.

MS. WILLIS: Do they all use KOPs?

DR. PRIESTLEY: Most of them use something like a KOP. They may not call them a KOP, but when you start looking at the methods most of them have as their heart an approach where you pick, you know, typical areas, like the Forest Service calls them visual control points, that are used to evaluate visual change. So it's very much a standard element of all federal systems, or I would say most federal systems.

MS. WILLIS: Do federal systems use other types of analyses such as from roads or trails or from other various areas?

DR. PRIESTLEY: Those are the kinds of things that are considered, but again if you're going to do your analysis you really need to pick a point, and then do an analysis of what specifically is going on from that point.

And, you know, I have seen some analyses, in fact I have done some, myself, for example I worked on a case in Alaska where there was a transmission line crossing a very scenic fjord. And I did an analysis of the views from a boat moving up the fjord.

But in that case I picked a series of control points and had a lot of very specific analysis to back up my --

MS. WILLIS: You've answered my question, thank you.

DR. PRIESTLEY: I'm sorry.

MS. WILLIS: -- to move on.

HEARING OFFICER FAY: And, Ms. Willis, it's been about 18 minutes now. Can you wrap it up in one or two more questions.

MS. WILLIS: I would like to say they did have two hours on direct, and we do have a few questions.

Yeah, and unfortunately his answers are longer than my questions are.

PRESIDING MEMBER LAURIE: I think the point is that we understand where the differences are. And it's a question of how much good testimony is going to help me. The question --

MS. WILLIS: I understand.

PRESIDING MEMBER LAURIE: -- is in our hands.

MS. WILLIS: I understand. I just wanted to refer to the visual 9 condition.

DR. PRIESTLEY: Excuse me?

MS. WILLIS: Visual 9, and I don't know who might be available to answer that. It's for the panel.

PRESIDING MEMBER LAURIE: The proposed modifications?

MS. WILLIS: The condition, and then, yeah, and I just want to discuss the testimony regarding the modification. Actually Mr. Abreu might be the person that would be able to address this the most.

And I can just kind of move to our concerns. Maybe Mr. Abreu can answer, were you here for the testimony of Mr. Edens regarding land use?

MR. ABREU: Yes.

MS. WILLIS: And I went through the transcripts and the part that is concerning is that on page 205 of the January 31st transcript, Mr. Edens testified: The MEC site is at one of

the northern entrances to the North Coyote Valley and it should, per the general plan and/or the County master development plan, be developed with a large campus or corporate industrial use that would set the tone for the entire North Coyote Valley area, rather than with a power plant that would dominate the area, provide the image of a heavy industrial use."

Do you remember testimony to that? I mean you don't have to remember the exact words --

MR. ABREU: That sounds familiar.

MS. WILLIS: Then on page 206 it states: We note the MEC's inherent incompatibility with the planned uses." And they cite visual dissonance between the planned campus industrial development and he goes on.

My concern and my question is basically you're changing the condition or proposing condition change on page 24 to VIS9, wanting to emphasize the role of the San Jose planning department, and I guess my question is are you aware of the number of power plants the planning department has been involved in reviewing the design for?

MR. HARRIS: Kerry, I'm sorry, what

page?

MS. WILLIS: 24.

MR. HARRIS: This is of our direct testimony?

MS. WILLIS: Yep.

MR. HARRIS: Is there another number at the bottom? I've got B6 or something like that.

MR. ABREU: But I didn't get the question there, Kerry, I don't --

MS. WILLIS: The question is are you aware of how many other power plants the City of San Jose planning department has reviewed the design of?

MR. ABREU: No.

MS. WILLIS: Are there any other large power plants in the City of San Jose?

MR. ABREU: No.

MS. WILLIS: Okay, so it's a good possibility the answer could be maybe zero?

MR. ABREU: It's a good possibility.

MS. WILLIS: Okay. Are you aware of how many power plants the CEC Staff and compliance project managers for the Energy Commission have reviewed?

MR. ABREU: No.

MS. WILLIS: But you would suppose it would be more than that, is that correct?

MR. ABREU: Yes.

MS. WILLIS: Okay. Maybe you can answer then why you think that there should be basically an emphasis of the role of the City planning department in this design review?

MR. ABREU: Because the project is going to be, you know, in the City of San Jose, or at least mostly in the City of San Jose, depending on how this all works out. We want them to be involved, and to the extent we can do it, satisfied with the architectural treatment of the project. We want to include them as part of, you know, what we do in moving forward.

MS. WILLIS: Well, maybe you could answer then why the condition as written did not provide the City adequate review?

MR. ABREU: I don't understand -- actually the condition is we proposed it. It did say in consultation with the City of San Jose planning department.

MS. WILLIS: Right, you added that in. I'm asking why the condition, as it was written, not the way you wrote it, the way we wrote it.

MR. ABREU: Okay. Are you saying what was wrong with the condition the way you wrote it?

MS. WILLIS: Why did you feel like you need to add?

MR. ABREU: I think we added that because we wanted to demonstrate to the City that we want their involvement, that we're not trying to just bypass them, that we are not going to ignore them. So it's really more, I think, of a communication to the City that we do want to seek their input.

MS. WILLIS: And you do not feel the condition, as written, would seek the City's input even though that was included?

PRESIDING MEMBER LAURIE: We've got that, Ms. Willis. We can read the conditions.

(Pause.)

MS. WILLIS: Just a few questions on the visual plumes. Isn't it true that the current proposed cooling tower design cannot meet staff's proposed condition of certification VIS10? Is that correct?

MR. DUNSTAN: Well, in some years there would be some hours in which compliance with the condition would require us to shut down the plant.

And to that extent, adoption of the cooling tower design would be an unacceptable constraint on commercial operation, so that the --

MS. WILLIS: I mean other --

MR. DUNSTAN: -- doesn't work for us.

MS. WILLIS: I think we have already said that that wasn't part of the condition, the shutting down of the plant.

I'm just asking the design to meet the condition otherwise.

MR. DUNSTAN: Are you referring to the design point of 20 degrees Fahrenheit and 100 percent relative humidity?

MS. WILLIS: No, I'm referring to the design that you've proposed.

MR. DUNSTAN: Please repeat the question.

MS. WILLIS: Okay, one more time. The current proposed cooling tower design, isn't it true that it cannot meet staff's proposed condition of certification as we wrote it?

PRESIDING MEMBER LAURIE: And which condition?

MS. WILLIS: VIS10.

MR. DUNSTAN: The latest version would

have us change the design point temperature and humidity.

MS. WILLIS: I'm not talking about the latest, I'm talking about the actual condition as written. We haven't rewritten the condition.

MR. DUNSTAN: Well, let me review the language of the original condition.

MR. HARRIS: Ms. Willis, I'm not sure this witness has seen the language that I think you're referencing about you'd be willing to take the shutdown out? Can you reference your --

MS. WILLIS: I believe it's the 30 degree, 90 percent humidity.

MR. HARRIS: No, the reference in your testimony to staff's willingness to take the shutdown condition out. Can you cite that so we can show him? I think that's the problem here.

MS. WILLIS: Well, I don't think that's -- that's not really the question about the shutdown. That would be a result of not meeting it, not -- we're just asking about meeting it.

MR. DUNSTAN: If I may, are you asking whether the tower we've proposed with the 30 degree Fahrenheit, 90 percent relative humidity design point would comply with the VIS10 as it

appears in the FSA regardless of the shutdown requirement?

MS. WILLIS: Right.

MR. DUNSTAN: Our evaluation of the potential for formation of a visible plume, keeping in mind at some points this plume might be a few wisps of visible something, indicates that there's a high probability that in most years the design we've proposed could comply.

The basic problem with the condition relates to the specification of dimensions of plume for which there's no established measurement methodology. And the timekeeping aspect. We feel that this is simply -- it would be difficult, if not impossible, for the compliance project manager to administer.

MS. WILLIS: So is that a no?

MR. DUNSTAN: Please repeat the question.

MS. WILLIS: Never mind.

PRESIDING MEMBER LAURIE: Well, didn't you ask the question whether --

MR. DUNSTAN: Very well, my answer --

(Parties speaking simultaneously.)

MR. DUNSTAN: Fair enough, let me --

PRESIDING MEMBER LAURIE: -- does the design of the project meet VIS10 as you read it today. And I think we have to know the answer to that, because if the answer is no, then --

MR. DUNSTAN: You're correct. I have an answer for that, and the answer is I really don't know.

PRESIDING MEMBER LAURIE: Okay.

MS. WILLIS: In your testimony do you dispute the results of the psychometric modeling analysis performed by staff using the San Jose Airport and the San Martin Airport meteorological data?

MR. RUBENSTEIN: We do not have the details of that analysis and we were not able to duplicate its results. When we performed a parallel analysis we found that in the case of the San Jose data we predicted more hours of a visible plume. And when we analyzed the facility using the San Martin data, we predicted fewer hours. I cannot explain the discrepancy between our analysis and staff's.

MS. WILLIS: The last question I had was regarding also visual condition 10. Could you please state how and if you're -- you may not be

prepared to do this, but how you plan to monitor visual plumes.

MR. DUNSTAN: Our plan at this point is to rely on a correlation provided to us by the tower manufacturer, which is known as a physical plume curve, which predicts the formation of some form of plume for a given design point, and various ambient conditions.

The plant will be equipped with meteorological monitoring equipment which will be input to the plant's central computer, and we would use a predictive correlation to drive the devices that actually activate the plume abatement systems.

I would expect that in the first cool weather season of operation the operator would be very interested in seeing whether any sort of visible plume occurs when the abatement feature are, in fact, in operation.

So I think the human eye will be the calibration device during the initial winter of operation of the plant. And if we find there to be a problem we would go back to the supplier of the tower under warranty provisions and require that he correct it such that it met the predicted

performance.

HEARING OFFICER FAY: Ms. Willis, you told us 15 minutes; it's been over half an hour now. One more question.

MS. WILLIS: No more questions.

HEARING OFFICER FAY: Thank you. All right, San Jose.

MS. DENT: I said I'd give a quick statement of where my questions are going to begin with.

HEARING OFFICER FAY: Sure.

MS. DENT: So I'll do that, I think, with each witness that I think the questions are directed to.

I think I'll start with the architecture testimony, since that was what we took first, and I really only have a couple of areas of inquiry with the architecture testimony.

CROSS-EXAMINATION

BY MS. DENT:

Q One is for Mr. Abreu, I think, and that is to run through again, just so that I understand it, an explanation of how changes in the architecture, what kind of changes would require remodeling of the air quality testimony.

I understood it about the staff; I didn't quite understand it about the placement of the physical parts of the plant on the site, whether moving it horizontally or vertically on the site would require air remodel.

HEARING OFFICER FAY: Let's just go to that. Between -- probably Mr. Rubenstein.

MR. RUBENSTEIN: Yeah, I will answer that. Any changes in the horizontal dimensions, meaning moving any of the equipment around on the site by more than a de minimis level, and by that I mean probably a foot or two, would result in -- a foot or two from left to right or front to back --

MS. DENT: So if I'm looking at your figure VIS1.2, if you move any of the equipment between the creek and Monterey Road, that's moving it left and right, is that what you mean by left and right? Or do you mean Blanchard Road to the creek?

MR. RUBENSTEIN: Either way. North or south, east or west, if you move any of the plant equipment by more than a foot or two, it would trigger the need for us to redo the air quality modeling analysis.

MS. DENT: So the layout of this plant on the site in terms of your air quality modeling is fixed? There's no ability to modify, for example, the setback of the plant from the riparian corridor habitat by more than a foot or two, by moving it onto a part of the site that is wider and more vacant?

MR. RUBENSTEIN: It's certainly possible to move it, but your original question was could you move it without triggering the need to redo the modeling analysis, and the answer is no.

MS. DENT: That answers that question, thank you. The other architectural question I have really goes to the examples that we were shown of the architecture for other facilities, and I think that the other facilities, the examples we were shown were for what appear to me to be much smaller facilities in terms of the area, square footage, the mass of the building and that sort of thing. Except, perhaps, for the facility in Denmark. That looked like it was a big power plant to me.

So if I could ask you to just address that for a moment, the mass of this facility, height, the size of the layout, the site that's

occupied by the facility.

MR. STOCKS: I think that you're right, actually, I think the power station in Denmark is of a comparable size, but also the power station that we actually noted in New Jersey is smaller, but it isn't that much smaller.

It is subjective, of course, because we don't really know just how big these installations are, but I think your perception is correct.

MS. DENT: Now, I'm not sure I know which was one was New Jersey. I remember John F Kennedy Airport, that's a --

MR. STOCKS: New Jersey is the one on the top right-hand corner, which is here. That's New Jersey.

MS. DENT: And now that facility, the surrounding area that it is located in, is that facility located in an urban area?

MR. STOCKS: That's actually in the University playing fields area, so it is slightly built up, it isn't an urban area.

MS. DENT: And are you aware of any other facilities of this size of Metcalf, the mass of Metcalf, that you worked on in urban industrial -- in campus industrial urban areas?

MR. STOCKS: Well, I, personally, have actually worked on very large industrial design, and those would be in Paris. It wasn't a power plant there, it was actually a car manufacturing facility. That was actually much larger than this facility here, so it's --

MS. DENT: But no power plants?

MR. STOCKS: No, no power plants of this size, no.

MS. DENT: Okay, that does it for architecture. Now I'm going to -- just a couple of questions on the plume issues. And I'm sorry if the -- again, I wasn't prepared today for the -- because I misunderstood your notice. I'll try to keep it short.

HEARING OFFICER FAY: And keep in mind, regarding exhibit 97 on the plume, you're accorded the same opportunity as staff, you can follow up later.

MS. DENT: These are way more basic questions than that.

HEARING OFFICER FAY: Okay.

MS. DENT: If I understand the testimony with all of the technology that is being proposed by the applicant there's an acknowledgement that

under some weather conditions less than 30 degrees and higher humidity than 90 percent the plume will be visible, and there's some debate about when those weather conditions occur.

But those weather conditions do occur sometimes during the year in Coyote Valley, am I understanding that correctly?

MR. RUBENSTEIN: That's not quite correct. What our testimony is, is that based on a year's worth of data collected at the IBM site, it's our best judgment that there would be no periods in which a plume would be visible from either the abated cooling tower or from the abated heat recovery steam generators.

We recognize that there is variability in the weather from year to year. We recognize that the IBM site is not exactly at the project site. And there is that uncertainty, and as we've said in our testimony there is the potential for a plume to form.

We think that potential is greatest at night when you would not be able to see the plume. And we think that that potential is greatest during daylight hours under conditions when there would either be fog forming or rain.

MS. DENT: Now that plume would be visible from all of these KOPs, I think you referenced them, would it not? If there were a plume -- I'm trying to understand. You acknowledge that it occurs under some weather conditions. Those weather conditions may or may not exist in Coyote Valley. We don't have any -- apparently we don't have any meteorological data for the specific site.

MR. RUBENSTEIN: We have temperature data from the PG&E substation at Metcalf.

MS. DENT: That's about a half a mile away.

MR. RUBENSTEIN: That's about as close as you can get, and I daresay that the temperature pattern at the Metcalf substation is going to be identical to the temperature pattern at the project site.

MS. DENT: And you don't have humidity data for that?

MR. RUBENSTEIN: That's right, so I can't do a full prediction. But by comparing the temperature data at the substation with the data at the IBM site and at San Jose and at San Martin, I conclude that the project site is best

represented by the San Jose and IBM data. Between that set of extremes it's going to be closer to the San Jose and IBM data.

That indicates to me, based on our analysis, that at the times when there is a potential for a plume to form, it is most always going to be under conditions when visibility in the Coyote Valley is limited anyway.

MS. DENT: I understand that.

MR. RUBENSTEIN: And then to get to your specific question about which KOPs, I can't draw any quantitative conclusions about which KOPs you might be able to see a plume from. But I can say with great certainty that the further you are from the site in any direction the less likely you're going to be to see a plume if there's a plume to see at all.

MS. DENT: And I think there was some, there sounded like there was some dispute about the length, or height, I think height would be a better way to put it, of the plume when it is visible.

Did you have some estimate of that, yourself? Let's say under -- I understood your testimony that there would be -- it would be, you

could see through it more easily if the temperature were close to 30 degrees. And the lower the temperature drops the more dense the plume is going to be appear to be.

But that doesn't impact, I would think, the height of the plume. So I'm just trying to get a picture of how high this plume is so that we can understand how far away you would see it from.

MR. RUBENSTEIN: The height of the plume in data response 90, and this is from the cooling tower, we estimated at being an average of 68 meters, so roughly 200, 210 feet during those periods of time when the plume might be visible.

MS. DENT: So that would be 210 feet above the top of the stack?

MR. RUBENSTEIN: And that was the old design. Not the top of the stack, this is the cooling tower, so it's the top of the cooling tower.

MS. DENT: And what is the height of the top of that cooling tower?

MR. RUBENSTEIN: I'm sorry, I misspoke. It's above ground level.

MS. DENT: So it would be 220 feet above ground level?

MR. RUBENSTEIN: Right, for the old design of the tower.

MS. DENT: And now for your current design?

MR. RUBENSTEIN: I don't know that I have that number in front of me. I do know that we predicted no visible plumes, and so we would not have recorded any measured heights.

MS. DENT: Well, again, let's assume that the weather conditions exist. Does the redesign of your stack affect the height of the plume?

MR. RUBENSTEIN: Yes, because it will, by reducing the tendency to form plumes at all, it will reduce both the frequency of the formation of the plume, and if a plume forms it will reduce the size of the plume.

MS. DENT: Okay, I have just one more question about the plume, and it's really a question, technical question. I mean is there something out there, I heard some mention of perhaps other technology that is used in colder wet climates for plume abatement. Was I misunderstanding that testimony, or is this all, this is the most you can do?

MR. DUNSTAN: I think you were referring to my comment that this type of tower is the most frequently used in areas of extremely low temperatures.

In general, temperatures as low as, for example, places in northern Europe or even northeastern United States, when the temperature is down in the single digits, the humidity is generally very low.

So it's not comparable to a tower designed for 20 degrees Fahrenheit and 100 percent relative humidity as staff had proposed.

That's a situation in which air simply cannot hold any more water, and any water added to the atmosphere will instantly condense.

MS. DENT: Well, I guess my question is, is there technology that does cover those conditions? I mean those conditions do exist in some parts of the world, certainly, and probably in some parts of the United States where you have both high humidity and cold weather.

So is there some technology, some plume abatement technique that exists that covers that?

MR. DUNSTAN: Not that I'm aware of.

MS. DENT: So there's no other --

nothing more that you can do to abate the formation of a plume, other than this particular --

MR. DUNSTAN: The only way to guarantee that no water vapor plume will form from the heat rejection system of a power plant is to use an air cooled condenser.

MS. DENT: All right, that finishes the plume abatement. Now I want to go to the visual just real quickly.

And looking again at VIS1.2, and I think this is for the first witness that testified, the KOP number 1 that is in so much contention, located down on Blanchard Road, --

DR. PRIESTLEY: Yes.

MS. DENT: -- the view that you see from KOP1, in fact the view that you see from KOP1 would be seen if you stood anywhere in the vacant field that is behind these residences from what you show as the property line clear to the lot line of the residences, is that entire open area, you would see that same view that you see from KOP1, would you not?

DR. PRIESTLEY: Yes and no. One of the things that you will note actually is that this

kind of thin line that runs kind of parallel to the UP Railroad tracks, and it comes down to about the point where you see KOP1, --

MS. DENT: Um-hum.

DR. PRIESTLEY: -- that is the boundary line of the project site. And that area is there to provide for an access road. And is a part of the landscape plan, I think we have a copy of it right here.

In fact that area is going to be very heavily landscaped. We're following the guidelines of the North Coyote Valley --

MS. DENT: Let me --

DR. PRIESTLEY: -- industrial campus plan, and --

MS. DENT: Let me ask you this, let me just exclude you from that long narrow strip, okay?

DR. PRIESTLEY: Sorry.

MS. DENT: I'm talking about the open field behind the residences. If you stood in the middle of that open field you'd be looking directly at Metcalf Energy Center would you not? You'd have a much more unobstructed view of it than you would from KOP1?

DR. PRIESTLEY: Oh, that's quite true. If you were standing in that vacant agricultural field behind the Passantino house, yeah, it would be unobstructed.

MS. DENT: Okay. Now, let me ask you about the property line. Do you understand the line that's drawn on this map, on this figure, I should say, the solid black line, it's kind of thin but it's solid, do you understand that to be an existing property line or a proposed property line?

