

EVIDENTIARY HEARING
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:)
)
Application for Certification) Docket No.
of SMUD's Cosumnes Power Plant) 01-AFC-19
Project)
_____)

HENDRICKSON HALL
12746 IVIE ROAD
HERALD, CALIFORNIA 95638

THURSDAY, MARCH 13, 2003

9:38 a.m.

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

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

COMMITTEE MEMBERS PRESENT

Robert Pernell, Presiding Member

HEARING OFFICER, ADVISORS PRESENT

Garret Shean, Hearing Officer

E.V. (Al) Garcia, Advisor

STAFF AND CONSULTANTS PRESENT

Caryn Holmes, Staff Counsel

Kristy Chew, Project Manager

Matthew S. Layton

Tuan Ngo

Rick Tyler

Mike Ringer

William Walters, Senior Associate

Philip Lowe, Senior Associate

Aspen Environmental Group

PUBLIC ADVISER

Roberta Mendonca

APPLICANT

Jane E. Luckhardt, Attorney

Downey, Brand, Seymour & Rohwer

Steven M. Cohn, Assistant General Counsel

Maria de Lourdes Jimenez-Price, Attorney

James R. Shetler, Assistant General Manager

Colin Taylor, Project Director

Kevin Hudson, Licensing Project Manager

Bob Nelson, Superintendent, Project Development

Scott Flake, Superintendent, Project Development
Engineering

APPLICANT

Joseph C. Pennington, Superintendent, Gas Pipeline
Assets

Steve J. Redeker, Manager, Nuclear Plant
Sacramento Municipal Utility District

Gary S. Rubenstein
Sierra Research

Mark Bastasch, Project Engineer
EJ Koford, Senior Biologist/Project Manager
Thomas Priestley, Senior Environmental Planner
Wendy E. Haydon, Environmental Planner
CH2MHILL

INTERVENORS

Kathy Peasha

Robert Sarvey

Mike Roskey

ALSO PRESENT

Brian Krebs, Program Coordinator
Aleta Kennard, Supervisor Technical Services
Sacramento Municipal Air Quality Management
District

Matt Kelly
Sacramento-Sierra's Building and Construction
Trades Council

Ray Trujillo, Northern California Regional
Director
State Building and Construction Trades Council

Jim Murphy

Bonnie Hays
Bonnie Hays Consulting

I N D E X

	Page
Proceedings	1
Opening Remarks	1
Introductions	1
Public Adviser	4
Overview	6
Topics	16
Air Quality	16
CEC Staff-sponsored SMAQMD witnesses	
A. Kennard, B. Krebs	16
Direct Examination by Ms. Holmes	16
Exhibit	17/18
Cross-Examination by Ms. Luckhardt	22
Redirect Examination by Ms. Holmes	26
Applicant witness G. Rubenstein	28
Direct Examination by Ms. Luckhardt	28
Exhibit	29/30
Exhibits	37
Cross-Examination by Ms. Holmes	71
Cross-Examination by Ms. Peasha	79
Cross-Examination by Mr. Sarvey	83
Exhibits	85
Afternoon Session	119
Air Quality - continued	119
Applicant witness G. Rubenstein-cont'd.	119
Questions by Committee	119
Redirect Examination by Ms. Luckhardt	131
Recross-Examination by Ms. Holmes	140
CEC Staff witnesses T. Ngo, M. Layton	149
Direct Examination by Ms. Holmes	150
Exhibits	150/153
Cross-Examination by Ms. Luckhardt	163
Questions by Committee	186/194
Redirect by Ms. Holmes	196

I N D E X

	Page
Topics - continued	
Air Quality - continued	
Public Comment	189
Jim Murphy	190
Intervenor Peasha witness R. Sarvey	199
Direct Examination by Ms. Peasha	199
Documents Packet	200,206/210
Hazardous Materials	210
Applicant statement	210
CEC Staff statement	211
CEC Staff witness R. Tyler	215
Direct Examination by Ms. Holmes	215
Exhibits	215
Questions by Ms. Peasha	217
Direct Examination - resumed	226,243
Questions by Committee	227,265
Cross-Examination by Ms. Peasha	236,244
Applicant witnesses C. Taylor, K. Hudson	238
Direct Examination by Mr. Cohn	238
Exhibits	239/241
Questions by Ms. Peasha	241
Direct Examination - resumed	241
Cross-Examination by Ms. Peasha	242,246
Questions by Committee	252
Redirect Examination by Mr. Cohn	276
Applicant witness B. Nelson	255
Direct Examination by Mr. Cohn	255
Exhibits	256/257
Questions by Committee	258,268
Redirect Examination by Mr. Cohn	274
Hazardous Materials - Detention Basin	281
Applicant witnesses C. Taylor, K. Hudson, B. Nelson, S. Flake	282,283
Direct Examination by Mr. Cohn	282