MR. ABREU: That's a proposed property line. We have an option on that land we haven't exercised.

MS. DENT: The existing property line, though, for the entire property that the Metcalf Energy Center is a part of, the existing property line actually runs behind, the current existing property line runs behind the back of the residences. Where is it between the back of the residences and your proposed property line?

MR. ABREU: I don't understand the question.

MS. DENT: You can look at this 1.2 and if you could indicate where the existing property

line is for -- the Metcalf Energy Center is on an existing parcel of property. Where does the current property line for that parcel end right now?

MR. ABREU: Well, we have two pieces of property. It's going to be the Metcalf Energy Center. The northernmost you see a tree, if you look at this VIS1.2, you see a tree line, a row of trees running up and down the page about two-thirds of the way through the heat recovery steam generators.

To the left of that is one piece of property right now. And then to the right of that is the other piece of property.

MS. DENT: And how far does the current property line extend toward Blanchard Road?

MR. ABREU: Do you want to run that question by me again? Maybe it's getting a little late.

CHAIRMAN KEESE: Does it extend to where we see the trees running down?

MR. ABREU: This is Blanchard Road over here.

MS. DENT: Correct.

MR. ABREU: This is the property line.

And so I'm not sure --

MS. DENT: That's your proposed property line.

MR. ABREU: No, no, that's the actual property line today. I wasn't sure what your question was.

MS. DENT: So the current property line is that row of trees right there?

MR. ABREU: For one piece of the property.

MS. DENT: For one piece. For the other piece of property where you do have facilities, at least on VIS1 you show facilities --

MR. ABREU: Right.

MS. DENT: -- on the other side of that row of trees for quite a ways, where does that property currently go to?

Okay, so if you're looking at what is adjacent to the current property that the project sits on, what is adjacent to the current property is not only these residences, it's everything down here on the other side of Blanchard Road, is it not?

The current parcel of property that you're proposing to use, as you just described it,

extends all the way down to Blanchard Road?

MR. ABREU: The access road does extend all the way down to Blanchard Road.

MS. DENT: I'm not asking you about your proposed property line, I'm asking you about the current property line on the property.

If you were looking to protect properties that are adjacent to the property instead of looking to protect existing uses, you would be looking at properties south of Blanchard Road, is that correct?

MR. HARRIS: I'm going to object on the basis there's too many properties in your question. I'm not sure which property --

HEARING OFFICER FAY: We can't understand your question.

MS. DENT: All right.

PRESIDING MEMBER LAURIE: Is the point you're getting to that they have property available that they can do additional landscaping? Is that your point?

MS. DENT: My point is that there's quite a bit of property available where this project could be moved quite a lot.

PRESIDING MEMBER LAURIE: Okay, you're

talking about moving the property, you're not talking about additional landscaping?

MS. DENT: There could be additional landscaping. The project could be moved further back from the creek. There's quite a bit of additional property for flexibility in design of this project.

PRESIDING MEMBER LAURIE: Okay. Ms. Dent, I think there's evidence in the record that allows you to make that argument.

MS. DENT: But further I want to get at the LORS compliance issue. And I'll refer to the page --

HEARING OFFICER FAY: Can you do it briefly, you told us 15 minutes and it's been 15 minutes.

MS. DENT: Well, you know, it takes people, it seems like, a long time to answer questions. I think I've only taken about five minutes. No, I think I've taken less than 15 minutes, it might have taken them longer. I can't estimate the amount of time it's going to take them to answer.

On page 13 of your testimony at the bottom of the page, you take issue with the

staff's assessment of LORS compliance in terms of impact of the project on adjacent properties.

DR. PRIESTLEY: That's correct.

MS. DENT: The question that I'm asking is do you not understand that the City's policies, which are land use policies, are not designed necessarily to protect existing uses, but are also designed to protect planned and future uses?

DR. PRIESTLEY: I can accept that, yes.

MS. DENT: And would you not agree that the visual impact of this project on planned and future uses, such as campus industrial for the property immediately between the property line and Blanchard Road, is at least as significant a visual impact as staff assessed impact from the KOP1?

MR. HARRIS: I'm going to object to the question as unintelligible, and ask you to rephrase it.

MS. DENT: Okay. Let's look at the standpoint of planned and future uses, campus industrial for the property immediately south of the proposed property line. It's on the existing property, but immediately south of the proposed property line. Between the proposed property line

and Blanchard Road.

You're standing there, you're in a campus industrial development.

MR. HARRIS: Are you asking him to assume the --

MS. DENT: Yes.

MR. HARRIS: -- Cisco development?

MS. DENT: I'm asking him to assume the planned campus industrial land uses.

MR. HARRIS: I'm sorry, I want to make sure we're clear. Are you asking about the planned Cisco project or other potential --

MS. DENT: No, just campus industrial generically, the land use plan that the City has for the area.

MR. HARRIS: So, closer than the Cisco project?

MS. DENT: Closer than the Cisco project. Campus industrial on that property right there.

Wouldn't you agree that the impact, visual impact of the project on campus industrial immediately south of the project is, in fact, much much greater than the visual impact even at KOP1?

DR. PRIESTLEY: I guess my response has

to begin with an explanation of the evaluation of this project we've had a number of workshops and we've kind of gone round and round.

The extent to which it is appropriate for us, under CEQA, to be evaluating things, viewpoints, elements of the environment that are not there yet, that are not part of the existing environment.

And, in fact, in some of the earlier analyses CEC Staff had done evaluations of the impacts of views of this plant from proposed industrial campus buildings. But the CEC made a decision that it would be inappropriate to do that. And those evaluations were dropped from staff's evaluation.

HEARING OFFICER FAY: Ms. Dent, I just heard him answer in terms of CEQA. The question I heard you ask was in terms of LORS, --

MS. DENT: Yes, --

HEARING OFFICER FAY: -- City LORS. Okay, you're talking at cross-purposes.

MS. DENT: Yeah, I was going to say my question directly relates to the fact that we are making a LORS determination here. And you've made a LORS determination. And the City LORS that

you're referring to are specifically as you acknowledged, designed to protect future and planned uses.

So, did you not, in doing your LORS analysis, even look at future and planned uses? Or did you, as it appears to be, look only at existing uses, whether these particular residents would see the plant and what they would see?

MR. HARRIS: I'm going to object and ask that you ask a single question as opposed to a compound question, because you lost me.

MS. DENT: Well, we can really take a long time on --

MR. HARRIS: Well, you asked two different questions, and I didn't know which one you wanted him to answer.

HEARING OFFICER FAY: Mr. Priestley, apparently the City has LORS to protect future uses based on their planning.

Did you take that into account?

DR. PRIESTLEY: Yes, I did, and this is documented in some of our earlier data responses.

HEARING OFFICER FAY: And notwithstanding the plan for this area south of Blanchard Road, you still believe the project

complies with LORS designed to protect the view of future -- from future uses?

DR. PRIESTLEY: Yes, I do. And I should explain just very briefly, I mean it's incontrovertible that when you are in this area behind the Passantino property, of course, you would be able to see this facility.

But whether it would be incompatible with an industrial campus project is another question. And I believe that it, in fact, would be compatible, would not have a negative impact on campus industrial use in that area.

HEARING OFFICER FAY: And therefore would comply with the LORS that address that?

DR. PRIESTLEY: Yes.

HEARING OFFICER FAY: Okay, that's his answer.

MS. DENT: Okay, I've got just, I think hopefully, a couple more questions on that same issue.

HEARING OFFICER FAY: Okay, please hurry.

MS. DENT: I want to turn to the alternate site views also, and I want to ask directly again, you testified that staff has found

that there is no significant adverse visual impact of the project on these alternative sites.

DR. PRIESTLEY: That is true.

MS. DENT: Do you agree with that analysis or disagree with that analysis? Yes or no. I mean one or the other. Quick question.

DR. PRIESTLEY: I'll say that at least in the one case I do not agree with staff.

MS. DENT: Okay, and so that's for one of these alternates you think there would be a significant visual impact? And which one is that?

(Laughter.)

DR. PRIESTLEY: Can anyone guess? Alt 4.

MS. DENT: So you think there's a significant visual impact in all four of these?

MR. HARRIS: No, no, no.

MS. DENT: Alternate 4?

DR. PRIESTLEY: Yeah, I'm sorry.

MS. DENT: Now this is a view, a simulated view, would be about how far away from this proposed facility?

DR. PRIESTLEY: Well, I guess you'd have to say that you're right next to it. I'm standing in the middle of the boulevard here, and as you

can see it comes right up to the edge of the street.

MS. DENT: Well, in fact, if you had the standard City setback for campus industrial on the property immediately adjacent to the proposed Metcalf Energy Center wouldn't this be exactly what you'd see?

DR. PRIESTLEY: No. As you know, the guidelines for campus industrial areas have very very demanding requirements, not only for setback, but for landscaping, so what you would see would be within the context of the landscaping within the setback area, not only on the project site, but also on the setbacks required on the campus industrial site.

So the context -- a) the context would be different. And here you're getting an impact because of a blockage of a very significant view that has been recognized in the scenic highway designation for this area.

So there are some specific reasons why this would be a significant impact. And a generating facility on the Metcalf site would not be.

HEARING OFFICER FAY: Last question, Ms.

Dent.

MS. DENT: And so again, applying this same approach to the Metcalf Energy Center site, if you're standing where the campus industrial is, adjacent to the Metcalf Energy Center site, you're going to not see most of Tulare Hill, you're going to not see the Coyote Creek riparian corridor that's next to the site, you're going to see a power plant in front of you just like you do in alternative 4?

DR. PRIESTLEY: Well, actually the viewing distance would be different than what you are seeing here, because right in here you're right next to the fenceline of the project.

And, again, because of the setback requirements, the landscape requirements required on both parcels, from your most frequent viewing area, say like in the building, around the building, you're going to be several hundred feet from the power plant site. So you would be seeing it, you know, within a somewhat larger landscape context.

And, again, you would be seeing it in the context of all of the landscaping that will be required on both sites.

MS. DENT: I'm going to do one more question. I'm sorry.

PRESIDING MEMBER LAURIE: Wait, wait, wait, wait, first of all, if we say one more question you get one more question. Why don't you ask if you can have one more question.

MS. DENT: May I have one more question.

PRESIDING MEMBER LAURIE: Yes, you may. I just want to make sure that we all understand the rules.

MS. DENT: Oh, yeah, I understand the rules very well, thank you.

PRESIDING MEMBER LAURIE: When you're in a courtroom and a judge says you have one more question, do you ask your witness two questions?

MS. DENT: I may.

PRESIDING MEMBER LAURIE: Well, not in my courtroom you wouldn't.

MS. DENT: And I do --

PRESIDING MEMBER LAURIE: Just ask your question.

MS. DENT: -- I will --

PRESIDING MEMBER LAURIE: Ask your question --

MS. DENT: -- be -- I will be --

PRESIDING MEMBER LAURIE: Ask your question, Ms. Dent.

MS. DENT: I will be glad to follow your rules if I'm told the rules in advance.

PRESIDING MEMBER LAURIE: Well, Mr. Fay said you had one more question.

MS. DENT: I think that being told the rules the minute before the next question is a bit unusual.

PRESIDING MEMBER LAURIE: We also --

MS. DENT: I'm going to drop it, that's okay.

HEARING OFFICER FAY: Good.

MS. DENT: I'm going to drop it --

PRESIDING MEMBER LAURIE: If you feel your question --

MS. DENT: No, no, no, no --

PRESIDING MEMBER LAURIE: -- is important to your case, ask your question.

MS. DENT: Okay, I will. Thank you. Looking at the site diagram up there behind you, and the setback of the facilities from the property line, the facilities immediately to the north of the property line are set back exactly 100 feet, is that correct?

MR. ABREU: I think we went over this in the land use section, Mollie --

MS. DENT: Right.

MR. ABREU: -- Ms. Dent. What we have, you had the condition that the CEC put into land use that at the time that the other land gets converted to campus industrial we have an option with the owners, the Passantinos, to add more landscaping to the south of the power plant, so we would fully comply with the 100-foot setback.

Initially --

MS. DENT: I under --

MR. ABREU: -- because the Passantinos didn't want us to use all their land, we have a less of a setback.

MS. DENT: The setback is going to be 100 feet, though. My question for the earlier witness about the large setbacks and about the extensive landscaping is that there are going to be -- there are planned to be buildings, I believe it would be 200 feet away, because there would be 100-foot setback on each side, so you would literally be 200 feet from that facility.

DR. PRIESTLEY: From the closest building, and you have to remember, perhaps when

you get a chance to look at some of the simulations you'll see that it was a very intentional part of the design to put the lowest buildings here at the southern end of the property. This is kind of like an administration warehouse building; it's no more than about one story high, so it's rather low. And particularly with the landscaping in front of it, it's something that you will be able to look over.

So it was quite intentional to put this, to put the parking lot on the south side to provide more distance between any potential viewers down here and the larger elements of the facility.

MS. DENT: Thank you. I have no further questions.

PRESIDING MEMBER LAURIE: Five-minute break, folks.

(Brief recess.)

PRESIDING MEMBER LAURIE: -- examine the applicant's witnesses.

MR. AJLOUNY: I'll start my timer now, and I'd appreciate -- stop my timer -- got it? Start it up. I'd appreciate yes or no answers where possible, since I only have 20 minutes and I

have quite a few questions.

CROSS-EXAMINATION

BY MR. AJLOUNY:

Q My first set of questions is for Dr. Priestley.

Doctor, if you can go to your page 3 of your testimony, last paragraph, first sentence. It states: IBM Research and Development facility is visible prominent feature on the north side of Bailey Avenue west of Santa Teresa Boulevard."

Are you there?

DR. PRIESTLEY: Oh, yes, I'm here. What's the question?

MR. AJLOUNY: Okay, the question is if you're at Metcalf site, are you able to see the IBM Research Center?

DR. PRIESTLEY: No.

MR. AJLOUNY: Okay, and that statement in the first sentence that I just read, are you leading to the fact that you can see it from the Metcalf station?

DR. PRIESTLEY: You're referring to the term vicinity of the project. I'm talking about, here I'm talking not just what you can exactly see from the project, but, you know, the larger area,

subregion within which the project is set.

MR. AJLOUNY: Isn't it true that that facility is backed up behind some hills and it's very hard to see even maybe from the Cisco site?

DR. PRIESTLEY: You're talking about the IBM facility?

MR. AJLOUNY: Yes, the one you're talking about in the first paragraph three.

DR. PRIESTLEY: Sure. It's up there, you know, the upper end of Bailey Road. You can certainly see it when you're going by, but when you're like down on Monterey --

MR. AJLOUNY: And I'm talking about at the Cisco site. And I don't mean to be rude cutting you off, I'm just trying to get as much done in 20 minutes.

DR. PRIESTLEY: Yeah, probably from the Cisco site, well, maybe the southern end of the Cisco site you may be able to see something, but not from most of the site.

MR. AJLOUNY: So would you say maybe visual prominent feature maybe is a little stretching it?

DR. PRIESTLEY: No, again it has to do with how I'm using the term project vicinity. If

you're talking about the general project vicinity and things that are up in kind of the northern end of the Coyote Valley, that's certainly within that kind of subregion.

MR. AJLOUNY: Okay. When I read that I took it as when you're at Metcalf or in the general area you can see IBM.

DR. PRIESTLEY: No, I'm sorry if that came across.

MR. AJLOUNY: Okay, great. Page 8, item 4, third paragraph.

DR. PRIESTLEY: Okay.

MR. AJLOUNY: It's a big paragraph but I don't want to take time to read it all. But there's a sentence I'm concerned about, and that would be the one that's about seven lines down, are you there yet?

DR. PRIESTLEY: The fourth paragraph under --

MR. AJLOUNY: Third paragraph under item 4.

DR. PRIESTLEY: Oh, the third paragraph?

MR. AJLOUNY: It starts: In any event.

DR. PRIESTLEY: Okay.

MR. AJLOUNY: Okay?

DR. PRIESTLEY: Yes.

MR. AJLOUNY: The sentence is about seven lines down, the sentence: FSA concluded that the project would not have an adverse effect on ten of them."

Okay, am I led to believe that not having adverse effect is equal to less than significant effect?

DR. PRIESTLEY: Yes.

MR. AJLOUNY: So less than significant is not having an adverse effect? I guess, I'm just wondering if you're playing with words there. There's ten items less than significant?

DR. PRIESTLEY: These are -- what I intended to say, and I'm sorry it's not more clear, my intent was to say that both the staff and I agree that at least ten of the sites there definitely would not be an impact. I believe that there are 11 that there wouldn't be an impact. But staff found that on 10 of the KOPs there would not be a significant impact.

And I think, based on the discussion we just had, you know, perhaps to be very very precise I should correct this to say that staff has found that there would not be a significant

impact on eight out of ten.

MR. AJLOUNY: Okay, great, that's the point I wanted to make. On page 21, cumulative impacts, your testimony.

DR. PRIESTLEY: Okay.

MR. AJLOUNY: Last paragraph, last sentence, in the middle of the sentence it states: It is important to take into account the fact that as part of the project over 100 acres of visible prominent hillside lands will be set aside as permanent open space contributing substantially to the preservation of the valley's hillside backdrop."

DR. PRIESTLEY: I see that.

MR. AJLOUNY: Okay. What do you mean by visually prominent hillside lands?

DR. PRIESTLEY: The south side of Tulare Hill is an obvious visually prominent element of the landscape of the northern Coyote Valley.

MR. AJLOUNY: Okay, so basically in layman's terms it's a big hill in front of everybody?

DR. PRIESTLEY: Yeah, exactly.

MR. AJLOUNY: Okay, great. So that big hill in front of everybody with a big huge

building, do you think it would visually impact that hillside?

DR. PRIESTLEY: I can't give you a yes precisely, my --

MR. AJLOUNY: All right, that's okay --

DR. PRIESTLEY: -- my answer is no because I disagree with your contention of big huge building in front of the entire hillside. Because well, we can have more discussion of this, but for the sake of brevity I'll stop there.

MR. AJLOUNY: Great. Okay, I think this was mentioned but maybe I'll clarify it. On page 3 of your testimony, fourth paragraph, I think staff got this one, but I'm -- let's see, page 3, fourth paragraph, you talk about adjacent to the Metcalf substation.

Was that touched on? Am I dreaming or was that talked about, the word adjacent? Oh, that's right, because I think you used the word half mile, or someone said something about a half mile that that substation might be from the proposed site? Is that --

DR. PRIESTLEY: Can I have the question, please.

HEARING OFFICER FAY: Just ask the

question.

MR. AJLOUNY: Okay, yeah. Is it true that you said that the substation is about a half mile away?

DR. PRIESTLEY: It may be closer. I said perhaps something under a half a mile. We'd have to measure it on the map to --

MR. AJLOUNY: Okay, no problem.

DR. PRIESTLEY: -- tell you for sure.

MR. AJLOUNY: And I guess I want to key in on the word adjacent.

DR. PRIESTLEY: Oh, excuse me, can you show me where it says adjacent?

MR. AJLOUNY: Yeah, on page 3, fourth paragraph down. You know what, I misspoke. It says immediately to the east of the site. And I guess I put my notes down as adjacent, so I apologize.

The first sentence, fourth paragraph, the existing PG&E Metcalf substation located in the Coyote Narrows immediately to the east of the site. True?

DR. PRIESTLEY: Yes, it is true.

MR. AJLOUNY: So, almost a half mile, maybe just less than a half a mile, with the

railroad and all that, you would consider immediately to the east of the site?

DR. PRIESTLEY: In that context I would say the use of the term immediately is appropriate.

MR. AJLOUNY: Okay, could you use the word immediately to the south --

PRESIDING MEMBER LAURIE: We got it, your point.

MR. AJLOUNY: All right, fine, that's good, you're making it easy for me, thank you.

PRESIDING MEMBER LAURIE: Your point is made.

MR. AJLOUNY: The abatement, is it achievable to do a 20/100? Twenty degrees, 100 humidity?

MR. DUNSTAN: We've been advised by one of the world's leading manufacturers of hybrid cooling towers that they are very skeptical about being able to meet that design condition.

MR. AJLOUNY: Okay, so they're skeptical. So your answer is it is not achievable?

MR. DUNSTAN: GEA Thermal Dynamics has told us they don't think they can do it.

MR. AJLOUNY: Did you ask them about 95/25, or 25/95?

MR. DUNSTAN: No.

MR. AJLOUNY: Okay. So it isn't a matter of spending more money to achieve it, it's just that it's not feasible?

MR. DUNSTAN: GEA Thermal Dynamics has told us that they're very skeptical whether they can do it. They've never done it, and that indicates to us that their confidence in success is very low.

MR. AJLOUNY: So one of the possible ways to achieve a non-plume power plant would be dry cooling?

MR. DUNSTAN: That's correct.

MR. AJLOUNY: All right, thank you. Okay, alternate 4 on our famous non, what I call the surprise pictures here. I don't know what else to call it.

On your alternate 4, Dr. Priestley, I just wondered, do you know how big that site is?

DR. PRIESTLEY: You know, I would have to look in my alternatives analysis to be able to tell you exactly what --

MR. AJLOUNY: Okay, no problem.

DR. PRIESTLEY: -- does anybody know?

MR. AJLOUNY: Do you have any reason why you moved it it looks like maybe 10 or 20 feet from the street, and why you didn't push it back in your example here?

DR. PRIESTLEY: You'd have to take a look at the site layout, but because of the configuration of the site that was really the only way to do it.

MR. AJLOUNY: So your testimony is to say that this power plant has to be this close to the street to be sitting on that site?

DR. PRIESTLEY: If you're going to squeeze everything on that site, you're going to have to do something like this.

MR. AJLOUNY: Okay, well, I mean I saw in your proposed Metcalf, which is really such a superior site that the one-story building was closer to the home, wouldn't you think that you might put the one-story building closer to the street?

DR. PRIESTLEY: Well, you know, one of the down sides of this site is that it is bounded on three sides by streets. So, you know, yeah, sure the lower buildings were put on another side,

where there are also sensitive viewers, but, you know, you only have one of those low buildings to work with, and you can't do that on every side.

MR. AJLOUNY: Okay. We talked about temperature and humidity. If humidity was higher does that mean -- and I'm referencing the 39, so if humidity was like 95 percent, does that mean maybe the temperature would be 32 when you start seeing plumes? Is that how that works?

MR. DUNSTAN: No. In fact, if the dry bulb temperature is 30 degrees -- let's back up. I believe we're talking about the proposed tower that's designed for coincident conditions of 30 degrees dry bulb and 90 percent relative humidity.

If ambient dry bulb temperature were 30 degrees and the relative humidity were 95 degrees there is a potential for some water vapor to condense above the tower.

MR. AJLOUNY: I guess my question is the higher the humidity would that make the temperature breaking point of plumes beginning to be seen at a higher temperature?

MR. DUNSTAN: Yes.

MR. AJLOUNY: Okay. So, in reference to my last question, if the humidity was at 95

percent, we might see plumes above 30 degrees? Yes or no, please.

MR. DUNSTAN: Yes.

MR. AJLOUNY: Okay. Are you aware of the temperature being around 25 or so degrees in the valley this past week with the rain and the coldness?

MR. DUNSTAN: I haven't seen the weather reports, but I'm not surprised, --

MR. AJLOUNY: No problem.

DR. PRIESTLEY: -- it was raining.

MR. AJLOUNY: I'm aware of it, I live there. I just didn't know if you were.

Are you aware, Dr. Priestley, Metcalf Road and Monterey Highway is basically the entrance for the Malik family who's been there for 90-plus years?

DR. PRIESTLEY: Okay, you're talking about Metcalf Road --

MR. AJLOUNY: Yeah, there's a family called Malik, their last name, they have their own road, they have homes.

DR. PRIESTLEY: Oh, Malik Road you are referring --

MR. AJLOUNY: Yeah, Malik Road, there's

a Malik family there. The only --

DR. PRIESTLEY: That's the road that is more or less the frontage road to highway 101, it kind of parallels --

MR. AJLOUNY: Yes, yes.

DR. PRIESTLEY: -- it takes off from --

MR. AJLOUNY: On the other side.

DR. PRIESTLEY: It takes off from Metcalf Road --

MR. AJLOUNY: Yes.

DR. PRIESTLEY: -- and it parallels highway 101 and essentially functions as a --

MR. AJLOUNY: Yeah, you don't have to go through a long description, please.

DR. PRIESTLEY: Okay. You're aware of it?

DR. PRIESTLEY: I just wanted to make sure I --

MR. AJLOUNY: No, you got it, buddy.

DR. PRIESTLEY: -- talking about the same thing.

MR. AJLOUNY: You go north on Monterey and you'd have to make a right turn on Metcalf and then a right turn onto Malik. So essentially for the Malik family to get to their home, Monterey

Highway is like their driveway, almost. That's the only way to get to their home is go north on Monterey Highway, right on Metcalf and up to their home if they're coming anywhere from the south, is that true? To the best of your knowledge? Did you take -- or --

DR. PRIESTLEY: Well, I guess all I can say is I'm not acquainted with this family.

MR. AJLOUNY: Well, are you acquainted with the homes and did you take into account that basically Monterey Highway is their driveway in a sense? And I'm going by earlier testimony that, you know, getting to a home, or experiencing the wonderful surroundings of your own home is part of the perception --

DR. PRIESTLEY: Well, certainly the Monterey Highway is used by, you know, many many people. I mean there's, you know, some substantial traffic volume along Monterey Highway, so --

MR. AJLOUNY: I'm talking about the specific impact of the family that I know personally has testified in front of the Commission of being concerned about this power plant.

Maybe someone can help him? Are you guys familiar with it?

HEARING OFFICER FAY: Are you addressing the visual impact to these people of passing the power plant on Monterey Road?

MR. AJLOUNY: Every time they want to get to their home.

HEARING OFFICER FAY: I think we can just stipulate that anybody that approaches San Jose from the south would --

MR. AJLOUNY: Yeah.

HEARING OFFICER FAY: -- the same --

MR. AJLOUNY: But it's a difference if I had to go home every day, I have to see a huge plant. It's a little different than driving to work. And I just wanted to point that out. If I made my point I'll keep on going --

MR. HARRIS: On Metcalf Road, though? The entrance to Malik Road is Metcalf Road?

MR. AJLOUNY: Yes, oh, yeah, it's the only way.

MR. HARRIS: So it's on the other side of the substation?

MR. AJLOUNY: No. Okay, I heard Ken, this is for you, buddy, I heard that you have, you

mentioned something about a hint in your testimony just a few minutes ago about County land, this could be difference because something about part of it's on County land, is that true?

MR. ABREU: Yes.

MR. AJLOUNY: Okay, are you aware of the 10,000 square foot size in County LORS that basically, and I'm saying LORS, but there's a law, because I happen to have a church, trying to build a church on the County land. You can't go over 10,000 square feet. Are you aware of that in the County?

MR. ABREU: No.

MR. AJLOUNY: Oh, okay. Well, then I'll just leave that alone. Hopefully you can find out.

Okay, we talked about the Passantino family and someone mentioned Mark Passantino, and I think it was Dr. Priestley, about the great conversation he had with Mark Passantino, correct, Dr. Priestley?

DR. PRIESTLEY: Yeah, I mentioned --

MR. AJLOUNY: Okay, that's good.

DR. PRIESTLEY: -- that I --

MR. AJLOUNY: Did he happen to mention

to you about the millions of dollars he's receiving for the ten acres of land?

DR. PRIESTLEY: We did not talk about that subject.

MR. AJLOUNY: Okay. Could that possibly be why he's --

MR. HARRIS: Objection, argumentative.

MR. AJLOUNY: No, I'm just asking, could that possibly influence his feelings about --

HEARING OFFICER FAY: That's speculation. I don't think Mr. Priestley's qualified as a psychologist.

MR. AJLOUNY: Well, it's not argumentative. It might be speculation.

(Laughter.)

HEARING OFFICER FAY: Save your time.

MR. AJLOUNY: All right, buddy. Well, I mean, you know, it's real stuff. Okay.

One of my last questions. Ken, I think you talked about picture 35. Hurry, guys, give me this thing before they --

MR. ABREU: This one?

MR. AJLOUNY: Okay, picture 35. Can you help me out like Paul Harvey usually does and give me the rest of the story?

You mentioned there was three scenarios that you presented to the City. I think picture 35 of this diagram, are you familiar with this?

MR. ABREU: Yes.

MR. AJLOUNY: You mentioned this was the second visual that the City had an opportunity to look at, true?

MR. ABREU: No.

MR. AJLOUNY: Okay, which one was it? The first one? First, second or third? You mentioned there was three.

MR. ABREU: Yeah, if you look at the first three in that set, one, two, three. Those were the first three architectural treatments we had.

MR. AJLOUNY: Okay. Was this one of the ones you presented to them?

MR. ABREU: What do you mean by presented to them?

MR. AJLOUNY: Okay, earlier testimony I heard two specific things that I'm concerned about. You mentioned this building and you mentioned that the City didn't want anything higher, bigger mass higher than the footage allowed, and something else -- something else you

mentioned in earlier testimony why you didn't want this -- why they didn't want this.

MR. ABREU: There were a number of reasons why we moved away from that architecture.

MR. AJLOUNY: But in your testimony earlier today you mentioned that the City had two reasons why they didn't want this, is that correct?

MR. ABREU: Yes.

MR. AJLOUNY: Okay, isn't it really the fact that in earlier testimony you can't have something like this because of the downdraft or whatever the words are of the wind? Isn't that what I --

MR. ABREU: It makes it more difficult, but, you know, you can still do it.

MR. AJLOUNY: Well, in earlier testimony who stated that? One of the --

MR. ABREU: I stated it.

MR. AJLOUNY: Okay, you stated that it wasn't possible, and I think you even talked to Commissioner Laurie that this was not a possibility because of the -- you couldn't achieve the air issues with it being big and round on the top?

MR. RUBENSTEIN: I think with respect to that specific design the answer was that it could be done, and in fact, that was proposed. But it did make the air analysis more complicated.

MR. AJLOUNY: Okay, so --

MR. RUBENSTEIN: It was a difference -- I think what you may be thinking of is when Paul Stocks was talking and I was talking about the interaction with air quality modeling, and the question was raised about whether you could completely hide the stacks. I had said that no, you couldn't, because there were these air quality constraints.

If you notice in that design there's a tapering towards the top, which is what enabled us to at least show compliance.

MR. AJLOUNY: Okay, I guess I remember through the workshops and working with the City, basically what I heard here today, that two reasons the City wanted it lowered, and that this wouldn't be possible. But, yet, in fact it was an issue of hard to meet air quality issues.

And I guess I'm just bringing this out to see if you're willing to admit it here on your testimony, that's all.

MR. HARRIS: Was there a question?

MR. AJLOUNY: Yeah, well, I heard it earlier, so I'm not going to beat a dead horse here.

Okay, are you familiar with the Morgan Hill five doctors on the meteorology report that just came out? Anyone?

MR. RUBENSTEIN: I don't know the doctors, but I'm familiar with that report, yes.

MR. AJLOUNY: Will that report affect anything on visual plume or --

MR. RUBENSTEIN: No.

MR. AJLOUNY: -- anything you can think of that would significantly change this project or be a concern to the community?

MR. RUBENSTEIN: No.

MR. AJLOUNY: Okay. One last question, and this will be for Dr. Priestley. You mentioned you visited the site and visited our buddy, the Passantino family.

DR. PRIESTLEY: Yes.

MR. AJLOUNY: Did you go onto the actual site, itself?

DR. PRIESTLEY: The Passantino property?

MR. AJLOUNY: No, on the actual site of

where the plant -- the County part of the land, I guess the hill? The land that Calpine already purchased. Did you go on that part of the site?

DR. PRIESTLEY: Well, I've made many visits to the site, and I've been on the portion of the --

MR. AJLOUNY: Okay, great.

DR. PRIESTLEY: -- property where the --

MR. AJLOUNY: The answer's yes.

DR. PRIESTLEY: -- power plant is going to go and --

MR. AJLOUNY: The answer's yes.

DR. PRIESTLEY: Okay.

MR. AJLOUNY: So did you observe anybody living on that site?

DR. PRIESTLEY: I observed people on the site, but I was in no position to determine whether people were living there.

MR. AJLOUNY: And would you say you observed people and dogs and families, or whatever, every time you went on that site, or just about every time?

DR. PRIESTLEY: Let's say I made a lot of trips to the site, I was there for specific, you know, kind of research and study purposes, and

I tried to stay clear of people, chickens, and especially dogs.

MR. AJLOUNY: Okay.

(Laughter.)

MR. AJLOUNY: So that's kind, because that would be the thing to do if people living there, you don't want to disturb them.

That's all my questioning.

HEARING OFFICER FAY: Okay, thank you. And I want to compliment you for sticking to your estimate.

MR. AJLOUNY: Yeah, I know, I went up by two minutes.

HEARING OFFICER FAY: Give you that. All right. Let's see. And we don't have the City of Morgan Hill today here, I just want to confirm that. All right, I see no indication.

CARE, Mr. Boyd is not here. Mr. Williams? No. Mr. Garbett.

MR. GARBETT: William Garbett.

HEARING OFFICER FAY: Garbett.

MR. GARBETT: Speaking on behalf of the public. I have a few questions. And my questions can either, in some way, shape or form, be for the staff or for the applicant. I think since the

applicant is here right now, I'll address a few questions to them and then finish up with the staff. The questions are about the same either way.

HEARING OFFICER FAY: If I may, just keep in mind they can only --

MR. GARBETT: I know.

HEARING OFFICER FAY: -- answer questions about their testimony; they can't answer about the staff's testimony.

CROSS-EXAMINATION

BY MR. GARBETT:

Q Earlier we had a whiteboard, some photographs that were presented here. And on these photographs, there was four of them on the alternatives, it showed industrial sites, as opposed to the final photograph which is KOP1, which is not zoned industrial.

Do you believe there would be a difference in the staff response siting an industrial location against a nonindustrial location? Mr. Stocks.

DR. PRIESTLEY: Yeah, -- oh, -- yeah, I think there could be, depending upon the viewing context. You know, for example, figure 4 is an

industrial area, but it's one that's right next -- it's zoned industrial at this moment. Anyway, in fact, the City of Fremont is thinking of changing its designation and use.

But in any case, although it's zoned industrial there is still some sensitivity in that it is immediately adjacent to a scenic highway, and at the moment offers a view towards a very important visual landmark.

MR. GARBETT: With the visual landmark of the proposed Metcalf site that would be in the Fremont area, then only be a block from a cogeneration power plant from another industrial site within less than one city block?

DR. PRIESTLEY: I have to admit I'm a little confused by the question. You're suggesting that in Fremont right now there's already a cogeneration plant in the vicinity of that project?

MR. GARBETT: A block away from your proposed site.

DR. PRIESTLEY: I'm not familiar with it. In my many visits to that area it wasn't, you know, immediately obvious to me.

MR. GARBETT: Yes. In these photographs

the first four alternative sites show both a before view and an after view with a site like the Metcalf building imposed, but of the first four photographs there are no high lines or wires visible in the photographs emanating from the power generation site.

In the last one, KOP1, there are significant wires showing, both before and after.

DR. PRIESTLEY: Well, in KOP1, of course, you know that the transmission lines that you see are transmission lines that already exist. Actually one of the advantages of a project on this site is that the transmission link over to that transmission line is just going to be on the order of a couple hundred feet.

MR. GARBETT: Mr. Stocks, you testified earlier, is it not true, that you said that one of the most significant visual aspects was the transmission towers running along the hill?

MR. STOCKS: That is, to me it's my personal perception that's the case.

MR. GARBETT: From a visual aspect if you had a site that was located near a scenic highway, the Sanchez Freeway, or another highway, Monterey Road is traditionally known as the route

of the El Camino Real, these are what you might call significant scenic highways, the brief view as motorists go down those roadways, or the railroad tracks, would be very brief. And they wouldn't get that long a timeframe of looking at the Metcalf site, is that true?

MR. STOCKS: I don't know the site, sir, that's the --

MR. GARBETT: You don't know.

DR. PRIESTLEY: I think that's a question that I could answer. It would be relatively brief, yes.

MR. GARBETT: Isn't it true that if the lines emanating from the Metcalf plant, which come from around the area of the smoke stacks, go up the hill, would you say that is a very visual significant connection where people would not only focus on the plant, but focus on the hill and the interconnection, and be a significant visual detriment, Mr. Stocks?

MR. STOCKS: We're talking about the Metcalf site now?

MR. GARBETT: Yes, the Metcalf site.

MR. STOCKS: Okay, I don't think there's -- one's eye is not led down transmission

lines down to a building or a built form, I don't think. That's my own personal opinion.

Actually they become apparent because they're actually silhouetted against the sky. That's the reason why transmission towers are noticeable.

MR. GARBETT: But if very briefly you were focused on a power plant or an industrial site of some kind, and you were focused on that, and as you departed, your parting view was lines going up to the next visual aspect, which is the transmission lines, don't you believe that would be a psychological factor where one would tend to follow the view or the connection point which would be those transmission lines going up the hill?

MR. STOCKS: No, I don't think that at all, actually. I must admit I don't think there's going to be a psychological connection that you would, in fact, make. It isn't something that I don't think the human mind works that way.

MR. GARBETT: Okay. Well, being trained in psychology, I have a different viewpoint --

MR. STOCKS: Okay.

MR. GARBETT: -- ergonomics.

HEARING OFFICER FAY: You have the answer.

MR. GARBETT: Yes, I have the answer.

With the site they have talked about the fact that you may need part of the stacks extending above whatever structure or hidden aesthetic treatment that you give the building.

If these stacks were not these straight stacks going up, but a venturi type stack used to go and increase the exhaust speed of the stacks, which might even shorten the necessity for tall stacks, could that venturi effect be an enhancing visual quality of the design that you would perhaps try to make for design treatment?

MR. STOCKS: I think that there are, you can't actually isolate individual elements like that and say it's going to be an improvement, or the opposite, in fact. You have to actually look at the whole thing in its context.

So, perhaps the answer is yes, but it depends upon how the rest of the building is actually treated. There's nowhere specific focusing in on that one aspect of a design of the stacks and saying that that's going to make it better.

MR. GARBETT: Okay, but it could be a treatment that could work to enhance the design in some respect, perhaps?

MR. STOCKS: I think that there's all sorts of possibilities, that has to be accepted as a possibility of being one way of changing the look, and perhaps changing it for the better. We don't know whether it's possible from the engineering point of view, that's the --

MR. GARBETT: Would a possible shortening of the stacks make your job easier?

MR. STOCKS: Yes, I'd have to say that that would, in fact, make the job easier of actually making the building into something that is a beautiful thing, which is what we're after.

MR. GARBETT: If you could eliminate any plumes from the building would that make it more appealing?

MR. STOCKS: Well, that's a subjective question. And I have to answer it subjectively and say that it actually would not worry me. I've seen plumes from stacks all around the world, and it doesn't actually have the same effect upon me that perhaps it has on other people.

MR. GARBETT: Okay. Let's pose a

hypothetical to Mr. Abreu. If the City cannot, by their present standards for the South Bay Water District, extend water to you, and you had to find an alternative, would dry cooling be possible in the same manner, for instance, that you've done at Sutter in the space that you have for the site as an alternative?

MR. ABREU: I think I answered that back when we talked about water. And what I said is that we would have to, on that site, encroach partly into the riparian setback area with an air cooled condenser, and so we would have to mitigate that impact, and we could. But we'd also have to go back to the, you know, the Energy Commission and amend our project.

MR. GARBETT: But given the particular site dimensions of Sutter as opposed to the rather large wieldy site that you have at Metcalf, and you've engineered it once before, couldn't you basically make a smaller compact site within your present borders without moving any buildings other than just readdressing your present cooling towers and converting to dry cooling?

MR. ABREU: No.

MR. GARBETT: Okay. Is there space

available on the site to basically make dry cooling possible?

MR. ABREU: I think I already answered that.

MR. GARBETT: Huh?

MR. ABREU: I think I already answered that.

MR. GARBETT: Mr. Stocks, if they had dry cooling with no plumes, shorter stacks with a venturi type stack, and undergrounded transmissions going up the hill, would that make for a much more visual appealing design that you could do?

MR. STOCKS: It changes the problem, that's the important thing. The architectural problem that we have is with the design as it is now. And we can actually perhaps make all sorts of hypotheticals that would actually change the problem completely.

Whether that problem is actually easier to solve or not so easy to solve, that's the -- it has to be seen.

MR. GARBETT: Mr. Stocks, with a little bit of extra money, because dry cooling has a certain fixed price, as a possible addition or an

enhancement or a possible redesign, given the savings of billions of dollars of not having to extend water to the site, given that there would be a few million savings, would that be able to solve your design problems with more money?