I N D E X

	Page
Topics - continued	
Hazardous Materials - Detention Basin - cont'd.	
Applicant witnesses - continued	
Exhibits	284/285
Questions by Ms. Peasha	286
Applicant witness S. Redeker	302
Direct Examination by Mr. Cohn	303
Exhibits	303/305
Cross-Examination by Ms. Peasha	305
Exhibits 1 and 2	309
CEC Staff witness M. Ringer	314
Direct Testimony	314, 316
Questions by Ms. Peasha	315
Questions by Committee	317
CEC Staff Written Testimonies and Exhibits	326/328
Closing Remarks	330
Adjournment	330
Reporter's Certificate	331

P R O C E E D I N G S

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

9:38 a.m.

PRESIDING MEMBER PERNELL: Good morning; my name is Robert Pernell; I'm the Presiding Commissioner on the SMUD Cosumnes Project Committee. With me today is my Advisor to my left, Al Garcia. And to my right is the Hearing Officer, Garret Shean. Mr. Shean will be conducting the hearing today.

The Second Member of this Committee is Commissioner Rosenfeld, who is unable to be here this morning.

The purpose of the evidentiary hearing today and tomorrow, if necessary, is to assemble the record upon which the Commission will ultimately decide the application for certification of the Cosumnes Power Plant project.

While these are largely formal proceedings, we will provide opportunity for members of the public to make comments about the proposed project.

Let me just make a brief announcement. We don't have a PA system here, so if there is problems hearing we would ask that everybody hold the chatter down, and those who are speaking, please speak up so that everyone can hear.

At this time I would like the parties to

1 identify themselves, as well as their team, starting
2 with the applicant.

3 MR. COHN: Commissioner, good morning, Mr.
4 Shean. My name is Steve Cohn; I'm appearing on behalf
5 of the Sacramento Municipal Utility District. With me
6 today are co-counsel Jane Luckhardt and Lourdes
7 Jimenez-Price. We also have our project management
8 team, starting with our Assistant General Manager, Jim
9 Shetler; our Project Director, Colin Taylor; --

10 PRESIDING MEMBER PERNELL: All right, can
11 you, just for the public, can you raise your hand when
12 you're-- so that the public will know who to question
13 after the meeting.

14 (Laughter.)

15 MR. COHN: All right. Colin Taylor in the
16 middle; and then Kevin Hudson, who is the Project
17 Manager. Thank you.

18 PRESIDING MEMBER PERNELL: Staff, please.

19 MS. HOLMES: Thank you. Good morning, my
20 name is Caryn Holmes; I'm the Counsel for the Energy
21 Commission Staff. With me today is Kristy Chew, the
22 Project Manager for this project, and the technical
23 experts who will be testifying later today.

24 PRESIDING MEMBER PERNELL: Thank you. Any
25 public agencies? Would you please stand up and

1 identify yourself for the record?

2 MR. KREBS: My name is Brian Krebs,
3 Sacramento Metropolitan --

4 PRESIDING MEMBER PERNELL: Okay, would you
5 come to the mike, just for the record.

6 MR. KREBS: My name is Brian Krebs and I'm
7 with the Sacramento Metropolitan Air Quality Management
8 District.

9 PRESIDING MEMBER PERNELL: Thank you,
10 welcome. Any other public agencies? Intervenors.

11 MS. PEASHA: Yes, good morning; I'm
12 Katherine Peasha, Intervenor. And my expert witness
13 will be Bob Sarvey today.

14 PRESIDING MEMBER PERNELL: Good morning,
15 welcome. Are there any other organizations or people
16 representing organizations, or community-based
17 organizations?

18 MR. KELLY: My name is Matt Kelly; I
19 represent the Sacramento Building and Construction
20 Trades Council.

21 PRESIDING MEMBER PERNELL: Welcome. All
22 right, at this time, -- I'm sorry.

23 MR. TRUJILLO: Ray Trujillo; I represent the
24 State Building and Construction Trades Council.

25 PRESIDING MEMBER PERNELL: Welcome. At this

1 time I'd like to introduce our Public Adviser, who will
2 give you a brief statement on how you can participate
3 in our process. Ms. Mendonca.

4 MS. MENDONCA: Good morning, and thank you,
5 Commissioner Parnell. I think I'd like to start off by
6 saying for those members of the public who would, at
7 some time, like to comment today I think we've
8 designated this as your area. And if you would please
9 come forward, after filling out a blue card and when
10 you're called on, and use this microphone.

11 And I would like to just briefly summarize
12 for the Committee how the Public Adviser approached
13 this project and what we did from the beginning, going
14 back to the beginning, to accommodate and do public
15 outreach.