MR. STOCKS: Well, the brief that we have from Calpine is to solve the design problems. We haven't been set a budget at all. Calpine wants to see this thing solved, and they've got no, there's no limit to the efforts that we're expending to actually do that. So it isn't a question of money.

MR. GARBETT: Okay, that concludes my questions. Thank you.

HEARING OFFICER FAY: Thank you. Mr. Wade.

MR. WADE: I have learned that five minutes is an impossible goal, but I'll --

HEARING OFFICER FAY: Do your best.

MR. WADE: -- do my best.

CROSS-EXAMINATION

BY MR. WADE:

Q Let's start with a question to Mr. Dunstan. You mentioned that you were going to use predictive curves to come up with a plume length

as a function of temperature and humidity correlated over some period of time.

Would it be possible for you to use that curve to limit the operation of the plant? In other words, if the curves predicted that there was going to be a plume, would it be possible for you to stop operation of the plant?

MR. DUNSTAN: Well, it's always possible for us to shut the plant down.

MR. WADE: Okay, that's all.

MR. DUNSTAN: We don't know that it would serve the grid.

MR. WADE: No, I understand, thank you. Question for Mr. Rubenstein. Now these are some questions that Mr. Ajlouny touched on briefly, but I just want to ask you a few more questions.

In describing the feature effects of the power plant and the architectural features that are actually part of the AFC supplement B, I think there were several comments that additional analysis would have to be done if there were a change in the plant design.

Is it not true that that design was, in fact, analyzed and submitted as application supplement B, and that there were several air

pollution problems with that? In particular there was a carbon monoxide preconstruction monitoring trigger that was exceeded? And a PM10 significance, PSD limit that was exceeded? And contentious issues with the Bay Area Air Quality Management District in their disapproval of your use of the ISC prime model, which was not an EPA approved model, so that in summary, analysis has been completed on that? It's not a matter of speculation, but that facility, in fact, will not work? Or has significant problems?

MR. RUBENSTEIN: I think I got all the questions there. Let me see if I can run through them, Jeff.

First of all, when I said that changes would have to be evaluated through modeling I was not talking about that design. The question came to me about if the current design that we have today, and that has already been reviewed by all the agencies, were to change, would that require additional analysis, and the answer is yes.

MR. WADE: Good.

MR. RUBENSTEIN: Second, you are correct that the specific design you're talking about was analyzed completely as part of supplement B.

Third, no, I don't believe that that design created any air quality problems. We worked through those and that's why ultimately that design was included in supplement B. It did trigger an additional monitoring requirement at the discretion of the Bay Area District. And the Bay Area District chose to exercise that discretion.

At the same time that the Bay Area District chose to exercise that discretion, Calpine and Bechtel were reviewing that design with other parties.

And as a result of those other decisions they chose to change the design again, which fortunately made my life easier, and eliminated the trigger for the preconstruction monitoring.

But that was not determinative. The reason why the change was made between supplement B and supplement B was because of discussions with other parties about the architectural features.

MR. WADE: Okay, I think I understand. Would it be fair to say that it contributed to your decision?

MR. RUBENSTEIN: No.

MR. WADE: No? Okay. You missed one,

which was the Air Quality Management District, a disapproval or contention with your use of ISC Prime. Would you --

MR. RUBENSTEIN: You're right, I did miss that. I've forgotten the context of that question. Could you repeat that question, please?

MR. WADE: I'm pointing out that the Air District had challenged your use of ISC Prime to generate the air pollution modeling data and --

MR. RUBENSTEIN: They did because at that time it was not an EPA approved guideline model.

MR. WADE: Okay, thanks. I have some questions for Dr. Priestley. Thank you, Gary.

Okay, let's refer to this figure which is called figure 8.11-1BR. It shows the viewshed, I believe it's called, --

DR. PRIESTLEY: Yes.

MR. WADE: -- for the planned view of the site. Could you please refer to the upper left corner of the viewshed, follow the line along below KOP9.

DR. PRIESTLEY: Okay.

MR. WADE: Would you concur that there's a bike path, walking trail that follows just

inside the visual viewshed which is called the Coyote Creek Trail? Starting at -- well, directly down from KOP9 and extending all the way down to the bottom of the viewshed.

DR. PRIESTLEY: And I am aware that there are trails in this area, and I believe that you may be referring to a trail that kind of continues along I guess you might call it like the southwest side of that series of lagoons there, and --

MR. WADE: Right.

DR. PRIESTLEY: -- parkway, and it kind of goes along the top of a levee?

MR. WADE: Right.

DR. PRIESTLEY: Yes, I'm aware of that.

MR. WADE: Okay. I believe you used the term earlier, the cone of vision, referring to the way people might view the power plant.

Would it be fair to say, looking at the map of the trail, that the power plant would be directly in the cone of vision of anyone walking along the trail for about a mile?

DR. PRIESTLEY: Well, you know, I've spent some time in that area, you know, really thinking very very hard about what the potential

visibility of a power plant on the Metcalf site would be from that trail corridor. And there are a couple of things going on here.

One is Tulare Hill, itself, at least in places, provides some screening in between. A couple other factors you need to consider include some of the riparian vegetation that's in between, and then the distance factor, as well, because when --

MR. WADE: Actually, I have considered all those.

DR. PRIESTLEY: Okay.

MR. WADE: In fact, I live there, so there is no obstruction in terms of vegetation, and Tulare Hill doesn't block the trail, all the way from the edge of your viewshed all the way down.

And, in fact, isn't that the definition of a viewshed? That you can see everything, you can see the power plant from inside?

DR. PRIESTLEY: I think one of the things I explained in the text of the AFC is this is a generalized viewshed in that it is quite possible, there are specific places within it when localized views, you know, may be -- in localized

areas views towards the project site might, in fact, be screened --

MR. WADE: I'm sure I --

DR. PRIESTLEY: -- you know, is --

MR. WADE: -- would have to stipulate that. Would you be willing to, in exchange, stipulate that there are many many periods of time through which along the top of the levee inside the viewshed, looking directly in the direction you're walking, that you would be inclined to see the power plant stacks over the small protuberance of Tulare Hill?

DR. PRIESTLEY: It's -- yeah, I'll stipulate that it's quite possible that there are places where you might be able to see them. In fact, you know, one of the reasons --

MR. WADE: Okay, that's fine.

DR. PRIESTLEY: -- KOP6 was to give kind of a generalized --

MR. WADE: That --

PRESIDING MEMBER LAURIE: Dr. Priestley, the question called for a yes or no, and you answered it.

MR. WADE: Thank you. Okay, now, are you aware of the fact that just outside the

viewshed, in fact, there's a big white section in the map, are you aware of the fact that's a housing development, and that there are 244 detached homes and over 400 condominium attached homes in that housing development?

DR. PRIESTLEY: I'm wondering if you're maybe talking about an area just above where it says Basking Ridge Avenue? Is that --

MR. WADE: No, I'm not. I'm talking about just below the trail that we've been talking about. So that would be due south, south of the trail, and adjacent to the trail.

DR. PRIESTLEY: You're talking about the existing housing --

MR. WADE: Yes.

DR. PRIESTLEY: -- that's in that location?

MR. WADE: It's called California Maison.

DR. PRIESTLEY: Yeah, in fact, I am familiar with that. I have spent time in that area.

MR. WADE: Good, so you're aware of that housing development, and you --

DR. PRIESTLEY: Yes.

MR. WADE: -- recognize that it exists? And it's adjacent to the trail? Do you recognize that the housing development is adjacent to the trail?

DR. PRIESTLEY: Oh, yes, yes.

MR. WADE: Okay. You mentioned in your earlier testimony that the CEC considers people moving about and the views that they might acquire while moving about -- I think you were referring to their property, but --

DR. PRIESTLEY: Well, their property and other neighborhoods, as well.

MR. WADE: Okay. Would it be reasonable to recognize that there are many hundreds of families that may spend a lot of their time moving about in such a way that they're going to spend a large proportion of their time looking directly at the power plant?

DR. PRIESTLEY: You're suggesting people from this neighborhood use the trail and --

MR. WADE: I'm suggesting --

DR. PRIESTLEY: -- and they may see it from there?

MR. WADE: Um-hum.

DR. PRIESTLEY: Yeah, I can accept that,

yeah.

MR. WADE: Okay. You have also indicated, no, actually it was the CEC in the FSA has indicated that KOP7, which is the Coyote Ranch has high visual characterization, high visual quality?

DR. PRIESTLEY: I'd have to take a look at my testimony --

MR. WADE: No, no, no, I'm asking you if you're aware of the fact that the FSA says that. That KOP7 is Coyote Ranch. And you can look at the map and verify that. And that the visual quality associated with that KOP is high?

DR. PRIESTLEY: I'll accept that, that's what they say. I have to --

MR. WADE: Okay, yeah, I've got it right here. They also say that the Coyote Creek trail is considered to have the same visual characterization as Coyote Ranch.

DR. PRIESTLEY: You mean visual, like quality?

MR. WADE: Yes.

DR. PRIESTLEY: Okay, yeah.

MR. WADE: Okay. I believe your definition of significance is that if there are a

significant number of people -- no, this is not yours, this is CEQA -- if there are a significant number of people that are affected by a view, which degrades moderately high or high quality view, then that would be a significant impact.

DR. PRIESTLEY: Again, we've had a discussion a little bit earlier about some of the ingredients that go into a --

MR. WADE: Yeah, so you probably --

DR. PRIESTLEY: So, there's --

MR. WADE: -- probably agree with that?

DR. PRIESTLEY: So the number of people would be one of the elements that you would consider in thinking through the part about what is the sensitivity of the view. So large numbers of people engaged in recreational activities would be something that you would need to pay some serious attention to --

MR. WADE: Okay.

DR. PRIESTLEY: -- in making your final determination.

MR. WADE: Thank you, that's all I have.

HEARING OFFICER FAY: Okay, great. Thank you. Ms. Willis, do you need some time before you start on -- oh, Mr. Scholz. And how

long did you --

MR. SCHOLZ: I estimated one hour.

HEARING OFFICER FAY: You estimated one hour?

MR. SCHOLZ: Ten minutes, and I believe a couple questions have been asked, so it may be shortcut.

HEARING OFFICER FAY: Okay, good.

CROSS-EXAMINATION

BY MR. SCHOLZ:

Q Dr. Priestley, were you in attendance when the visual designs were shown to the community at a community meeting at Martin Murphy Middle School?

DR. PRIESTLEY: If you're referring to the open house that occurred, I think it was on a spring day about a year and -- almost two years ago?

MR. SCHOLZ: I'm not referring to the June 5th open house, but the community meetings at Martin --

DR. PRIESTLEY: Was that the Charlotte Powers --

MR. SCHOLZ: Yes.

DR. PRIESTLEY: Oh, yes, I remember that

one very well.

(Laughter.)

MR. SCHOLZ: Was the community pleased with the look of the power plant?

DR. PRIESTLEY: I heard a lot of things that evening, and I'd be hard put to say that many of them were directed specifically at the architectural design that we were presenting.

MR. SCHOLZ: Just, thank you. I just wanted to somehow get to the Committee that there was a large number of people that didn't like the design. I tried to do that with two questions.

PRESIDING MEMBER LAURIE: There's no evidence in front of the Committee that there's any consensus as to any particular architectural plan at this point.

MR. SCHOLZ: You suggested earlier that you expected to hear that there was large opposition to the power plant design in the community, and how are we going to do that unless we bring out hundreds of people to tell you that they don't like the --

PRESIDING MEMBER LAURIE: I don't recall that. I don't know what you mean.

MR. SCHOLZ: You said you expected to

hear testimony that people don't like the design of the power plant. How would you expect, when we can only ask questions, how are we supposed to present testimony that people don't like the design of --

CHAIRMAN KEESE: I think he said we expect to hear argument at the end. Some people are going to like it, some people aren't going to like it. We expect to hear a debate when you --

MR. SCHOLZ: Right, but there's no evidence to say that, so I'm trying to establish an evidentiary way of saying that people didn't like it.

PRESIDING MEMBER LAURIE: Yeah, well, but --

MR. SCHOLZ: Without trotting 100 people to come to your meeting to tell you that.

PRESIDING MEMBER LAURIE: I think what we've been trying to get across is that it is unlikely that we're going to settle what the plant looks like tonight or even as part of any certification that might result as a result of these hearings.

MR. SCHOLZ: I agree completely. They're going to believe it's the greatest thing,

some community members --

PRESIDING MEMBER LAURIE: No, no, I --

MR. SCHOLZ: -- think it's something else.

PRESIDING MEMBER LAURIE: -- I'm saying I'm not even satisfied that the looks of the plant are going to be determined by any decision that's going to come out of this Commission.

MR. SCHOLZ: I'd like to follow up on that. I got the inclination that Commissioner Laurie demonstrated that he may be more inclined to like the visual design shown in the simulation number 35, where the stacks are covered.

PRESIDING MEMBER LAURIE: I didn't offer any preference.

MR. SCHOLZ: Okay, you didn't. During the direct testimony provided by the applicant, it seemed like you gave several misleading impressions to the Committee that the design completely covered -- the design that completely covers the HRSG stack would require an air quality analysis would have to be redone. This is similar to what Jeff asked. And that the City required you to remove the top 50 feet of cover, and that you also stated that you got community input on

your design.

And I wanted to ask questions relating to that. And as Jeff asked, you did do air quality modeling analysis on this type of design. Would you like to correct that for the Committee's sake that you did analyze covering the stacks?

MR. RUBENSTEIN: We analyzed that specific design. But, as I said when Jeff asked the question, there were other designs that completely covered the stack that we found unacceptable, and as a general rule, we would find it very difficult to make a design that completely covered the stack acceptable.

That was a lot of work that went into that design to make it one that was acceptable from an air quality perspective.

MR. SCHOLZ: I'm trying to understand -- thank you for that answer. At this point in time a design that covers the HRSG stacks is impossible for this project. We got to make a decision to whether accept this project or not with a design that cannot disguise the HRSG stacks, would that be a fair statement?

MR. RUBENSTEIN: No, if I learned anything through this process, it's that I can't

make any predictions about what the air quality impacts are going to be of a design on this site with the equipment as close as it is together without actually doing the analysis.

So, Scott, I can't make any general statements like that. The only thing I can say is if someone wanted a design that would completely cover the stacks, it would be very difficult, but not necessarily impossible. And I couldn't render any opinions about it unless I actually analyzed it.

MR. SCHOLZ: I'll come back to that, thank you.

MR. RUBENSTEIN: Okay.

MR. SCHOLZ: Would you agree, and this would probably go to Dr. Priestley, that a visual plume shatters the hope of disguising this faux office building as a nonheavy industrial building?

DR. PRIESTLEY: I wouldn't agree with that.

MR. SCHOLZ: Would you agree that seeing two exhaust stacks shatters the hope of disguising this faux office building as a nonheavy industrial building?

DR. PRIESTLEY: I guess I wouldn't

characterize it in that way.

MR. SCHOLZ: At this point in time the site chosen for MEC and the analysis done that you're submitting for a decision has precluded a design that disguises the HRSG stacks.

HEARING OFFICER FAY: Is that a question?

MR. SCHOLZ: Yes. Is covering the HRSG stacks off the table?

MR. ABREU: The application we're making is for the design we have, which doesn't have the HRSG stacks covered.

MR. SCHOLZ: So we're making a visual determination that they will not be covered?

MR. ABREU: Right.

MR. SCHOLZ: We have to go with basically the framework of what you've shown us?

MR. ABREU: Right.

MR. SCHOLZ: And showing us beautiful pictures of other power plants is irrelevant because we have to deal with this design --

PRESIDING MEMBER LAURIE: Well, that's the applicant's position. That's not necessarily what the Commission may or may not do.

MR. SCHOLZ: So you're giving us hope

that, like I said, it seemed like you were inclined to think it's better looking if the HRSG stacks are covered, so you're saying there's hope that you can impose --

PRESIDING MEMBER LAURIE: What I'm saying is I think the Committee is going to consider a more detailed examination of architectural alternatives.

MR. SCHOLZ: Thank you.

PRESIDING MEMBER LAURIE: I think the Committee understands what something looks like is very important.

HEARING OFFICER FAY: All done?

MR. SCHOLZ: I'm done.

HEARING OFFICER FAY: Okay. I want to follow up with a question. Mr. Rubenstein, you --

PRESIDING MEMBER LAURIE: You have 30 seconds, Mr. Fay.

(Laughter.)

HEARING OFFICER FAY: I got it, I'll talk fast. Cutting me off.

You said other entities had influence as to whether the design to conceal the HRSG stacks was going to go forward or was set aside. And was the City of San Jose one of those that actually

preferred some exposure of the stacks?

MR. RUBENSTEIN: I was not involved in those discussions. I think Mr. Abreu can answer that.

HEARING OFFICER FAY: Mr. Abreu?

MR. ABREU: There were a number of reasons we changed off that design. As I mentioned earlier, the City was one of the people that provided input that caused us to go to a different design.

HEARING OFFICER FAY: And this is part of their view that the power plant should be recognized as a power plant?

MR. ABREU: That was part of it. Part of it was also that we had to move the equipment on the plant to meet this 100-foot setback instead of the 65.

Once you have to move the equipment in the plant, you have to redo the modeling all over again anyway. So we knew we had to do it again anyway, and you know, we got the comment on celebrate the plant, and on reducing bulk and opening up the thing more visually, and so forth.

And then there was this height law about 95 feet. So there were a whole bunch of factors.

And we were saying, you know, well what's the simplest way through this set of problems.

HEARING OFFICER FAY: Okay.

MR. ABREU: And I mentioned a lot of other folks had comments that were negative about covering the stacks, as well, architectural journalists and so forth. So we were getting a lot of feedback in that direction.

HEARING OFFICER FAY: Okay, so this has been aired in the community, both the design to conceal the stacks, and one that, the current design that reveals it more?

MR. ABREU: We've had no lack of comments on all of our designs.

(Laughter.)

HEARING OFFICER FAY: All right. Okay, thank you. That concludes the cross-examination. Do you have any redirect, Mr. Harris?

MR. HARRIS: I fear what would happen if I said yes, so, no.

HEARING OFFICER FAY: Very wise. Ms. Willis, do you need a moment before you do your direct, or are you ready to go ahead.

MS. WILLIS: I think we'd better go ahead.

HEARING OFFICER FAY: Okay. Do we need to swear your panel?

MS. WILLIS: Yes, staff calls Joe Donaldson, Will Walters and Gary Walker.

HEARING OFFICER FAY: Please swear the witnesses.

Whereupon,

JOE DONALDSON, WILLIAM WALTERS and GARY WALKER

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

PRESIDING MEMBER LAURIE: Ms. Willis, before you start, and I'm prepared to be overruled by my Hearing Officer, but I'd be inclined to urge you to not concentrate on the debate over whether or not there's a significant impact on KOP1, because the Committee has heard substantial evidence on both sides. And I'm not satisfied what more testimony will accomplish.

Gary has to help us write the opinion, so if he thinks he needs more, that's fine. But I think we understand what the issue is.

HEARING OFFICER FAY: I'm sure staff has addressed that KOP in their written testimony.

MS. WILLIS: I'd like to start with Mr. Donaldson.

DIRECT EXAMINATION

BY MS. WILLIS:

Q Could you please state your name for the record.

MR. DONALDSON: It's Joe Donaldson.

MS. WILLIS: Was a statement of your qualifications attached to this testimony?

MR. DONALDSON: Yes, it was.

MS. WILLIS: Could you briefly state your education and experience as it pertains to visual resources.

MR. DONALDSON: Yes, I have an undergraduate degree in architecture from UC Berkeley, 1975 and a master of landscape architecture from Utah State University in 1982.

MS. WILLIS: And your work experience?

MR. DONALDSON: I work for an environmental consulting firm, Jones and Stokes. I have over 20 years of experience in planning and landscape architecture, a university instructor for several years. I've done numerous lectures on visual resources management. And have worked on a variety of projects over these 20 years dealing

with visual resources analysis and planning.

MS. WILLIS: Did you prepare the testimony entitled visual resources in the final staff assessment?

MR. DONALDSON: Yes, I did.

MS. WILLIS: And that, for the record, has been previously marked exhibit 7.

Are you sponsoring rebuttal, the testimony entitled rebuttal to applicant's visual resources testimony?

MR. DONALDSON: Yes.

MS. WILLIS: And that will need to be marked as a new exhibit.

HEARING OFFICER FAY: We'll mark that as exhibit 107.

MS. WILLIS: Mr. Donaldson, do you have any changes to your testimony?

MR. DONALDSON: There are a couple of changes. One is in the FSA, the visible plumes analysis that's been submitted by Will Walters in the supplement.

MS. WILLIS: Okay, and could you refer to your rebuttal testimony on page 8, I believe there was a change on --

MR. DONALDSON: Right, there's a

misheading there. It says VIS2, and it should be corrected to say VIS5. And that's on page 8 of my rebuttal.

MS. WILLIS: Do any of those changes change your conclusions?

MR. DONALDSON: No.

MS. WILLIS: And do the opinions contained in your testimony represent your best professional judgment?

MR. DONALDSON: Absolutely.

MS. WILLIS: Mr. Walters, could you please state your name for the record.

MR. WALTERS: My name is William Walters.

MS. WILLIS: And did you prepare the supplemental testimony entitled, cooling tower and HRSG visible plume analysis?

MR. WALTERS: Yes, I did.

MS. WILLIS: And I believe that's been previously marked as exhibit 96.

Was a statement of your qualifications attached to your testimony?

MR. WALTERS: I believe it was.

MS. WILLIS: And could you briefly state your education and experience as it pertains to

plume analysis.

MR. WALTERS: I have a BS in chemical engineering from Cornell University. Registered PE in chemical engineering in the State of California. I've been doing environmental work including modeling, for the last 15 years. I'm currently employed with Aspen Environmental.

MS. WILLIS: And do the opinions contained in your testimony represent your best professional judgment?

MR. WALTERS: Yes, they do.

MS. WILLIS: Mr. Walker, could you please state your name for the record.

MR. WALKER: My name's Gary Walker.

MS. WILLIS: And, Mr. Walker, could you tell us what your job title is at the Energy Commission.

MR. WALKER: Yes, I'm an Energy Facility Siting Planner II.

MS. WILLIS: And did you supervise the written testimony provided under visual resources?

MR. WALKER: Yes, I did.

MS. WILLIS: Mr. Donaldson, in your analysis of visual resources, did you visit the site and surrounding area?

MR. DONALDSON: Yes, I did.

MS. WILLIS: You analyzed 11 key observation points and the general area.

MR. DONALDSON: That's correct.

MS. WILLIS: In your analysis of visual resources did you conclude there would be any direct significant adverse impacts to the environment?

MR. DONALDSON: Yes.

MS. WILLIS: And were most of those mitigable?

MR. DONALDSON: Most of them were.

MS. WILLIS: And in your professional opinion are any of those impacts unmitigable to less than significance?

MR. DONALDSON: Yes. There are actually two that are unmitigable to less than significant.

MS. WILLIS: And, as we've agreed with the Committee we won't address KOP1, but that was one of them, is that correct?

MR. DONALDSON: That's correct.

MS. WILLIS: And could you please address how you were led to the conclusion the impacts would be unmitigable in the combination views throughout the area.

MR. DONALDSON: Yes. I looked at the visual quality of the entire area and looked at visual sensitivity of the entire area, also. Felt it was important in this case because there is actually quite a precedent for looking at a combination of views from throughout the area. The U.S. Forest Service does that; BLM does that. There are a variety of visual resource management systems operated by the federal government that in fact look at linear facilities and look at a variety of areas.

Felt it was very important to do this to provide a context for visual assessment for the entire area.

I looked at all of the KOPs in association with looking at views from roads, from residences, and so forth throughout the area.

I looked at visual sensitivity. I looked at the fact that the area is seen regularly by large numbers of people on a daily, weekly and yearly basis from numerous locations throughout the area including roads, residences, businesses, and recreation facilities and so on.

Lots of area residents travel around the area. There's a scenic highway, 101, that carries

extremely high numbers of people along there. There are trains that carry several thousand passengers per day back and forth along those tracks immediately adjacent to the site. And there are a number of recreation areas, including parkway lakes, Coyote Ranch, and other trails and pathways in the area.

So I looked at the visual sensitivity in terms of high numbers of people traveling, moving throughout the area. And I looked at the visual quality from throughout the area.

MS. WILLIS: And your conclusion?

MR. DONALDSON: My conclusion is that for the combination of views from throughout the area, including the KOPs and a variety of other locations throughout the area, that those impacts are, in fact, significant.

MS. WILLIS: The applicant supplied some photosimulations of power plant design. Can you tell me, out of the number that were submitted, which design most represents the one that you analyzed in the FSA?

MR. DONALDSON: Out of the one that were submitted, it's number 26, although there's a slight difference. I don't see the cooling tower

there. I'm not sure that tanks and other facilities are precisely located. But generally the mass of the structures and the HRSG units is the one that I analyzed.

MR. HARRIS: I'm sorry, 26?

MR. DONALDSON: 26 is --

MR. HARRIS: Oh, of our handout.

MR. DONALDSON: Yes.

MS. WILLIS: Of your handout.

MR. DONALDSON: Yeah, yeah. It's also portrayed in most of the visual simulations in the FSA, as well.

MS. WILLIS: Mr. Donaldson, did you conclude that there would be any cumulative impacts?

MR. DONALDSON: Yes, I did.

MS. WILLIS: I'm sorry, visual impacts.

MR. DONALDSON: Yes. There are significant cumulative visual impacts associated with this project.

MS. WILLIS: Did you analyze local LORS relating to visual resources?

MR. DONALDSON: Yes, I did.

MS. WILLIS: Were those both City and County LORS?

MR. DONALDSON: Yes.

MS. WILLIS: And did you determine that this project would be in compliance with all LORS?

MR. DONALDSON: No.

MS. WILLIS: Could you state, I guess if you can just state how many LORS apply, and the number that did not comply.

MR. DONALDSON: As was stated earlier by the applicant, there were a couple that were dropped. Actually there were only two of those total number of LORS that were dropped. So we ended up with a total number in the FSA -- I should offer that the reason they were dropped was because of the adoption of the master development plan for Coyote Valley on October 24th, which was actually after the filing of the FSA.

So my analysis didn't indicate -- my analysis in the FSA was slightly changed by that change in the adoption of the plan by the City of San Jose. That's the reason for that.

There were 35 LORS, and now I'm talking about currently, following the adoption of the master development plan, 35 LORS that were applicable, and of those, 22 I found were in compliance, or the power plant was in compliance

with 22 of the 35. And was not in compliance with 11 of the 35. Actually 13 of the 35, but two, if the conditions of certification are adopted for those would be, they would actually be brought into compliance.

So we're left with a total of 11 out of 35 that were not in compliance.

MS. WILLIS: Thank you. I'd like to return to Mr. Walters. The issue of visual plume has been of concern to the public and to the City of San Jose.

Did you provide supplemental analysis of the potential for visual plume?

MR. WALTERS: Yes, I did.

MS. WILLIS: And does your supplemental assessment supplant only part of the discussion of the visual plumes in the FSA?

MR. WALTERS: It supplements specifically only any numeric analysis provided in the FSA.

MS. WILLIS: So that would be the modeling analysis?

MR. WALTERS: Yes, it would.

MS. WILLIS: And just a few words, or as briefly as you can, could you explain what a

psychometric analysis is?

MR. WALTERS: A psychometric analysis, in the context of stacks, is looking at the beginning condition, at the exhaust and the end condition when it's fully mixed with ambient. Essentially you draw a line between the two conditions on a psychometric chart. And if you cross a saturation line you get condensation, which is essentially a plume.

It's a pretty straightforward analysis and unlike dispersion modeling there are no safety factors involved. It's pretty absolute in terms of its basic physical parameters.

MS. WILLIS: Can you explain how you conducted your analysis for this project?

MR. WALTERS: Initially I used the met data set that was provided by the applicant and did a quick hand calc, just putting the line on the chart by myself, you know, physically drawing the line between the conditions that were provided by the applicant for their design points.

And after that I determined that I needed more met data to make sure that the conditions would not go below those that are at the design point, specifically my knowledge of the

area wasn't such that I could say that 30 degrees Fahrenheit was a very cold condition in the area.

So I called up Bay Area Air Quality Management District and got additional five years of met data at the two closest locations that they had, a data set that would provide me enough information to run the analysis.

Those locations were at the San Jose Airport and at the San Martin Airport, respectively essentially north and south of the site. Both approximately 13 to 14 miles away.

And then running the analysis on those again, doing just an initial calculation by hand I was finding the potential for plume. So at that point I used a more rigorous computer analysis, which draws the line a little more accurately than I can by hand. And that is the results that are in my paper.

MS. WILLIS: In your professional opinion can the applicant comply with the proposed staff condition VIS10 with the current proposed project design?

MR. WALTERS: In my opinion there will be met conditions that will occur sometime during the project life, or some years during the project

life that will put them outside of the range of the requirements of that condition.

MS. WILLIS: Thank you. Mr. Donaldson, did you review the applicant's testimony?

MR. DONALDSON: Yes, I did.

MS. WILLIS: And the applicant has proposed changes to staff's proposed conditions of certification as part of their appendix B. I know you've provided rebuttal testimony addressing most of the proposed changes.

Do you agree with the applicant's proposed changes for VIS1?

MR. DONALDSON: Actually, no.

MS. WILLIS: And can you explain?

MR. DONALDSON: Yeah, VIS1 calls for, that the one that describes you can have a low gloss finish on the plant.

What we've determined is that low gloss finishes are often used for other projects, industrial projects and so forth. They have been used, so there's a precedent for that. They don't actually deteriorate as rapidly as the applicant suggested in their report. And Gary Walker has done some research on that and could provide some additional background on that, using his research

for that.

And I think what's important, too, is to realize that the purpose is really to reduce the glare of the plant. And if we look at a higher gloss paint there, we're not, in fact, helping it to blend in with its surroundings, or to soften the effect overall. It potentially could create more reflectance and attract more attention to it, and therefore be more visually prominent.

So for those reasons we feel like we need to stay with the idea of keeping the requirement on there for maintaining a low gloss finish.

MS. WILLIS: Mr. Walker, I think I'll turn to you for the next few. Did you review the proposed changes to staff's proposed conditions of certification?

MR. WALKER: Yes, I did.

MS. WILLIS: Let's go to VIS9. Are you in agreement with their proposed changes?

MR. WALKER: No.

MS. WILLIS: And can you explain why?

MR. WALKER: The applicant has proposed that specific requirements for screening be eliminated from the condition of the upper

portions of the structures that have a very industrial appearance, and to propose some substitute language that is not as specific as what's been proposed by staff. And staff intentionally made it specific because of particular concerns about the elements that would be visible without that screening.

Also they have chosen to strike out eliminating the industrial appearance of the catwalks by insetting them on the HRSG stack screening. And it's not clear in their discussion they implied that that was not possible, that elimination of those features would make the operation dysfunctional. But we weren't talking about eliminating any features, just redesigning them.

MS. WILLIS: Did you review the changes for VIS10?

MR. WALKER: Yes, I did.

MS. WILLIS: And either you or Mr. Donaldson can answer that. Can you explain if you agree with those changes.

MR. DONALDSON: Actually we agree that we can reduce one of those -- the requirement that the plant be shut down. I think that was in my

testimony. So, you know, --

MS. WILLIS: Actually that was eliminating that requirement, is that correct?

MR. DONALDSON: Yes, I'm sorry, eliminating that requirement, yeah, that's in my testimony.

What I think is important, though, if I can just add a little context to that, that the plumes, as we're all aware, are a major concern. There are several reasons for that. None exist in the area. The City of San Jose has come out and said that no plumes, actually no plumes are acceptable, and the plumes really represent a very strong indicator that it's an industrial facility.

So regardless of what the architectural structure is, if there are plumes hovering around or above that, it's going to be sort of branded, in essence, as an industrial facility. I think that's important to note.

Shall I go on?

MS. WILLIS: Yeah, --

MR. DONALDSON: I can talk more about it.

MS. WILLIS: That's fine. Let's go on, is there anything else on that? I mean, if

there's anything else that you feel like you need to add at this point?

MR. DONALDSON: We did talk about changing the design parameters, also, from the 30/90 that's been discussed to the 20/100, and you know, we can certainly, I'm sure we're going to get into that more at some point.

MR. WALKER: There's a general change that applicant has proposed in a number of the conditions, and that's that the compliance project manager shall provide written comments on the proposed plan within 30 days of receipt of the plan.

We found that to be -- our general goal is to respond as quickly as possible, but given staff resource limits sometimes that's simply not possible. And we don't want it to be specified in the verification.

Actually these are conditions upon the applicant, not conditions upon the staff.

MS. WILLIS: Mr. Walker, did you review VIS11, and I don't believe that was included in the written testimony.

MR. WALKER: That's correct.

MS. WILLIS: And those were changes

proposed by the applicant?

MR. WALKER: Yes, they want to eliminate the requirement for not installing landscape screening in the form of a dense evergreen hedge along any portion of Fisher Creek corridor, or future trail. And they want to add in, in consultation with the City of San Jose and Santa Clara County Parks and Recreation, that the owner shall plant the corridor.

However, in regard to consultation the protocol already requires that the City and County review and comment upon the plan. And so I think that's redundant to put it in the first part of the condition.

As far as the hedge I think I'll let Mr. Donaldson respond to that.

MR. DONALDSON: Yeah, I think the issue is that on the hedge, and this is a view from Fisher Creek of the power plant; the applicant has proposed screening that view by placing a dense evergreen hedge there.

It was my assessment that if that was done, in fact what that would do would also be to screen views of the surrounding rural landscape, the open fields, trees, hillsides and so forth.

And that would mean screened views of the power plant, it would also screen views of the open areas around there with the rural context.

So, I felt it was important then to, I guess, eliminate that potential and maintain more flexibility. I guess what I would say we can do with VIS11 is that we would be okay with some of those changes, and provide the applicant with more flexibility, but maintaining the parameter that preserving views is important, and that it would not necessarily be a dense evergreen hedge that would block views along that entire corridor, which is what my understanding of the current reading or what the applicant has proposed.

So, in other words we can relax that, I believe, a little bit and be more flexible, and allow some flexibility, as long as those parameters are more clearly identified that views will be maintained.

MS. WILLIS: Thank you. I think that concludes our direct testimony.

MR. WALKER: I have one more point to refer to. Mr. Walters. In regard to VIS10 I should have mentioned, we had considered the applicant's comments about difficulty of

monitoring, and I think Mr. Walters had some insight into possibilities in terms of --

MS. WILLIS: I think we're concluded. I'd like to, at this time, move the section visual resources of the FSA, exhibit 7, and exhibit 96 and 107 into the record.

HEARING OFFICER FAY: Any objection?

MR. HARRIS: No.

HEARING OFFICER FAY: All right, so moved. Those are received into evidence.

PRESIDING MEMBER LAURIE: Question, Mr. Fay. Did you have something first?

HEARING OFFICER FAY: It was just a question of one of the witnesses before we go too far away from -- I wanted to ask Mr. Donaldson, that last answer, I missed a critical reference. The hedge?

MR. DONALDSON: Yes.

HEARING OFFICER FAY: And where is that located?

MR. DONALDSON: The applicant has proposed placing a dense evergreen hedge along Fisher Creek corridor, which would be -- maybe I could just point to it along here so you can refer to this figure.

Along through this area, to screen views from future trails that are intended to be along this corridor here in the master development plan and so on.

So that was what the applicant had proposed. And what I was saying was that a dense evergreen hedge along there would also screen the views of the adjacent hills, the riparian areas, the open fields and --

HEARING OFFICER FAY: And when you said you could be flexible on that, can you describe any criteria that would guide that flexibility? Would it be in consultation with the City --

MR. DONALDSON: Yes.

HEARING OFFICER FAY: -- or the County or what?

MR. DONALDSON: I think both with the City and the County, since both have input into the trail system. Yes.

And I think just a slight rewording of the thing, too, to keep it from being so rigid as far as absolutely no dense evergreen hedge would be along there. I think it just needs to be reworded, and I could suggest some wording for that that would help, I think, improve the

flexibility of that.

HEARING OFFICER FAY: Okay. Will you be submitting anything, any language?

MS. WILLIS: If the Committee would direct us, we will.

MR. DONALDSON: I could certainly --

HEARING OFFICER FAY: I'd like to follow through on that thought. And, yes, if you would submit something to the record --

MR. DONALDSON: Sure.

HEARING OFFICER FAY: -- with what you have in mind, so that the Committee at least has, you know, some specific language.

MR. DONALDSON: Yes.

HEARING OFFICER FAY: We've got the flavor of it from you, but if you could deliver some specific language and serve it on all the parties, --

MR. DONALDSON: Sure.

HEARING OFFICER FAY: -- appreciate that.

MR. DONALDSON: Yeah. I think the idea there is that it meets the needs of maintaining views where appropriate through the area, and still providing the applicant the opportunity to

provide some screening along that area. That's the intent.

HEARING OFFICER FAY: All right.

PRESIDING MEMBER LAURIE: Mr. Donaldson, you testified that in your opinion a plume is indicative, people perceive a plume is indicative of industrial uses. Was that your testimony?

MR. DONALDSON: Yes.

PRESIDING MEMBER LAURIE: How familiar are you with Cisco's proposed project? Do you have any familiarity at all?

MR. DONALDSON: Yes, I reviewed the plan that they proposed, including architectural designs, elevations and placement of structures and so on, yes.

PRESIDING MEMBER LAURIE: Will that, to the extent that you know, would that project be creating any sort of plume from any use?

MR. DONALDSON: My understanding, and this is not a professional opinion, my understanding is that large buildings would have air conditioning or heating facilities that potentially could create small plumes. But I really don't know that.

PRESIDING MEMBER LAURIE: What about

their substation that they're going to have on site? Do you have any knowledge about the potential for that?

MR. DONALDSON: No, I do not.

PRESIDING MEMBER LAURIE: I guess what I'm trying to discern is that even in a high tech park some kind of plumage can exist, and it's a question of degree and size, is that your point?

MR. DONALDSON: Yes, I guess the other point is here I'm looking at it from a CEQA perspective, from an existing baseline conditions perspective.

Right now there are no plumes in Coyote Valley. What we're talking about by introducing a power plant there is introducing, potentially introducing plumes to that area, so -- yeah.

PRESIDING MEMBER LAURIE: I was trying to get at your point that the people will perceive the plume as industrial. And I'm attempting to discern whether in most cases when you have high tech parks, such as Cisco, only as an example, when you also have plumes of some nature and some fashion.

MR. DONALDSON: I honestly don't know. I'm not familiar with how large those plumes would

be, how often they may occur, or what extent those would occur.

PRESIDING MEMBER LAURIE: Thank you, sir.

CHAIRMAN KEESE: I had one question, also, Mr. Donaldson. Most power plants have roads around them, or you can go around a power plant. I heard you apply a rather rigorous test, it seems to me, in going around this power plant which really almost doesn't have roads around it or anything.

Is there a power plant that wouldn't have a significant visual impact, applying the rigorous test you seem to have applied?

MR. DONALDSON: I would assume that, yes, there would be a power plant -- you mean in this location, or in some other --

CHAIRMAN KEESE: In a --

MR. DONALDSON: Anywhere?

CHAIRMAN KEESE: Yes.

MR. DONALDSON: Yeah, I would imagine that you could have a power plant that would not have a significant visual impacts on its context, yes.

CHAIRMAN KEESE: Is it fair to say was

that your determination in these cases that we didn't get into evidence here? Did you apply a rigorous approach to these alternatives in saying that there was no visual impact?

MR. DONALDSON: The rigor of the application of visual analysis to the alternatives was not at the same level as it was for the, you know, for the Metcalf plant. Obviously, 100 pages of detail versus you know, six or eight pages, at the most, of detail.

CHAIRMAN KEESE: Had the same rigor been applied might these have been found significant, also?

MR. DONALDSON: I don't believe so. I spent a day driving around looking at all those from a variety of different locations, and spent quite a bit more time actually assessing the area from maps and aerial photos, and so on.

It's my conclusion at this time that what's in the testimony for the alternatives is accurate.

CHAIRMAN KEESE: Okay, thank you.

HEARING OFFICER FAY: Well, we sort of interrupted you, Mr. Harris, but I think it's your turn for cross-examination.

MR. SCHOLZ: Before you go forward did you accept the testimony?

HEARING OFFICER FAY: Yes, --

MR. SCHOLZ: I wanted to reserve a right. We don't know what the language is to the visual conditions of certification. They've been bandied about between what the applicant has asked to be changed. What are we considering here?

PRESIDING MEMBER LAURIE: You may not know until you see a decision.