16 Once we received a copy of the application
17 for certification my office began scoping, and that
18 included looking for opportunities for involving the
19 public in understanding what our process and procedures
20 might be.

21 We created a one-page project description
22 which we translated into Spanish and distributed that
23 one-page project description to as many locations as we
24 could, including the local Chamber of Commerce, who
25 made it available to

1 the -- the local Chamber of Commerce would have been
2 Elk Grove -- who made it available to their members.

3 And we went copies of the application for
4 certification to the Elk Grove Branch Library and the
5 Galt Neighborhood Library. And included 25 posters
6 that could be put up to indicate where the application
7 was located and how members of the community could find
8 it. And also copies of the project description.

9 We sent 4700 copies of the project
10 description to the Galt Unified Elementary School
11 District which were distributed amongst five schools
12 within their District to be sent home with the school
13 students.

14 And we sent 3500 copies of the project
15 description to the Galt Chamber, as I mentioned. I
16 forgot to mention the number before. 16,000 copies of
17 a newspaper insert advertising our first informational
18 hearing were sent to The Galt Herald newspaper for
19 distribution to their local subscriptions in zip codes
20 communities of Galt, Rancho Murieta and Wilton.

21 And in addition, the Public Adviser or
22 representatives from my office have attended the
23 majority of the meetings. We would comment that when
24 the meetings have been held locally and in the Herald
25 area or in the Rancho Seco area, we have had more

1 members of the community who could participate, but we
2 do feel that the public has had an ample opportunity to
3 know about and learn about this project.

4 Thank you.

5 PRESIDING MEMBER PERNELL: Thank you. At
6 this time I'll turn the hearing over to our Hearing
7 Officer, Mr. Shean.

8 HEARING OFFICER SHEAN: Good morning. Let
9 me just indicate the purpose of the microphones that
10 are here. These are for our reporter.

11 What you should know is that the Energy
12 Commission records this evidentiary hearing for the
13 purpose of producing a transcript. And that
14 transcript, along with the documentary evidence that is
15 received, will be the bases for the Energy Commission's
16 ultimate decision.

17 The reason for that is we will have an
18 established record, then, which is what will support
19 the Commission action. So that the public and any
20 reviewing court, if that's necessary, know that the
21 decision was based upon only that which was discussed
22 in public. Therefore, there are no private discussions
23 or anything else which can occur which would support a
24 Commission decision on this particular case.

25 I want to, just as a housekeeping detail, to

1 the attorneys and witnesses in the case, indicate that
2 we have no problem with you being seated at your
3 respective tables. We would have a problem with
4 coaching at the time that the witness is testifying,
5 and that will include whispering and notes and things
6 like that.

7 If you basically hear the gavel come down
8 hard and ask that the witness be moved, it will only be
9 because some sort of coaching is taking place.

10 With that, what we expect to do is follow
11 appendix A, the order of testimony that appeared on the
12 notice of the evidentiary hearing.

13 We have these introductory remarks by the
14 Committee and we're going to ask the parties if they
15 have anything of a preliminary nature that they would
16 like to discuss, outstanding motions or anything like
17 that. And then we're going to begin with the air
18 quality testimony.

19 So, with that, we invite any matters that
20 the respective parties wishes to address. Anything
21 from the applicant?

22 MR. COHN: Only in response to any motion
23 that someone else might make. We have no motions of
24 our own.

25 HEARING OFFICER SHEAN: Okay. We need to do

1 this from down here. Okay. From the staff, anything?

2 MS. HOLMES: Staff is ready to proceed.

3 HEARING OFFICER SHEAN: All right. From the
4 intervenors?

5 MS. PEASHA: Yes, I'd like to make a motion.
6 Intervenor, in good faith, submits I have a motion to
7 continue the topics of air quality and water resources
8 to the second set of hearings.

9 The request for the continuance of air
10 quality is due to the lack of an FSA document which
11 contains staff's position on biology and the absence of
12 a biological opinion from the USFWS.

13 Air quality impact and biological resources
14 are interrelated. And without the biological opinion
15 several key areas of air quality cannot be assessed.

16 In fact, the Air District is required,
17 pursuant to section 7 of the Endangered Species Act,
18 ESA, 16 USC 1536, to have a biological opinion to issue
19 to the FDOC.

20 I'd also intend to dispute the alternative
21 analysis and biological resource analysis in further
22 hearings on these topics.

23 I also petition to postpone the water issue
24 until the second evidentiary hearing. After just
25 receiving the FSA part 2, I have issues with the

1 staff's position, but have not had adequate time to
2 analyze the FSA and prepare for evidentiary hearings.