HEARING OFFICER FAY: What you have on the record is both positions. They're advocating different conditions. Under some circumstances some of the conditions are different proposals from --

MR. SCHOLZ: As parties to this case, how do we comment on the conditions of certification?

PRESIDING MEMBER LAURIE: You comment to the proposed decision.

HEARING OFFICER FAY: Well, and before that in their briefs. Your brief could reflect whether you favor one version or the other version or some --

MR. SCHOLZ: Because I can just throw

this out, VIS10 was very important to the community. And we were very skeptical that VIS10 was going to survive the Committee.

But it didn't even survive a question from the applicant of the staff to delete the condition, you know, that the plant has to be shut down. That made it very palatable to the community. They knew if they couldn't meet what they have been telling everybody, the plant was going to shut down.

And now it didn't even make it that far.

HEARING OFFICER FAY: I understand, but to answer your question it's argument, and what you're telling us now ought to be included in your brief with all the arguments as to why. Okay? But it's on the record in both versions.

MR. SCHOLZ: Thank you.

HEARING OFFICER FAY: As modified by their comments here today.

MR. AJLOUNY: Excuse me, I just have one quick question. How many minutes does the applicant have to cross-examine?

HEARING OFFICER FAY: Well, Mr. Harris, how long do you need, give us an estimate.

MR. HARRIS: Approximately ten minutes,

give or take. Maybe I'd better say 12. Approximately ten minutes.

HEARING OFFICER FAY: All right, well, if we give you 15 minutes, that's five less than Mr. Ajlouny.

MR. HARRIS: I won't use 15 minutes, I'm sure.

HEARING OFFICER FAY: Okay.

MR. AJLOUNY: I guess the point I wanted to bring is that you didn't ask them about their cross-examination.

PRESIDING MEMBER LAURIE: Let me talk about that for a minute. It's not the question of how many minutes pass on the clock. I think you folks have a really great burden and a challenge, because this is a process very unique to no doubt what you've ever done before.

This process is not unique to either the Commissioners or the Hearing Officer. And we have a sense of what we're looking for as far as relevancy, and as far as priority, so that if you have somebody's testimony and you could ask 8000 questions, well, you can't ask 8000 questions because you just can't do that. So you can ask 42 questions, maybe. So you have to carefully

determine what those 42 questions are going to be.

And I think one of the challenges you folks face is that you have a lot of questions. The questions you have may not be consistent with our experiences as to what the primary priority critical questions are.

And so if you have an hour and a half of priority critical questions that focus on those important issues, I don't have any problem with that. The difficulty is that in most cases your time is spent on issues that may be of interest to you, and I understand that, but in our experience they don't go to the gut of the issues that we have to respond to in a decision.

So, when we see that happening we don't know when you're going to get to those, and that's why we place a limitation. We can't write your questions for you.

I can tell you in my experience I would very rarely cross-examine. There's just not much there. I can disagree with what a witness says, and then I'm free to argue that I disagree. And then I produce my own witness. But there's very little that you can actually get out of these witnesses in cross-examination that would be so

substantial as to tear somebody's testimony apart.

So, it's not just a question of minutes.

MR. AJLOUNY: Yeah, and, Commissioner, I respect that. And I know it might be frustrating for you because this is more routine and it is a new experience for us.

But a few comments. We don't have the money for bringing our own witness, so our only strength is we're going to kick at the knees if we can, in the sense of trying to tear apart testimony from the applicant. I mean that's the only defense we have, because in the society we live in, you know, we have responsibilities to our families, trying to keep our job and so forth. So we don't have that money.

PRESIDING MEMBER LAURIE: I understand that.

MR. AJLOUNY: And then the only other issues we have is because of the position you're in, and because of all the big pressures of this particular power plant, any little thing we see perceived as a bias towards the applicant is very sensitive to us.

So the fact that there is new evidence brought in. From the way I understand it, you do

a testimony and you give a brief, five-minute brief on what that testimony is, and then do cross-examination.

I didn't see that here displayed today. It upset me. And it was totally new and I didn't have a chance to cross-examine. I tried to bring that out, and it was like, you know, well point, but it just kept on going.

And that's, we're just kind of sensitive that any sense of bias-ness makes us sensitive.

HEARING OFFICER FAY: I don't blame you, I understand, because you don't want the project here, and so you're, you know, you're sensitive about that. And you see the political pressure building.

But I think you also have to keep in mind that regardless of those features, always, ever since the Warren Alquist Act was enacted into law, the burden of proof has been on the applicant.

That means that if the applicant doesn't make a good enough case, they lose. And --

MR. SCHOLZ: But they've never lost, so the burden is on us.

HEARING OFFICER FAY: And that's not

true. That's not true. I've written decisions that turned down power plants.

But, you know, the party that has the burden of proof we often give a little better chance to put on their case because they have to make that first threshold.

Anyway, let's move on. Mr. Harris has promised us a brief cross-examination.

MR. HARRIS: Yeah, I'll go quickly.

CROSS-EXAMINATION

BY MR. HARRIS:

Q Joe, do you have your rebuttal testimony in front of you -- Mr. Donaldson, your rebuttal testimony?

MR. DONALDSON: Yes, I do.

MR. HARRIS: Can you turn to page 2, under 4, combination of views, the second full paragraph, the last sentence it says: Therefore it would be correct to state that the FSA concluded that the project would not have a significant visual impact on 8 of the 11 views analyzed." Do you see that line?

MR. DONALDSON: Yes, I do.

MR. HARRIS: I don't want to quibble with you too much, but it's my understanding that

there were 11 views to begin with, is that correct?

MR. DONALDSON: Eleven KOPs.

MR. HARRIS: KOPs, I'm sorry, you're correct. And that two of those KOPs were dropped, is that correct?

MR. DONALDSON: No, that's not correct.

MR. HARRIS: Well, let's talk about that, then.

MR. DONALDSON: Okay.

MR. HARRIS: KOP along Fisher Creek, I think is number 7,--

MR. DONALDSON: Correct.

MR. HARRIS: You began an analysis on that but did not conclude that analysis. Clarify for me the two views that were --

MR. DONALDSON: Yes, the two views I think you're referring to are the views from Fisher Creek corridor --

MR. HARRIS: And for --

MR. DONALDSON: -- trails --

MR. HARRIS: -- overpass.

MR. DONALDSON: -- and the other one is the overpass as the main entry into the --

MR. HARRIS: My understanding that --

well, I'm sorry, I should let you answer, I'm sorry.

MR. DONALDSON: Those are the two.

MR. HARRIS: I'm sorry, I didn't mean to cut you off.

Were they excluded from your analysis or were they done to a certain level and then left out, or --

MR. DONALDSON: If you look into the FSA they're both analyzed. What I stopped short of, though, was determining the level of significance. So there's a full analysis in there; they were not dropped from the analysis.

MR. HARRIS: Okay, let me come at it another way.

MR. DONALDSON: Yes.

MR. HARRIS: I was going to say eight out of nine. Yours says eight out of 11, but can we agree that there's only one where there's a finding of significance, and that's KOP1? And then I'll move on --

MR. DONALDSON: KOP1 of the 11 KOPs analyzed, only one had a finding of significance.

MR. HARRIS: Okay, thank you. I'll move on.

MR. DONALDSON: Okay.

MR. HARRIS: On the issue of combination of views, it's in your testimony and also your rebuttal testimony, which views were combined here? First off, it's my understanding that you didn't simply just combine the KOPs, is that correct?

MR. DONALDSON: That is correct. It was a combination of the KOPs along with looking at a variety of other areas, realizing that KOPs are specific points within a broader context of views.

MR. HARRIS: Okay, thank you. Can you identify in your testimony where those other views that you combined are set forth?

MR. DONALDSON: I believe I described in the testimony for the combination of views that it is the combination of views for the KOPs, as well as other areas around there, other roads, in other words, other portions of take an example, highway 101. The KOPs taken from one specific point of highway 101.

But the combination of views we consider the view corridor all the way along highway 101, and there is high visibility of the plant from a variety of other areas.

MR. HARRIS: How many views were combined, then?

MR. DONALDSON: An infinite number of views. I mean you can't -- I mean, you know, we have a line, how many points are on a line, I don't know.

MR. HARRIS: And which views were combined?

MR. DONALDSON: You asked me that and I said that the KOPs and all of the other views within the area from travel routes, from businesses, from residences and so forth.

MR. HARRIS: So let me ask it another way. What types of views were combined? To be more specific, were there residential views, recreation views, traveler views?

MR. DONALDSON: Yes, all of those are stated in the FSA, views from businesses, views from recreational areas, views from trails, views from other roads, as well as all the points that include the KOPs --

MR. HARRIS: Okay, --

MR. DONALDSON: -- and the areas surrounding those.

MR. HARRIS: Okay, I'm sorry, I need to

let you finish. I'm excited, I guess. I'll try to slow down -- or tired.

You mentioned an infinite number of views. Do you have before you figure 8.1-1BR, which was passed out earlier as part of Tom Priestley's testimony? I have extra copies if you need it, or if other folks need it.

This is basically the document that shows the KOPs. Do you have that document before you?

MR. DONALDSON: If you're talking about this map, yes.

MR. HARRIS: Okay. I want you just to think of this map as everything north of the Metcalf site and everything south of the site, just for purposes of my questions. Do you have that in mind?

MR. DONALDSON: Yes.

MR. HARRIS: With regard to everything north of the Metcalf Energy Center, can you identify the views that were combined in your analysis there?

MR. DONALDSON: That would be views along the portions of Monterey Highway; views from the railroad tracks; views from Parkway Lakes;

views from --

MR. HARRIS: I'm sorry, let me ask you questions about those individually, then. The views along Monterey Highway, does that mean the entire length of Monterey Highway?

MR. DONALDSON: The entire length that have views of the plant, where the plant would be visible from.

MR. HARRIS: Okay, can you show me on this map along Monterey Highway the views that you combined?

MR. DONALDSON: The plant is visible for a fair distance of Monterey Highway. In fact, it's visible from KOP6, Monterey Highway runs along that area, so as you're driving south you actually would have views of the plant from that direction.

MR. HARRIS: Are you connecting the dots here, then, is that what you're doing essentially?

MR. DONALDSON: Yes.

MR. HARRIS: Driving from --

MR. DONALDSON: Yes.

MR. HARRIS: -- one KOP to another KOP?

MR. DONALDSON: Well, yes, yes, the idea is that similar to what the Forest Service and BLM

and other federal agencies do in analyzing views, they may take a series of points such as from a campground or particular overlook, but they also consider the views from a roadway, which would have an infinite number of points along that roadway from which you could view something.

MR. HARRIS: Okay, --

MR. DONALDSON: So the concept is you're looking at the views from linear facilities, as well as areas, as opposed to a KOP. I think that maybe the issue here is that we tend to look at KOPs from the standpoint of there's a photograph and it says this photograph represents the view. Whereas if you move 15 feet from one side or 15 feet to the other side, you might actually get a different, slightly different perspective.

MR. HARRIS: So, are --

MR. DONALDSON: The same as if you drove up or down a highway you would get a different perspective as you travel that highway or road or rail line or whatever.

MR. HARRIS: My 12 minutes may not be sufficient at this rate, but I'll try to not cut you off, and try to focus you, if I can.

MR. DONALDSON: I was just trying to

help you understand.

MR. HARRIS: I appreciate that. I'm back to the whole concept of infinite number of views.

So do you have in your testimony field notes or other notes that would describe the routes you took in gathering this infinite number of views that you were combining?

MR. DONALDSON: I drove throughout the area, probably within the viewshed I think I drove up and down every road at least once.

MR. HARRIS: When you were driving up and down the roads you were gather infinite views for the combination, is that correct?

MR. DONALDSON: Well, yes. I was looking to see if I could see the power plant site from those areas, yes.

MR. HARRIS: So then is this infinite combination of views then essentially your windshield tour of the surrounding area, is that correct?

MR. DONALDSON: Yes, through -- yeah, through several site visits and a fair bit of driving and getting out of the car and looking from a variety of viewpoints.

MR. HARRIS: So it's your testimony, excepting out now KOP1, because we're not going to talk about that, but that although you found no significant impacts at the other 11 KOPs, that from the windshield tour, if you will, of this area you combined those views into a finding of significance under CEQA?

MR. DONALDSON: Maybe we're missing a connection here. But, the visual quality of those 11 KOPs is actually identified as moderately high or moderate for all 11, 11 out of 11 KOPs, according to my analysis.

MR. HARRIS: I'm really just trying to get at the basis for your conclusion of how you combined these views. And I do understand, thank you for referring me to the table with the various views, but is it a correct statement that the combination of views is essentially a result of your traverses up and down roads and highways along this area?

MR. DONALDSON: Yes, including -- yes, including looking at the KOPs, yes.

MR. HARRIS: How many times did you go out and drive these various KOPs, or various routes with these views that were combined?

MR. DONALDSON: I'd say at least four, possibly six different times. Somewhere between four and six.

MR. HARRIS: Four and six for each one of these --

MR. DONALDSON: No.

MR. HARRIS: -- sets of combinations of views, --

MR. DONALDSON: No.

MR. HARRIS: -- or four to six for Monterey Highway? I'm having trouble figuring -- I want to know when were you out there. Can you tell me how many times you visited this first set of views you're combining on Monterey Highway?

MR. DONALDSON: I've driven up and down Monterey Highway numerous times, probably five or six times.

MR. HARRIS: Okay, and that's the basis for your combination. What other areas were you driving? I want to -- basically there's nothing, let me ask you, is there anyplace in your testimony where you describe your traverses for these views that you've combined?

MR. DONALDSON: I believe that where I actually describe the dates or the actual routes

that I traveled around. No, I don't believe I specifically say which route I traveled or what day I traveled that particular route.

MR. HARRIS: So there are on field notes or other kind of documentation about which days you were on Monterey Highway and which days on 101 and that kind of --

MR. DONALDSON: I could probably go back through my records and assemble that information if that seemed really important to you.

MR. HARRIS: I guess what I'm tying to get at is I'm trying to figure out, number one, which views you combined. And from your testimony I'm having trouble understanding that.

And then I also want to understand, once I figure out which views you've combined in this infinite string, which ones you went over several times, which ones you drove down once. Those kind of things. Is that kind of evidence available in your testimony?

MR. DONALDSON: I don't believe it is.

MR. HARRIS: Okay, thank you.

MR. DONALDSON: In terms of precise -- you're asking for precise numbers, how many times I drive north on highway 101, how many times I

drive south, is that what you're asking, precise numbers? Because I don't have those numbers.

MR. HARRIS: I guess what I'm asking is taking the windshield tour and combining views as you drove up and down 101, I'm interested in knowing how many times you did that. Was it one time up 101? Was it several times? And I think you answered the question.

MR. DONALDSON: I did, yes.

MR. HARRIS: You didn't have -- that's what I was driving at, so no pun intended, sorry.

MR. DONALDSON: Okay.

MR. HARRIS: Let me move on. Have you seen a plume from the IBM facility on Bailey Road associated with the wet cooling tower there?

MR. DONALDSON: No, I have not.

MR. HARRIS: You have never personally observed that?

MR. DONALDSON: I have not, no.

MR. HARRIS: Okay. I want to talk about the design of 20 degrees F and 100 percent relative humidity.

Do you know of any plants that have been designed to that standard?

MR. DONALDSON: I personally do not.

MR. HARRIS: Do you even know if it's possible to design a facility to meet that standard?

MR. DONALDSON: Wouldn't this be a better line of questioning to ask Will?

MR. HARRIS: If that's more appropriate, sure.

MR. DONALDSON: He's the technical expert.

MR. HARRIS: Whoever on the panel is available to answer that question.

MR. WALTERS: I believe your own folks have said for the record that dry cooling would, in fact, get that done. In terms of a hybrid system, I actually did try to get some information from vendors, but due to the fact that I didn't know you were going to have this question, I wasn't able to get it.

I would make the assumption that it probably could be done. Whether or not it would be very easy or would fit in the footprint of your current plant, I can't say.

MR. HARRIS: So you didn't perform that analysis whether it would fit within this current plant, is that correct?

MR. WALTERS: No, I don't have the technical data to know if it would fit.

MR. HARRIS: Thank you. I want to go back to page 7 of Mr. Donaldson's testimony, rebuttal testimony, actually. Talking about cumulative impacts in this section. Do you have that before you?

MR. DONALDSON: Yes, I do.

MR. HARRIS: Reading about halfway down in that paragraph, on page 7, your testimony is -- or is it your testimony as follows: Because the power plant would have significant visual impacts it would also contribute to a cumulative impact." Is that your testimony?

MR. DONALDSON: That is written here, yes. That is my testimony.

MR. HARRIS: Is it also then not true, if the Committee disagrees with you and decides that there are no significant visual impacts, you have that hypothetical in mind?

MR. DONALDSON: I'm hearing what you're saying.

MR. HARRIS: Okay, assume for the purposes of my question that the Committee disagrees with you and decides that there are no

significant visual impacts.

MR. DONALDSON: Okay.

MR. HARRIS: Isn't it then true, using your statement, that it would also be correct that if there are no significant visual impacts then the project would not contribute to cumulative impacts, isn't that correct?

MR. DONALDSON: No, that's not correct.

MR. HARRIS: And is this your statement in the testimony that the fact that there is a significant visual impact means that it contributes to the cumulative impact, is that not your testimony?

MR. DONALDSON: What I wrote was because the power plant would have significant visual impacts, it would also contribute to the cumulative impact.

MR. HARRIS: So, if, again assuming that there are no significant visual impacts as determined by the Committee, it's also a true statement, is it not, that the power plant in that sense would not contribute to a cumulative impact?

MR. DONALDSON: I might be losing your question a little bit here, but maybe we're misunderstanding your -- maybe you're

misunderstanding the idea of cumulative impacts.

Cumulative impacts can occur even if there are no significant impacts. That's CEQA's definition. You can have, you know, a variety of impacts that are not considered significant, and yet you can still have a cumulative impact.

MR. HARRIS: Okay, well, let's deal specifically with this project then, with that CEQA lesson in mind.

Assume, again for my purposes of my hypothetical, that there are no significant visual impacts for the power plant. In what ways could you still determine that there's a significant cumulative impact.

MR. DONALDSON: I think when you look at the project, the proposed project, the power plant, in combination with other nearby proposed projects, which is what CEQA identifies, and in this case we'd be looking at the Cisco development and the urban reserve area developing, when you look at the combination of those projects and the effects on the visual environment, the impact to the rural character, the reduction in visual quality throughout the area, I think you can conclude even if none of the impacts were

determined to be significant for the Metcalf project, that in fact the cumulative impact and the contribution of the power plant to the cumulative impact, in combination with those other projects, could be significant.

MR. HARRIS: Okay, let me ask the question a different way. Assume again that there are no significant visual impacts associated with the project, as determined by the Committee. Do you have that assumption in mind?

HEARING OFFICER FAY: We've been over this quite a few times.

MR. HARRIS: He hasn't answered my question, so let me try to rephrase it one last time.

HEARING OFFICER FAY: Okay, one last time.

MR. HARRIS: Is it your testimony that if the Metcalf Energy Center has mitigated all of its visual impacts to a level of less than significant, that it would nevertheless contribute to a significant cumulative impact in the valley?

MR. DONALDSON: I believe from the evidence, from my analysis and so forth, that, yes, it would contribute to a significant

cumulative impact. Yes.

MR. HARRIS: Is that based on the relative scale -- let me talk about scale, then, in that cumulative impacts analysis. The Metcalf project is approximately 20 acres. The Cisco project, I believe, is about 668 or something like that. I think the entire area is over 1000 acres.

MR. DONALDSON: The answer is no, if you're -- you're asking scale -- I'm sorry -- pardon me.

MR. HARRIS: Is it your testimony then that just based on acreage, that a 20-acre impact is the same as a 680-acre impact?

MR. DONALDSON: That's very hypothetical. I mean how can you, you know, you can't determine 600 megawatt power plant and --

PRESIDING MEMBER LAURIE: I think his testimony is that it would --

MR. DONALDSON: -- certain height --

PRESIDING MEMBER LAURIE: -- add to the cumulative impact.

MR. DONALDSON: That's correct.

HEARING OFFICER FAY: One more, Mr. Harris?

MR. HARRIS: I'll make it a really good

one, I'll stop at that point.

HEARING OFFICER FAY: Okay. Thank you. I do have a followup question. And in spite of Commissioner Laurie's admonition I'm going to risk asking about KOP1.