3 My witness will need time to analyze staff's
4 position and prepared testimony on the subject of the
5 water resources.

6 Thank you.

7 HEARING OFFICER SHEAN: Okay, any responding
8 comments?

9 MR. COHN: Yes, Mr. Shean. First of all,
10 most of these issues were addressed, or at least the
11 proper time to address the issue would have been at the
12 prehearing conference.

13 This is, in effect, a second bite at the
14 apple. But nonetheless, to the extent we respond on
15 the merits of the motion, we strongly object to any
16 delay in any of the hearings that have already been
17 scheduled and are noticed for today and tomorrow. And
18 in particular, the air quality and water hearings,
19 which Ms. Peasha has requested to be continued.

20 First of all, in terms of her argument that
21 the FSA must be contained in a single document; that's
22 not the case. And in fact, Title 20 of the California
23 Code of Regulations, section 1747, even refers to the
24 various reports that the staff produces in the plural,
25 rather than in the singular.

1 Now, certainly there are many cases where
2 the FSA has been produced as one document; but that's
3 not a legal requirement. And in this case, in the
4 interest of time and trying to keep the schedule as
5 close as possible to the one-year schedule envisioned
6 by the Warren Alquist Act, staff and the applicant have
7 agreed, and we support the action of the Committee to
8 order that biology be postponed to a later date. And
9 we will be prepared to talk about that at the end of
10 these hearings.

11 And with respect to the argument that a
12 biological opinion must be issued before the final DOC
13 or hearings on air quality or health, that's just not
14 correct. And we'd be glad to go into details on that
15 argument.

16 In terms of the water section, it was issued
17 on February 28th, which is in compliance with the
18 regulations which provide that under section 1747 that
19 the FSA sections be produced 14 days prior to the
20 evidentiary hearing.

21 Thank you.

22 HEARING OFFICER SHEAN: Anything from the
23 staff?

24 MS. HOLMES: Staff doesn't have anything to
25 add to that, other than to say that we support moving

1 forward on the topics and denying the motion.

2 HEARING OFFICER SHEAN: Do you want to
3 respond?

4 MS. PEASHA: Yes, I'd like to rebuttal that.
5 They did not have an FSA at the evidential hearings --

6 HEARING OFFICER SHEAN: Okay, let me -- I
7 think we can deal with this. There's an answer, which
8 is we know we're going to conduct further hearings. We
9 know we're going to conduct further hearings. We want
10 to go ahead, to the extent we can, on the air quality
11 issues we have today. If you find --

12 MS. PEASHA: I have no problem with that,
13 Garret, --

14 HEARING OFFICER SHEAN: Okay, I know, I
15 know, and this is a ruling --

16 MS. PEASHA: -- and I --

17 HEARING OFFICER SHEAN: -- so, you may have
18 a problem with the ruling, but a ruling is a ruling.
19 We're going to go ahead to the extent that we can on
20 air quality today.

21 If, either as a result of the information
22 that's filed with the biology by the feds, there is
23 something that pertains to air quality, since we know
24 we're going to hold future hearings, you have an
25 opportunity to come back to the Committee and say this

1 matter is germane to air quality; it was not available
2 at the time we conducted the hearings on March 13th and
3 14th, and therefore you'd like an opportunity to deal
4 with it.

5 And I think the same applies with respect to
6 the other areas that you have raised. We know we're
7 going to do biology and alternatives at a future date.
8 If we need to, we can address an air quality issue if
9 it arises based upon a subsequent filing.

10 And with respect to water resources I think
11 what we would, again, knowing we have additional
12 hearings, we can accommodate you in addressing the
13 Committee on that.

14 MS. PEASHA: Just one more comment. With
15 the matter that they held workshops after the
16 evidential -- or the preconference hearing regarding
17 all of those topics, and changes were made to those
18 documents, doesn't that change the final -- the 14-day
19 period in which those documents were actually
20 documented?

21 HEARING OFFICER SHEAN: I think my answer is
22 the Committee is not counting days. We're trying to
23 make sure that you have an opportunity to present what
24 you want to present while we keep the proceedings
25 moving.

1 And what it is, is it's contingent upon
2 something arising and you're telling us that you need
3 to have a further opportunity to address the Committee
4 on air quality because of information that doesn't
5 currently exist.

6 So, we're not counting days. We're trying
7 to make sure that people have a meaningful opportunity
8 to be heard. And in the order we've just made, the
9 Committee believes we're providing you that.

10 MS. PEASHA: I just want to make that of
11 record. Thank you.

12 HEARING OFFICER SHEAN: All right, thank
13 you. With that, we'll now move into the testimonial
14 portion of our proceedings, which will be initially to
15 hear from the Sacramento Metropolitan Air Quality
16 Management District and the introduction into evidence
17 of the final determination of compliance.

18 What I would like to do, just for the
19 administrative ease of the proceeding is to have all
20 witnesses who are here and will testify under oath rise
21 and be sworn in. And then at the time that you come
22 forward, we'll make sure that you had understood that
23 you are under oath and have sworn to tell the truth.

24 So, at this point, since the reporter is
25 going to do this, if you know you're going to testify

1 today or tomorrow, please stand and we'll have the oath
2 administered.

3 UNIDENTIFIED SPEAKER: Mr. Chairman, does
4 that include public comments?

5 HEARING OFFICER SHEAN: No.
6 Whereupon,

7 ALL WITNESSES PRESENT

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

11 HEARING OFFICER SHEAN: All right, with that
12 why don't we have the staff introduce and sponsor this
13 just for administrative convenience.

14 MS. HOLMES: Thank you. The District has
15 two witnesses, I believe, that are available today, Mr.
16 Krebs and Ms. Kennard. I think it would be appropriate
17 to bring them up and have them speak at a microphone.

18 (Pause.).

19 MS. HOLMES: First of all, could you
20 please --

21 HEARING OFFICER SHEAN: Good morning. Could
22 we have the witnesses identify themselves and spell
23 their names, please.

24 Whereupon,

25 ALETA KENNARD and BRIAN KREBS

1 were called as witnesses herein, and having been
2 previously duly sworn, were examined and testified as
3 follows:

4 MS. KENNARD: I'm Aleta Kennard,
5 A-l-e-t-a K-e-n-n-a-r-d.

6 MR. KREBS: And I'm Brian Krebs,
7 B-r-i-a-n K-r-e-b-s.

8 DIRECT EXAMINATION

9 BY MS. HOLMES:

10 Q Thank you. Could the two of you please
11 explain what your professional responsibilities are
12 with the Sacramento Municipal Air Quality Management
13 District?

14 MR. KREBS: I'm a Permit Engineering; my
15 primarily responsibility in this particular project are
16 general. For this particular project was to do the
17 analysis of the emissions from the turbines of the
18 project, and to do a BACT, and essentially quantify the
19 amount of offsets required. And then Aleta provided --

20 MS. KENNARD: I'm Aleta Kennard and I was
21 responsible for basically dealing with all the emission
22 reduction credits that were proposed for the project.

23 MS. HOLMES: And are the results of your
24 analysis contained in a document entitled Sacramento
25 Metropolitan Air Quality Management District final

1 determination of compliance, Cosumnes Power Plant,
2 October 21, 2002?

3 MR. KREBS: Yes, they are.

4 MS. HOLMES: Would you like to have this
5 marked as an exhibit at this time, Mr. Shean?

6 HEARING OFFICER SHEAN: All right. Let me
7 just outline for the parties what we're going to do
8 with respect to exhibits. Rather than have a running
9 exhibit list, if an item has already been placed in the
10 administrative record of the Commission's docket unit
11 for this proceeding, and is identifiable, as you have
12 just done, by a title and a date or in some other means
13 that we know that it can be, if there is the necessity
14 of compiling an administrative record for judicial
15 review of the proceedings, rather than mark it as, for
16 example, exhibit number 1 or something like that.

17 We're just going to use the identification
18 of the document in the Commission's docket unit
19 administrative record as sufficient.

20 So, with that, let me just ask if there's
21 objection to the admission into evidence of the final
22 determination of compliance dated October 21, 2002, by
23 the Sacramento Metropolitan Air Quality Management
24 District?

25 Okay, hearing none, it's admitted.

1 MS. PEASHA: Yes. I did not receive a copy
2 of it, and I don't see it on the docket yet.

3 MS. HOLMES: I have a docket stamp on mine
4 of October 23, 2002.

5 To be completely clear about this, I have
6 docket stamp on the cover letter that was sent with the
7 DOC, itself, of October 22, 2002.

8 (Pause.)

9 HEARING OFFICER SHEAN: Ms. Peasha, you're
10 in the same position as at least the Committee Member
11 and the Hearing Office, I have not seen that document
12 cross my desk, either. Certainly not in an aqua cover.

13 PRESIDING MEMBER PERNELL: Does the
14 applicant have the document?

15 MR. COHN: Yes. We have extra copies we can
16 make available. And it was docketed and served on all
17 parties.

18 MS. HOLMES: The proof of service indicates
19 that Ms. Peasha was served.

20 HEARING OFFICER SHEAN: I'm just telling you
21 if it also indicates that I got it, --

22 PRESIDING MEMBER PERNELL: Do you have a
23 proof of service list?

24 MS. HOLMES: I do. And actually, Mr. Shean,
25 --

1 HEARING OFFICER SHEAN: Not on it.

2 MS. HOLMES: -- you're not on it.

3 (Laughter.)