Can I assume, and I understand that the staff found that to have a significant impact, but is it correct to assume that that really is a vicinity rather than a specific location?

MR. DONALDSON: Yes. And I think that what you've hit on here is the -- probably the reason that we appear to have disagreement between Tom's testimony and my approach, my analysis. Is that I think that analysis has been very specific to a point, to a location, and specifically the same, these are views from residences.

I've interpreted that idea of a KOP, and interpreted the idea of views a little bit more broadly, in that particularly from residences people do move in and out of the residence, they move around their residence, they go down to the mailbox, they drive down the road, they walk down the road, and so forth.

In this particular area you do have six residences, people do walk up and down the road

quite often. They have long duration views. They have, you know, very frequent views, also. And there are sensitive viewer groups.

So, yes, yes.

HEARING OFFICER FAY: All right, and how far -- in KOP1 would it include backing up and going southeast enough to encompass the view from the proposed Cisco campus? Or is that really outside the vicinity of KOP1?

MR. DONALDSON: Well, I was focused on the residential area, itself. And so I didn't really look at the Cisco development. I did in my original analysis, but backed off of that because of the baseline condition requirement in CEQA which didn't want to look at a future development.

HEARING OFFICER FAY: All right, thank you. Then, Mr. Ajlouny.

MR. AJLOUNY: Mollie, do you --

HEARING OFFICER FAY: Or, the City?

MS. DENT: I don't have any questions for the CEC witnesses, thank you.

HEARING OFFICER FAY: Okay.

MR. AJLOUNY: Okay, I'll try to set my watch here. Okay.

CROSS-EXAMINATION

BY MR. AJLOUNY:

Q I want to focus in on, first of all, I heard the word dry cooling. Again, to emphasize, dry cooling would not create a plume at all?

MR. DONALDSON: I'm going to have to give that over to --

MR. AJLOUNY: I don't know, whoever can answer.

MR. WALTERS: That is true, you would not have a plume with dry cooling.

MR. AJLOUNY: Okay. And as far as staff's concerned, when an applicant brings a project forward, is it their job to suggest to use different technologies, or is their job to look at like what criteria they need to meet? Maybe that's for Gary, since he's staff.

MR. WALKER: Is it staff's job to look at different ways to reduce impacts, is that what you're saying?

MR. AJLOUNY: Well, I mean would it be proper for staff to come back and say, you know, no plumes are wanted because the City, the neighbors and all this issue, so you've got to use dry cooling? Or would that not be appropriate for the staff to say technologies --

MR. WALKER: No, we do look at alternative technologies as a means of mitigating impacts. The question in regard to dry cooling on this location we did specifically ask in a data request of the applicant about that. And their response was that they could not fit dry cooling onto their site.

MR. AJLOUNY: So, would you consider that, you know, I guess what I'm saying -- how do I say this -- because of the size of the site it's not possible?

MR. WALKER: Yes.

MR. AJLOUNY: But the fact is a plume is an issue to the staff?

MR. WALKER: Yes, certainly.

MR. AJLOUNY: Okay. So I guess where I want to focus in on is knowing the plume is an issue for a lot of people, I really was concerned when the staff suggested not to shut down the plant if a plume was there.

Why would you have, I guess -- that surprised me when I saw the rebuttal that I think the words were, and I don't know if it was you, Gary, or someone else said they'd consider removing that one part about shutting down the

plant.

Who was that that said that?

MS. WILLIS: Do you have a question?

MR. AJLOUNY: Yes. Who was that that said that? And then I'll --

MR. DONALDSON: It's in my testimony.

MR. AJLOUNY: Okay. Why did you state that? I mean what would lead you to that when there's all this concern about plume?

MR. DONALDSON: Well, I think the way we discussed it and thought about that particular requirement, that it was perhaps too stringent. There is still the requirement that the applicant can be fined rather heavily if there is a plume. And there is still the intent there to reduce those plumes to a very low number. Those requirements are not going away.

So we're still holding to the requirements to absolutely minimize the plume. But we felt that we could accomplish that through the design parameters that were being specified in VIS10, condition of certification VIS10.

And we felt that we could, along with the system of fines that the Commission uses, that that would be an appropriate hammer, if you will,

to maintain that.

So the combination of the design parameters and the fine system would be adequate to enforce that condition.

MR. AJLOUNY: Okay. Well, --

MR. WALKER: Yeah, I guess I could expand on that a little bit. We conferred about the feasibility of the mitigation and concluded that if they met the more stringent design parameters that we recommended in our changes to the condition, that the plume occurrence, just by the fact if their plant satisfied those standards, would be an extremely rare occurrence. And essentially could meet the condition.

MR. AJLOUNY: So that's where I was getting at, I'm glad you -- so you're saying that if the 20 degrees 100 percent humidity was reached technically, the chance of plume is almost nil looking at the history of the weather and temperature?

MR. WALKER: That's correct.

MR. AJLOUNY: Okay, so now I'm understanding. So you basically are saying if you make this technology then there's really not reason to believe there's going to be a plume, but

the 30/90 would give you a reason, a good chance of a plume because it --

MR. WALKER: Not just a good chance of a plume, but a chance of exceeding the requirements of the condition.

MR. AJLOUNY: Okay. So you feel very strongly about the 20/100? I mean whoever.

MR. WALKER: I'd ask Will to get in on this.

MR. WALTERS: We feel strongly that that is a conservative number that will meet the condition.

MR. AJLOUNY: Okay. Or dry cooling?

MR. WALTERS: Dry cooling would certainly meet a no-plume condition, much less the current VIS10 condition.

MR. AJLOUNY: So, it's --

MR. WALKER: But the condition doesn't say meet a standard or use dry cooling. That's not a requirement. They don't have the alternative option --

MR. AJLOUNY: Okay, so I guess what I want to -- and I won't say any more -- want to focus in on it sounds like from staff, because I was highly disappointed, as a neighbor, but what

I'm hearing is as long as they can make the technology 20/100, you'll be happy because from your experience and your experts' testimony, there won't be a plume?

MR. WALKER: There won't be a plume that will exceed the parameters set in the condition.

MR. AJLOUNY: Okay. So in hearing from the applicant that that's not possible, I think I heard that you don't technically agree? It might be hard, but it is possible? Someone said it.

MR. WALTERS: Well, in terms of technical ability to do it, I think it is possible. It's just a question of how much dry versus how much wet. Basically you just look at the psychometric chart and you realize how much of each amount of cooling you would have to do. Whether or not it fits in the current design parameters of wet/dry systems that are around, I can't tell you.

That is obviously what -- or I say, in my opinion is probably what the applicant is asking of the vendors right now, can they do that based on their current wet/dry systems.

And, again, I don't know or have the ability to know what the range of the current

wet/dry systems are, whether you could build a wet/dry system that could achieve this. I think you could.

MR. AJLOUNY: Okay, so your answer --

MR. WALTERS: That's just my opinion at this point. I have actually tried to get that information from a vendor and I have not successfully gotten it yet.

MR. AJLOUNY: Okay, so hypothetically, or really a good chance, if this 20/100 takes more space and there's not enough room, do you have any expert opinion of which technology would be better if they have the same issue of space, dry cooling versus this 20/100? Do you have any opinion on that?

MR. WALTERS: Not at this time, no.

MR. AJLOUNY: Okay. I think I drove that home enough. I appreciate that.

These other questions, I have a number of them, won't take this long.

Okay, would you agree that building a power plant without any stacks showing like I think that number was 35, would be less significant visually than one showing stacks? Did I say that right?

HEARING OFFICER FAY: Less impact?

MR. AJLOUNY: I mean less visual impact than one showing stacks.

CHAIRMAN KEESE: That is the one the City didn't want?

MR. AJLOUNY: You know what, things have changed. And I think that's hearsay now, you know, I mean that's personally my feeling. So I want to --

SPEAKER: They gave you that impression, and that's why I wanted to ask --

MR. AJLOUNY: Yeah, --

HEARING OFFICER FAY: Wait, wait, wait, he's just trying to identify --

MR. AJLOUNY: I know, but --

HEARING OFFICER FAY: -- what example you mean.

MR. AJLOUNY: -- there's a lot of --

HEARING OFFICER FAY: We're getting off track.

MR. AJLOUNY: I know, and we don't want to, but --

HEARING OFFICER FAY: Stacks showing versus nonshowing.

MR. AJLOUNY: Yeah, and that's why I

want to get to the facts, because there's other things said, and that's where these emotions come from.

So, the point is stacks showing versus no stacks showing, would one be less significant than the other?

MR. DONALDSON: I would say potentially they could both be significant, but for two different reasons.

MR. AJLOUNY: Oh, okay.

MR. DONALDSON: Okay? This design potentially, I mean --

HEARING OFFICER FAY: When you say this?

MR. DONALDSON: I'm referring to picture number 35 in the applicant's handout from earlier, and the one that's up there behind Ken.

One of the difficulties with that design from a visual perspective is the screen goes all the way up to the top, and it creates a much greater sense of mass and a much greater sense of height, mass, bulk. And from that standpoint I would say it's visually highly, you know, visually impacting.

MR. AJLOUNY: Okay.

MR. DONALDSON: A power plant that has

stacks revealed indicates that it's an industrial facility, and we're talking in the context of a rural environment here, that, you know, for that reason then the change in -- the substantial change in visual character could also be significant.

So, for two different reasons either one could be, depending on where you're looking at it from, you know, how close you are, and so on.

MR. AJLOUNY: Okay, great. I want to try to keep on going here. Cisco substation was mentioned earlier by one of, I think, the Commissioners. And as I understand it, that substation is with transformers. Is that the way you understand it, whoever answered that, or knows about the Cisco?

MR. DONALDSON: Quite honestly I don't. I don't know about the substation.

PRESIDING MEMBER LAURIE: The testimony was that they didn't know.

MR. DONALDSON: Yeah.

MR. AJLOUNY: And, Gary? Okay.

MR. WALKER: I'm not aware of a substation, per se.

MR. AJLOUNY: Okay. All right.

MR. DONALDSON: Again, to clarify, my analysis was based on baseline conditions, existing conditions.

MR. AJLOUNY: Okay.

MR. DONALDSON: So I didn't go into --

MR. AJLOUNY: Are you familiar with the Metcalf substation sitting there?

MR. DONALDSON: Oh, yes.

MR. AJLOUNY: And those are transformers. Are you aware of any plume coming out of there?

MR. DONALDSON: The Metcalf substation?

MR. AJLOUNY: Yeah.

MR. DONALDSON: I'm not aware of a plume.

MR. AJLOUNY: Okay, and I would assume then Cisco's little substation probably would be the same result, could you assume that?

MR. DONALDSON: I have no idea.

MR. AJLOUNY: Okay. Well, trying to make a point here.

Have any AFCs been approved with no visual impacts, Gary? I guess you're the one, or whoever?

MR. WALKER: I suppose I have the most

length of experience about that. With no visual impacts? You mean with no significant visual impacts?

MR. AJLOUNY: Yeah, I'm not good with the words, you know, the significant word.

MR. WALKER: Yes, most AFCs staff has found no significant impacts.

MR. AJLOUNY: So this power plant, being significant visual impacts, is kind of like unusual?

MR. WALKER: Yes, it's not unique, but it --

MR. AJLOUNY: Okay.

MR. WALKER: -- yes.

MR. AJLOUNY: Okay, so I want to focus in on one thing that was previous testimony in land use. In land use, land use was a done deal. Basically the City said no, and so the applicant wasn't going to argue with that, but they used the word compatible, they wanted to prove that it's still compatible.

And I want to know from your expert testimony, seeing that it is visually significantly impacted, would that make it compatible to using that land, you know what I

mean, touching on that piece? And I don't mean to get into land use, but that was a piece a few days, you know, a few weeks ago that the applicant talked about, compatibility.

Do you have any feelings on that, or if this power plant is compatible with that land?

MR. DONALDSON: I can attempt an answer at that. I think they're two different definitions of compatibility. In one case, land use is looking at particular types of uses that are compatible with the designated use.

The other look at it would be from a visual perspective, which is is something compatible with its surroundings, from a visual perspective.

So, I think -- my perspective is it would be two different definitions of the term compatibility.

MR. AJLOUNY: Well, in the second one versus visual, would you say that it's not compatible with that land use?

MR. DONALDSON: With the surrounding --

MR. AJLOUNY: Yes.

MR. DONALDSON: The power plant, as proposed, would it be compatible with the

surrounding land uses? It's not an either/or thing. It's a scale of things. And I would say it has a tendency to be not very compatible --

MR. AJLOUNY: Okay.

MR. DONALDSON: -- because of the type of use it is, it's appearance and --

MR. WALKER: And, --

MR. AJLOUNY: Yes.

MR. WALKER: -- since I've done both land use and visual analyses on a number of projects, staff considers potential significant -- well, significant impact, especially unmitigable impacts in several different technical areas to contribute to the incompatibility in terms of land use. And in this particular case because of significant visual impacts of the project, it contributed to finding that from a land use perspective it's not compatible.

MR. AJLOUNY: Okay, great, and that's the key word I wanted to get out, is compatible.

HEARING OFFICER FAY: Is that it, or --

MR. AJLOUNY: Wait, --

HEARING OFFICER FAY: -- your last question? You're over time.

MR. AJLOUNY: You know what, my clock

didn't start --

HEARING OFFICER FAY: Okay, last question.

MR. AJLOUNY: Let me start it over -- no, I got three more, I think. Three more and --

HEARING OFFICER FAY: Can you cover it in one? Take the best one, --

MR. AJLOUNY: No, please, --

HEARING OFFICER FAY: -- because I want your mates to be able to have a chance to ask some questions, too.

MR. AJLOUNY: Well, they will. We just have a few left. Now you've messed me up, darn it. Let me see.

Okay, let me ask two -- can I ask two, please?

HEARING OFFICER FAY: All right, --

MR. AJLOUNY: Thanks. Has this project been consistent in the way you analyzed, I think the word is analyzed, these projects that, you know, AFCs, have you done everything consistently just like any other project?

MR. DONALDSON: I will answer from the perspective I did do the visual analysis for the Delta project, and I applied the same approach,

the same system and the same significance criteria to that project as I applied to this project.

MR. AJLOUNY: Okay. Gary, do you do visuals, too, or --

MR. WALKER: Yes, and staff has used the same general approach with the key observation points and the CEQA significance criteria, somewhat of a different approach than Mr. Donaldson has, but we view both approaches as valid. His approach is essentially one that's been used and approved by the Federal Highway Administration, so we found that to be acceptable.

MR. AJLOUNY: Great. Good. And then last question, how would monitoring be accomplished in regards to plume? I'm really curious about that. You got any ideas or suggestions?

MR. DONALDSON: Well, there are a lot of different ways, some of which obviously wouldn't be -- which would be human observers, but --

MR. AJLOUNY: I mean for compliance, you know, the hours and --

MR. DONALDSON: That would be one way. That obviously wouldn't particularly be palatable.

MR. AJLOUNY: What's the one way? I

missed it.

MR. DONALDSON: Human observers.

MR. AJLOUNY: Oh, human, okay.

MR. DONALDSON: It would certainly work, but, you know, do you really want someone out in the cold all the time?

A more likely scenario would be something that I've seen in other industries, it's essentially a computerized visual system that would -- it would alarm when under certain conditions that you would set up. It's used in the food industry all the time. Basically when you're running along a process line, if it sees something that it's not supposed to see, it'll actuate systems, and this would be kind of a similar situation.

The hard part would be putting cameras in the right places and getting them to see the plume well enough at night. But certainly during the daytime you can do that kind of effect.

It wouldn't work particularly well or maybe at all during a severe fog condition, though.

MR. AJLOUNY: The lights are up in the air in the nighttime, too, --

MR. DONALDSON: There would be limitations during extreme fog.

MR. AJLOUNY: Oh, yeah, that's right. Okay, well, thank you very much. That was my last question. And I hope that suggestion will get into the, you know, into your written stuff.

HEARING OFFICER FAY: Who else has cross-examination of the staff? All three of you, huh? Okay. Let's keep it real short. We'll start there.

Well, can you cut it down, because --

MR. GARBETT: I can try to. William Garbett speaking on behalf of the public.

CROSS-EXAMINATION

BY MR. GARBETT:

Q The applicant has stated that at Blanchard Road he may ask for crossing gates or flashing lights. Given the hypothetical the Public Utilities Commission, in a case like this, might go and demand before the large number of construction vehicles go across there to either eliminate the crossing or to provide a grade separation.

If the grade separation crossing had to be provided, how would this affect the visuals?

MR. DONALDSON: I would have to look at what that would look like. I have not analyzed that.

MR. GARBETT: Terrible. Given the fact there may be condensation at various times that you call a plume, there are many methods known by rainmakers of providing this condensation through cloud seeding, silver iodine or other things.

Going just the opposite way, have you considered any inhibitors to basically reduce the formation or the coalescing of moisture?

MR. WALTERS: I think once it's out the stack there's really not much else you can do.

MR. GARBETT: Could there be a treatment method before it left the stack?

MR. WALTERS: Well, essentially we've been discussing that. That's the wet/dry system or dry cooling.

MR. GARBETT: Given that the applicant has built a small sized plant at the Sutter site using dry cooling, is it feasible for him to actually, for instance, apply either dry or wet cooling to this site in the larger site space that they have at Metcalf?

MR. WALKER: Actually they have a larger

size space at Sutter, and it's a large project, also. But as far as -- let Will at least say whether he can answer that.

MR. WALTERS: I really can't. I don't know enough about the dimensions of the sites to say one way or the other.

MR. GARBETT: I think they're good enough engineers to -- in the aesthetics could a joint use trench be used to access the area for both gas, recycled water, potable water and sewage?

MS. WILLIS: I'm going to object. That's outside the scope of his testimony.

HEARING OFFICER FAY: Sustained.

MR. GARBETT: Okay. In the laydown area that would be provided during construction, what are going to be the visual consequences that are going to also affect the biological species within the area?

MR. DONALDSON: I don't believe I'm qualified to answer a question on biology. I couldn't tell you.

MR. GARBETT: But there would be a visual impact that would have affect upon the species by eliminating --

HEARING OFFICER FAY: Well, he can't comment on the species, he's not a biologist.

MR. GARBETT: By eliminating their territory.

MR. DONALDSON: I can't -- I don't have a good answer for that from a visual perspective.

MR. GARBETT: During construction what is going to be the visual aspects of any mitigation used to prevent runoff? For instance, the little skirts they put around the area of plastic and so forth. What is the effect, the long-term effect of the long construction period going to be used and the maintainability and the presentation of that, and the effect upon any migration of people or animals?

HEARING OFFICER FAY: I'm not going to allow that. Construction impacts are just considered entirely different. And in the visual area they are temporary. And there's going to be a lot of, in any project, a lot of visual impacts that you wouldn't want long term.

MR. GARBETT: The gas metering station, have you considered the visual effect, for instance, if they use a more accurate metering system such as the Coriolis effect meters and the

noise that may be emanating from those?

MR. WALTERS: For the gas metering station I analyzed the drawings, plans, maps that were provided to me by the applicant. And I analyzed them strictly from a visual perspective.

MR. GARBETT: With the plantings that the applicant is being used on the project, if there were a randomness rather than a regularity of pattern that would affect a pleasing benefit for the riparian corridor, more or less repeating the randomness of trees in nature that would also go and improve the sound attenuation around the area, would that be a benefit to the project, rather than a regular, concisely spaced spacing?

MR. DONALDSON: That's a -- well, my general opinion on that is that looking at the existing visual character with a grove of trees and riparian areas and so forth around there, that a more random planting that kind of mimicked the natural character of the area would probably be more in line, more in tune with existing visual character for the area.

Is that clear?

MR. GARBETT: Yes.

MR. DONALDSON: Okay.

MR. GARBETT: With an unexpected closure such as a permanent closure, would you have in there a condition to remove the fill that they're building the station upon? And restore the area back to you might say the grade level that it was prior to the project?

MR. DONALDSON: I don't understand the question.

MR. GARBETT: They're packing five feet of dirt there. Would the dirt go away if the plant went away?

MS. WILLIS: I'm not sure that's a question for a visual witness.

MR. DONALDSON: What would that be like, more like facility design or something.

MS. WILLIS: Yeah, we've covered a lot of --

MR. GARBETT: Well, that's part of the visual that's addressed in the --

PRESIDING MEMBER LAURIE: Just answer the question. Do you know? If the project goes away, do you know if the closure plan includes elimination of --

MR. DONALDSON: Fill? I think if the project wasn't built there wouldn't be fill placed

there.