4 HEARING OFFICER SHEAN: Well, that explains
5 why I didn't get it. It doesn't explain why she
6 doesn't have it.

7 All right. I mean this sort of points up
8 the necessity of addressing some of these things in the
9 future, as well.

10 MS. HOLMES: Do you want me to proceed
11 with --

12 HEARING OFFICER SHEAN: Yes, if you
13 have --

14 MS. HOLMES: Just the foundational
15 questions.

16 HEARING OFFICER SHEAN: Um-hum.

17 BY MS. HOLMES:

18 Q Mr. Krebs, are the facts contained in the
19 DOC true and correct to the best of your knowledge?

20 MR. KREBS: Yes, they are.

21 MS. HOLMES: And are the opinions contained
22 in the DOC your best professional judgment?

23 MR. KREBS: Yes, they are.

24 MS. HOLMES: Do you have any changes or
25 corrections to make to the DOC?

1 MR. KREBS: Not at this time.

2 MS. HOLMES: Okay. Were you planning to
3 prepared a --

4 MR. KREBS: No, no, --

5 MS. HOLMES: --brief summary of what the
6 conclusions are in the DOC?

7 MR. KREBS: I wasn't planning on it. Just
8 questions and answers.

9 MS. HOLMES: So, with that, we can make the
10 witness available for cross-examination.

11 HEARING OFFICER SHEAN: Do you have any
12 questions?

13 MS. PEASHA: Yes, I just have --

14 HEARING OFFICER SHEAN: And let me indicate,
15 no one had asked at the time we had the prehearing
16 conference to conduct a cross-examination of the
17 District. So, we can take a couple of questions --

18 MS. PEASHA: I asked for cross-examination
19 of staff.

20 HEARING OFFICER SHEAN: Correct. I indicate
21 that. And that's on the --

22 MS. PEASHA: And direct of -- yes, I did.

23 MS. LUCKHARDT: I wish we had the
24 transcript. Unfortunately, we don't. But I did, I
25 believe, indicate in the prehearing conference that we

1 might have a few questions for the District.

2 HEARING OFFICER SHEAN: Okay.

3 MS. LUCKHARDT: Based upon our understanding
4 of staff's position at that time.

5 HEARING OFFICER SHEAN: We'll go first with
6 you, then.

7 MS. LUCKHARDT: And I just have a couple.
8 This won't take long.

9 //

10 CROSS-EXAMINATION

11 BY MS. LUCKHARDT:

12 Q Whoever is the appropriate person to
13 respond, did you evaluate the ammonia slip limit when
14 you analyzed this project?

15 MR. KREBS: Yes, I did.

16 MS. LUCKHARDT: And what were your
17 conclusions?

18 MR. KREBS: Our conclusions were that the
19 project on a NOx emissions basis met our BACT
20 requirement of 2 ppm; and the 10 ppm ammonia slip was
21 well within our significance criteria. In other words,
22 it was not a significant risk to have a 10 ppm ammonia
23 slip. It does not pose -- based on our analysis, does
24 not pose any kind of significant risk. And therefore,
25 it is okay for this project. It's acceptable.

1 MS. LUCKHARDT: And to your knowledge is
2 this area ammonia rich?

3 MR. KREBS: Yes, that is my understanding;
4 that this area is ammonia rich.

5 MS. LUCKHARDT: Thank you. And in your
6 evaluation did you also evaluate SCONOx in your BACT,
7 best available control technology, analysis?

8 MR. KREBS: Yes. A top-down BACT analysis
9 was performed. SCONOx was identified as a potential
10 control technology. We reviewed other siting cases
11 done by the Energy Commission, as well as ARB, EPA,
12 South Coast. And in all the data that we could find,
13 the 2 ppm limit was essentially the most stringent
14 limit, of which this project can meet with SCR.

15 Again, the amount of ammonia that goes along
16 with the SCR does not trigger any significance criteria
17 that we have. And therefore it's an acceptable
18 technology, as well as an achieved-in-practice
19 technology, of which SCONOx is somewhat debatable for
20 this type of turbine.

21 MS. LUCKHARDT: Thank you. I have nothing
22 further.

23 PRESIDING MEMBER PERNELL: Let me ask a
24 question. In that answer are you recommending SCONOx,
25 or are you saying that it's not necessary?

1 MR. KREBS: No. I'm saying that the
2 requirement by the Air District was for a performance
3 criteria of 2 ppm NOx at one-hour average.

4 This project, with SCR, can meet that. And
5 the ammonia that goes along with it is acceptable.

6 HEARING OFFICER SHEAN: Do you have any
7 questions at this point? Or I guess the question the
8 Committee would have would be whether or not, if we do
9 conduct a further hearing on air quality, whether you
10 anticipate that you could return in a matter of let's
11 say a month or several weeks. Since they have not had
12 the document and an opportunity to review it.

13 Okay, do you want to do that now or later?
14 If you're not prepared now, let's maybe not wander
15 through the document unless you have some focused
16 questions.

17 MS. PEASHA: Well, without my knowledge of
18 this, would it be possible for my testimony questions
19 or cross-examination questions given by my witness, Bob
20 Sarvey, who is --

21 HEARING OFFICER SHEAN: Okay, if you feel
22 prepared to ask the questions, you may ask the
23 questions now.

24 MS. PEASHA: I do believe --

25 HEARING OFFICER SHEAN: If you think you'd

1 want to ask --

2 MS. PEASHA: I do believe that he's prepared
3 to ask them. I would ask --

4 HEARING OFFICER SHEAN: Okay, well, I'm
5 looking directly at him and if I can finish my
6 sentence, if you feel you're prepared to do your
7 questioning, please go ahead. If you feel you have not
8 had a sufficient opportunity to review that document,
9 the witnesses have indicated they can return.

10 What do you want to do?

11 MS. LUCKHARDT: Mr. Shean, one of Ms.
12 Peasha's witnesses references the Sacramento
13 Metropolitan Air Quality Management District's final
14 determination of compliance, the analysis done by the
15 District. And so it does seem that at least some of
16 her witnesses have reviewed the document.

17 I'm looking at page --

18 HEARING OFFICER SHEAN: Well, if you're
19 referring to Mr. Boyd's testimony --

20 MS. LUCKHARDT: Yeah, page 3 of Mr. Boyd's
21 testimony. Numbered paragraph 7.

22 (Pause.)

23 HEARING OFFICER SHEAN: Let's get the answer
24 from you. Do you want to go now or do you want to go
25 later?

1 MS. PEASHA: I would like them to return for
2 the second evidentiary hearing.

3 HEARING OFFICER SHEAN: Okay, we'll reserve,
4 assuming you ask for it after you've had a chance to
5 review it and want them to return, and ask that they
6 return, we'll do that.

7 MS. LUCKHARDT: So then the scope of that
8 continuation of this hearing would be simply on the
9 final determination of compliance, is that correct?

10 HEARING OFFICER SHEAN: So far. Okay. Is
11 there any further --

12 MS. HOLMES: Yeah, I had two or three
13 questions to ask of the District.

14 REDIRECT EXAMINATION

15 BY MS. HOLMES:

16 Q First of all, just a few moments ago, Mr.
17 Krebs, you referred to significance criteria for
18 ammonia. Do you recollect that --

19 PRESIDING MEMBER PERNELL: I'm sorry, you're
20 going to have to speak up a little bit.

21 MS. HOLMES: -- discussion? Just a few
22 moments ago you referred to significance criteria for
23 ammonia. Do you recollect that discussion?

24 MR. KREBS: Yes.

25 MS. HOLMES: What are your significance

1 criteria?

2 MR. KREBS: The significance criteria would
3 be in the realm of public health, toxics concerns. And
4 the significance criteria that we utilize for chronic
5 and acute risk is a risk factor of one, of which this
6 isn't a concern. But in the case of cancer, it would
7 be one in a million.

8 MS. HOLMES: So when you were evaluating the
9 significance of ammonia slip, did you consider the
10 potential for secondary particulate formation?

11 MR. KREBS: No. That wasn't part of the
12 risk analysis.

13 MS. HOLMES: Do you agree that there is the
14 potential for some secondary particulate formation from
15 ammonia slip?

16 MR. KREBS: The analysis wasn't done, but,
17 yeah, I believe there could be a potential for some
18 secondary particulate.

19 MS. HOLMES: But you just don't know
20 what --

21 MR. KREBS: That's correct.

22 MS. HOLMES: -- what the amount is? Thank
23 you, those are all my questions.

24 HEARING OFFICER SHEAN: All right. Ms.
25 Kennard, Mr. Krebs, thank you for coming. We'll let

1 you know what our future needs are with respect to a
2 hearing. Thank you.

3 PRESIDING MEMBER PERNELL: Thank you.

4 HEARING OFFICER SHEAN: All right, next
5 we'll go to the applicant. It has direct testimony,
6 and we'll begin with that.

7 MS. LUCKHARDT: Okay, I would call to call
8 Gary Rubenstein.

9 Would you please -- I guess, would you like
10 him to state his name for the record?

11 HEARING OFFICER SHEAN: If he would. And
12 let me just remind you, since I saw you stand, that you
13 have been sworn in.