PRESIDING MEMBER LAURIE: What five feet are you talking about?

MR. GARBETT: Okay, in order to build up the particular solid mass for the project, and to get it above the flood plane, they're putting five feet of fill in.

PRESIDING MEMBER LAURIE: Okay, do you know anything --

MR. GARBETT: And they're compacting it.

MR. DONALDSON: No, I don't.

HEARING OFFICER FAY: Okay, next question.

MR. GARBETT: Could that be one of the conditions that you might add?

HEARING OFFICER FAY: It's not in his testimony.

MR. GARBETT: No, it's not, thank you, you can't comment on that. Okay. At the gas metering station what would be the effect upon the visual nature of the project if any venting of the gas metering station occurred near the Metcalf Firing Range?

MR. DONALDSON: I'm not sure what you mean by venting. Would you clarify that?

MR. GARBETT: Venting --

HEARING OFFICER FAY: No, this witness is not qualified about hazardous materials, and it's not a visual question. It's not relevant.

MR. GARBETT: And you didn't have a hazardous materials section that included anything of this nature, so I pick wherever I can.

HEARING OFFICER FAY: That may be a valid criticism, but this isn't the witness for it. Let's have one more question, okay?

MR. GARBETT: Okay. In security systems on the premises you've talked about lighting conditions and other such things. Would you have any invasive materials such as, for instance, infrared beams that wildlife may see, ultrasound that they may hear, or other things that may disrupt the riparian corridor?

MR. DONALDSON: I don't know about those things. I looked at just what the applicant had identified in terms of lighting for security safety for the plant. I didn't look at any other, or I didn't know that there were other elements like that.

MR. GARBETT: That concludes my questions, thank you.

HEARING OFFICER FAY: Okay. All right, Mr. Wade, do you have some questions?

MR. WADE: Thank you, I just have a few questions. I think these are probably for Mr. Walters.

CROSS-EXAMINATION

BY MR. WADE:

Q Recalling your testimony you, I believe, looked at five years of met data in trying to predict the occurrence of a plume?

MR. WALTERS: Yes, I wanted to do a wider period of time to get a more representative feel for the conditions, for the range of conditions that might occur.

MR. WADE: Okay, and the applicant used just one year in which they, I believe, predicted zero plumes, is that right?

MR. WALTERS: That's correct.

MR. WADE: And did the applicant use 1993 IBM met data?

MR. WALTERS: That is what they used, that's what's in the record, yes.

MR. WADE: And did you hear the applicant earlier mention that there's uncertainty in modeling the plume, the occurrence of plume

based on the IBM met data? Do you recall hearing that?

MR. WALTERS: Not specifically in those words, no.

MR. WADE: Perhaps the record will show that, I believe that statement was made.

Are you aware of the fact that the '93 IBM met data is the same data that's being used for predicting the ground level air pollution impacts which were expected to --

MR. WALTERS: No, I don't know, I'm not involved in that section.

MR. WADE: Okay. Let me move to something that I think you probably are -- well, let me ask you this question, finally, on that subject.

Would you say it's better in modeling the effect of events that are affected by meteorological conditions to use a longer period of time? Five years as opposed to three, in general?

MR. WALTERS: In general specifically for psychometric analysis, I would say yes.

MR. WADE: Okay, and I believe you said that your psychometric analysis and the computer

programs give you a pretty high confidence that you can predict a plume?

MR. WALTERS: Yes, they're not quite the same as dispersion models, --

MR. WADE: No, I --

MR. WALTERS: -- there's really --

MR. WADE: -- understand that. Okay. Now, moving to VIS10 and your modification of VIS10, do you think it would be -- and maybe this is a question for the whole panel, I'm not sure which of you would like to answer this, but do you think it would be in the interest, or do you think the applicant would be incentivized to come up with the best possible design for reducing plumes if you were to specify in VIS10 that their plant would not be allowed to operate in the event of a plume?

MR. WALKER: I'm not sure exactly what incentives they would respond to. It's pretty clear that they aren't sure that they could operate with those conditions.

MR. WADE: Those conditions being 20 --

MR. WALKER: 20/100, right, as Mr. Dunstan said, the information they've gathered from potential suppliers indicates they're not

sure whether they could or not. They have doubts.

MR. WADE: Perhaps they're qualified to pick conditions that are optimal for their system design, which would give them the highest likelihood of being able to operate in that location, and if you were to specify simply that they are not allowed to operate if a plume exists, do you think that's a reasonable view?

MR. WALKER: That they would -- well, I'm sure they would try to get the most abatement possible if that were a requirement, certainly.

MR. WADE: Okay. And I guess part of my question was do you think they're qualified to pick an optimum set of design conditions?

MR. WALKER: I don't understand --

PRESIDING MEMBER LAURIE: I'm not --

MR. WALKER: -- the question.

PRESIDING MEMBER LAURIE: -- going to ask you to answer that question. That's staff's proposal, Mr. Wade.

MR. WADE: Yes.

PRESIDING MEMBER LAURIE: Or that's applicant's proposal. Staff has a different proposal.

MR. WADE: Well, I guess you probably

perceive that I'm offering another proposal which has sort of gone by the wayside, and the reasons why that might be the best approach for all concerned by specifying the thing which we really care about, which is the plume, we allow the applicant the opportunity to come up with whatever design they feel meets that top level requirement without specifying the lower level design conditions that would --

PRESIDING MEMBER LAURIE: Okay, understood.

MR. WADE: That's all I have to say. And I have no more questions, thank you.

HEARING OFFICER FAY: All right, thank you. Mr. Scholz.

CROSS-EXAMINATION

BY MR. SCHOLZ:

Q Again, following up on VIS10, not on the implementation and the changes, but on the verification, I want to follow up on the possibility of adding language to your verification that perhaps if a plume camera is the best way to do it. So you have some way of knowing whether the project is in compliance.

It's not dependent upon the applicant to

tell you it's in compliance. It's not dependent upon a neighbor harassing you saying it's not in compliance.

Would you consider putting language such as a plume camera where you can actually see for yourself and you don't have to be annoyed by the neighbors if there is a plume?

MR. WALKER: We would expect that whatever plan they would propose would provide for a verifiable condition that the staff would be able to independently verify whether they were complying with the condition or not. It would not simply accept them attesting to their compliance, whatever the technology might be. We're leaving it flexible for them to devise the most effective and practical thing. But we would evaluate it and our technical experts would look it over to insure that we considered it to be verifiable.

MR. SCHOLZ: I want to get it more specific because when we talk to the compliance manager early on in the hearings he said we had to speak to you, as the people who are writing the condition, how we're going to verify this.

PRESIDING MEMBER LAURIE: Okay, well, first of all the Committee writes the condition.

And these folks do not write the condition. All they do is recommend, and they've recommended. So you're just as free to make your proposal to the Committee as you are to these folks. Because these folks --

MR. SCHOLZ: You directed us to skip this topic at the compliance section and talk to the visuals. I'm talking to the visuals. You want to say now bypass that and wait till we come to the briefing section --

PRESIDING MEMBER LAURIE: No, but you're making your argument. And your argument is that you're asking for additional opportunities to verify. You can ask these folks -- strike that.

There have been questions about putting in a camera. So let's simply ask these folks do you have any additional comments about the viability of putting in a camera for verification purposes? Do any of you have an opinion on that?

MR. WALTERS: In terms of an opinion I think there's potential feasibility for that, along with other potential ways. But I don't think we want to limit --

PRESIDING MEMBER LAURIE: Why are you leaving verification to the applicant? Is that

what you're saying, that the applicant comes up with the verification proposal?

MR. WALKER: Yes.

PRESIDING MEMBER LAURIE: Why is that? I have to tell you that I don't understand that.

MR. WALKER: The condition is for them to meet the standards for reducing, minimizing the plume to where it won't cause a significant impact. That's the condition.

We typically allow an applicant to have flexibility in designing a method that will, to their best ability, most practicably satisfy that condition. But we have to review it to determine whether we think that their proposal is feasible and verifiable, practical.

So, we try not to put them in a straightjacket as far as the means of achieving the condition.

PRESIDING MEMBER LAURIE: And at what point does that occur?

MR. WALKER: When they submit the plan, during the compliance phase.

PRESIDING MEMBER LAURIE: Okay. And you're being asked that in development of that plan that a consideration be given to visual

verification. And I guess that's something you can ask the applicant for.

MR. WALKER: Yes, in fact, since Mr. Walters mentioned he thought that camera sorts of technology could be feasible, that's on the record now for them to consider in devising their plan.

PRESIDING MEMBER LAURIE: So in examining the plan, you'll be looking for applicant's response to whether a camera is feasible or infeasible?

MR. WALKER: Yes, unless they show us some other method that they find preferable, and we agree that that's a good method.

PRESIDING MEMBER LAURIE: Does that get to your point at all?

MR. SCHOLZ: It definitely does and what I'm trying to do is, let's try not to be antagonist about all this between the CEC, the applicant and the neighbors. Let's have an impartial way to document whether there's a plume. No one has to annoy each other, get on each other's nerves.

That's the condition. Here's how to verify it. If you can come up with a better way than a camera, great. But, you know, let's not be

tattle-tails, let's not be accused of, well, you know, it was 59 minutes, or, you know, 61 minutes or whatever.

We can document it. You know, we don't have to feel like we're telling on Calpine or whatever.

MR. GARBETT: I want a reward if --

MR. WALKER: We won't expect the community to do the monitoring.

MR. SCHOLZ: Well, the compliance manager gave us that impression that we would be the monitors, basically. The way it is right now. So that's why -- and I don't want to be the only source of --

MR. WALKER: Well, there's obviously a complaint process by which members of the public can notify the compliance manager about perceived violations of conditions. But that's not the method of verification that we would ask for in the condition.

PRESIDING MEMBER LAURIE: And I can tell you the Committee would be disinclined to put such a burden on the community.

MR. SCHOLZ: Thank you. Finally, I want to ask about a couple of the key observations --

PRESIDING MEMBER LAURIE: I'm sorry, I didn't mean to speak for the Committee. I would be disinclined.

MR. SCHOLZ: Thank you.

CHAIRMAN KEESE: I'm still awake.

(Laughter.)

MR. SCHOLZ: I want to understand that on a couple of these key observation points, one being the proposed Fisher Creek trail and maybe perhaps Coyote Ranch.

Were those views considered significant impacts prior to any mitigation?

MR. DONALDSON: Significant is used as it's used in CEQA, so I could say that you use the word, there would be a substantial impact or substantial change. Are you asking specifically about Coyote --

MR. SCHOLZ: Will they become, in your view, less than significant because of mitigation? Or are they less than significant because for a different reason, they're just less than significant?

MR. DONALDSON: The views from Coyote Ranch, according to my analysis, were that that would not be a significant adverse impact, visual

impact, from Coyote Ranch.

That was because the visual quality reduction due to the plant would only have reduced it from -- I hope I have this right -- but I believe it was from moderately high to moderate --

MR. SCHOLZ: Specifically on Coyote Ranch, we'll start there. Is it designated historical landmark or does it have any historical significance, do you know?

MR. DONALDSON: Actually I don't know that.

MR. SCHOLZ: I don't know the answer, either, I thought it had some significance, I'm not sure if it's the level of historical.

But it is used as a significant recreational facility, outdoor facilities, --

MR. DONALDSON: Correct.

MR. SCHOLZ: -- you're aware of that?

MR. DONALDSON: Yes.

MR. SCHOLZ: When people are out there choosing to use that facility they're going to see the power plant, correct now, instead of the Tulare Hill?

MR. DONALDSON: They'll see Tulare Hill and the power plant.

MR. SCHOLZ: Right.

MR. DONALDSON: Or a portion of the power plant.

MR. SCHOLZ: And what I'm getting at is that is not significant to you, absent mitigation?

MR. DONALDSON: According to my analysis it did not come out to be significant. I could -- well, it's in my testimony.

MR. SCHOLZ: Okay, I guess I didn't understand. You are making a condition, VIS7, I think, that references Coyote Ranch?

MR. DONALDSON: Yes.

MR. SCHOLZ: Where you're going to plant --

MR. DONALDSON: Yes.

MR. SCHOLZ: -- to somewhat or completely obstruct the view of the power plant?

MR. DONALDSON: That was something that was actually proposed by the applicant. And I thought that was a good idea, even though we don't have a significant adverse impacts from four views from Coyote Ranch. I thought the applicant proposed that and it was a good idea, so I wrote a condition that did require that, that just held that.

MR. SCHOLZ: I just wanted to understand if -- I mean I realize now if you plant trees you've obstructed the view to the hill, I mean the view is destroyed with the power plant, and the view is destroyed with the trees disguising the power plant. But you didn't think it was significant anyway, so it's really a moot point, I would guess.

MR. DONALDSON: I can clarify that the location of the trees would not obstruct the views of the hill because they're located down farther, the line of trees would be located down closer to the road.

However, it would take some time for those trees to grow tall enough, even, to obscure the power plant. But, remembering that we don't have a significant impact, that seemed to be okay.

MR. SCHOLZ: Okay, and I would --

HEARING OFFICER FAY: Mr. Scholz, --

MR. SCHOLZ: -- have a similar line of questioning, maybe you can do it faster --

HEARING OFFICER FAY: -- pick your last question.

MR. SCHOLZ: This is it. I mean but it's on a different observation point. I want to

use the same way of questioning regarding the trail.

You're proposing basically a hedgerow that puts you in a tunnel.

MR. DONALDSON: I'm not, but --

MR. SCHOLZ: And you can't see the visual character of the hills, the east hills. Was the project, was that considered a significant impact prior to that mitigation proposal? Or is it now not significant because you're having a hedgerow? And you can't see the power plant, but you also can't see the view to the east hills?

MR. DONALDSON: I'm not entirely understanding how to answer your question. I'm not entirely understanding your question. I can clarify that it was not identified as a significant impact because under CEQA that's a future use, and didn't qualify as a baseline existing condition.

What the applicant had proposed was to put up a hedge, a dense evergreen hedge along that section of a future trail when it was constructed in order to screen views of the power plant, or screen most of the views of the power plant.

I felt that that would also screen views

of the surrounding hills, et cetera, and the other areas around there that would qualify as high quality views from the trail.

So what I was trying to do in VIS -- was it 11? -- VIS11 was to say let's back away from that idea of having a dense evergreen hedge that would block all views of the area, and instead provide some level of screening, but also allow open views through there of the surrounding area, or to maintain those future views for trail users.

Does that --

MR. SCHOLZ: That's a great answer, thank you. All I was trying to get back to, and you can't do that for this one because it's a future use? You couldn't make a determination whether it was significant prior to the mitigation or not?

MR. DONALDSON: Okay, --

HEARING OFFICER FAY: And that's argument.

MR. SCHOLZ: No, I was clarifying that's what he said, he couldn't make that determination because it was a future use.

HEARING OFFICER FAY: Thank you. That concludes our cross-examination of the staff

panel, and that concludes our taking evidence on visual resources.

I have just a couple -- I'm sorry, did you have -- followup. And I'm sorry, Mr. Harris, I need you to go back over the exhibits you moved in. I didn't catch them all. If you could go down that list again?

MR. HARRIS: For visual or for --

HEARING OFFICER FAY: Visual.

MR. HARRIS: Okay. Let's see if my eyes work at this hour. 103B, 104, exhibit 46, exhibit 105, exhibit 66, exhibit 95, exhibit 97, and exhibit 106.

HEARING OFFICER FAY: Okay. And you moved all those in --

MR. HARRIS: Yes.

HEARING OFFICER FAY: -- and they were received. Thank you.

And do you want to identify where in the record some of these photographs appear? They have references, figure references. But I want to be sure that those references lead us to some document.

MR. HARRIS: Yeah, give us just a second here.

HEARING OFFICER FAY: And if they're not part of an exhibit, then I'd like to mark it for identification.

MR. AJLOUNY: I have a question for the Commission.

MR. HARRIS: They are part of an exhibit.

Okay, figure VIS1.2 is part of PSA set 7, exhibit 23. The Blanchard Road existing visual conditions, those selected photos all have the reference to the sources there, PSA comment set 7. Although I won't object if we want to introduce it for administrative convenience if these are, we can admit that as an item or just use the references, whatever you prefer.

HEARING OFFICER FAY: Okay, let's do that. The Blanchard Road visuals we'll mark as exhibit 108.

MR. HARRIS: Right, and I'd move that into evidence.

HEARING OFFICER FAY: And you do wish to move that?

MR. HARRIS: Yes, is it 107 or 108? I'm sorry.

HEARING OFFICER FAY: This is 108.

Staff is --

MR. HARRIS: Oh, staff's is 107, okay.

HEARING OFFICER FAY: -- 107.

MR. HARRIS: That's fine. Let's see --

HEARING OFFICER FAY: Any objection to receiving that?

MS. WILLIS: That was the photos from --

HEARING OFFICER FAY: That's the Blanchard Road photographs.

MS. WILLIS: No objection.

HEARING OFFICER FAY: Okay, and that is exhibit 108.

Okay, the other maps?

MR. HARRIS: The biological maps?

HEARING OFFICER FAY: Just where they're found.

MR. HARRIS: Yeah, the KOP map figure 8.11-1BR is part of supplement C, as in Charlie, which is exhibit 5.

HEARING OFFICER FAY: Okay.

MR. HARRIS: There was one BIO figure 2, that was from the draft biological resources BRMIMP, whatever we call it. I think that one was identified. Exhibit 101. I'm in biology now.

HEARING OFFICER FAY: And what about

this?

MR. HARRIS: Oh, --

SPEAKER: That was just a handout, it was part of our --

HEARING OFFICER FAY: Well, it was discussed quite a bit. I'd at least like to mark it for identification.

MR. HARRIS: We can mark it and move that into evidence, as well.

HEARING OFFICER FAY: Well, marked for identification as exhibit 109, the --

MR. HARRIS: Color photos of the architectural designs.

HEARING OFFICER FAY: -- color photos by Hillier Firm of the architectural, various architectural designs for the power plant. Marked as exhibit 109. Any objection to receiving that into evidence?

I hear none, so that is moved into evidence.

Okay. And you didn't want to even mark this now because you're going to introduce it later?

MR. HARRIS: I'm afraid I'll get in trouble, so we'll --

HEARING OFFICER FAY: Let's leave it --

MR. HARRIS: -- let's leave it alone.

HEARING OFFICER FAY: -- leave it as it is.

INTERVENOR: I'm ready for that one.

MR. HARRIS: I know you are.

HEARING OFFICER FAY: All right.

MR. HARRIS: We'll come back to that one for sure.

HEARING OFFICER FAY: Okay, all right, thank you all for your endurance and your patience. Yes?

MR. AJLOUNY: One question just so I can understand. The next set of hearings is set for three days, and it's all on air quality. And I want to know from the Commissioners' point of view, is he intending to accomplish that in one evening, also, or do you have any idea or goal or --

PRESIDING MEMBER LAURIE: I'm going to talk to Mr. Valkosky about it, and I would certainly, at this point I would expect not. I think we'll certainly not in one day, given the expectations. So I think you can plan on it going two.

But only, it's only because you all say you have these hours of cross-examination. And again, whether or not that's relevant, or focuses is beside the point.

HEARING OFFICER FAY: Just as a reminder, that is next Wednesday, February 28th, beginning at 2:00 in San Jose City Hall Council Chambers.

MR. AJLOUNY: Yeah, a week from Wednesday.

HEARING OFFICER FAY: I'm sorry, a week from next Wednesday, February 28th. And then the following day, March 1st. And then, if necessary, the following day, March 2nd.

MR. HARRIS: Mr. Fay, --

HEARING OFFICER FAY: Yes, Mr. Harris.

MR. HARRIS: -- if at all possible we'd suggest that maybe the location can be moved to this location. It seems to be a better accommodation. I'll leave that to the Committee's discretion, but from the applicant's perspective this room seems to work out better.

MR. AJLOUNY: Much better. Unless they let me sit up on the top.

(Laughter.)

HEARING OFFICER FAY: We'll check into that.

Okay, thank you for the suggestion. Anything further, then?

All right, thank you, all. We're adjourned.

(Whereupon, at 1:30 a.m., the hearing was adjourned, to reconvene at 2:00 p.m., Wednesday, February 28, 2001 at a location to be determined.)

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CERTIFICATE OF REPORTER

I, JAMES RAMOS, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Hearing; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said hearing, nor in any way interested in outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this 22nd day of February, 2001.

JAMES RAMOS