14 MR. RUBENSTEIN: Yes.

15 Whereupon,

16 GARY RUBENSTEIN

17 was called as a witness herein, and having been
18 previously duly sworn, was examined and testified as
19 follows:

20 DIRECT EXAMINATION

21 BY MS. LUCKHARDT:

22 Q If you could please summarize your
23 educational background and work experience.

24 A Yes, I have a bachelors degree in
25 engineering from California Institute of Technology.

1 And I have approximately 30 years of
2 experience in the field of air pollution research and
3 control, which includes eight years with the California
4 Air Resources Board. And since 1981 I've been a Senior
5 Partner with the firm of Sierra Research based in
6 Sacramento.

7 I have participated in innumerable number of
8 Commission licensing proceedings which are listed in my
9 testimony. And I have experience in performing air
10 quality analyses of over 13,000 megawatts of generated
11 capacity during my career.

12 Q And do you have any changes or corrections
13 to make to your prefiled testimony that was filed and
14 served on March 3rd?

15 A No, I do not.

16 Q Could you please summarize your testimony
17 starting with the applicable regulations?

18 HEARING OFFICER SHEAN: May I interrupt you
19 before we do that. The summary sort of assumes it's in
20 evidence already. First of all, is there any objection
21 to the qualifications of the witness to testify as an
22 expert?

23 All right, hearing none, he's qualified.

24 Is there objection to the admission into
25 evidence of the testimony of Mr. Rubenstein?

1 All right, it's admitted.

2 Now, he can summarize it.

3 MR. RUBENSTEIN: My summary. I reviewed the
4 project for conformance with the applicable air quality
5 regulations. That analysis included a review of the
6 best available control technology; and an assessment of
7 whether the project complied with the applicable
8 District emission offset requirements. And an air
9 quality impact analysis to determine whether the
10 project would cause any violations of any applicable
11 air quality standards or PSD, prevention of significant
12 deterioration air quality increments.

13 In performing all of those reviews, which
14 are summarized both in the air quality section of the
15 AFC, as well as in my prefiled testimony, I concluded
16 that the project would comply with all the applicable
17 air quality laws, ordinances, regulations and
18 standards.

19 BY MS. LUCKHARDT:

20 Q And did you analyze the project also under
21 CEQA?

22 A Yes, I did.

23 Q And what was the nature of your analysis and
24 what did you conclude?

25 A With respect to CEQA we performed a separate

1 but parallel analysis. That analysis looked both to
2 the question of whether there were any significant
3 localized air quality impacts for the project. And
4 whether there were any significant regional air quality
5 impacts for the project.

6 With respect to localized air quality
7 impacts there were three elements to that. First, we
8 took a look at whether the project was using best
9 available control technology, because the best way to
10 minimize environmental impacts is to make sure that the
11 plant is as clean as it can be.

12 Our conclusion, consistent with our
13 regulatory analysis, was that the project did, in fact,
14 use best available control technology.

15 The second element, looking at local
16 impacts, was air quality impact analysis that we
17 performed. And in performing that analysis we
18 concluded that the project would not cause any
19 violations of any state or federal ambient air quality
20 standards.

21 We did note that the project would
22 contribute to existing violations of the state and
23 federal standards for ozone and would contribute to
24 existing violations of the state standard for PM10.

25 Consequently, we concluded that there would

1 be a potential cumulative impact with respect to
2 localized air quality.

3 The third element of our air quality impact,
4 our localized impacts analysis, was to look at the
5 potential health risks associated with the project.
6 And we did a screen level health risk assessment, which
7 concluded that the project would not result in any
8 significant health risks associated with either
9 construction or operation.

10 Both the air quality modeling analysis and
11 the health risk assessment are extremely conservative
12 in that they simultaneously assume the project is
13 operated at its maximal allowable emission rates. And,
14 in addition, we assumed that those operations occur
15 under worst case meteorology. And in addition we
16 assumed that those impacts could be combined with worst
17 case background air quality levels. Even if all three
18 of those are physically not possible.

19 So, it's an extremely conservative analysis.
20 In doing that analysis we concluded that the project
21 would result in no significant localized impacts,
22 again, with the exception of a potential cumulative
23 impact because of its contribution to existing
24 violations of ozone and PM10 standards.

25 The second part of our CEQA-based analysis

1 took a look at regional impacts. And there were three
2 elements to that, as well. First, we once again looked
3 at best available control technology to make sure that
4 the project's air quality impacts and emissions were
5 minimized, and concluded, as we had previously, that
6 they were.

7 Second, because of the cumulative impacts
8 with respect to ozone and PM10, we looked to the
9 cumulative regional impacts, we took a look at the
10 District's emission offset requirements; made sure that
11 emission offsets were provided in accordance with the
12 District regulations.

13 The Air District's emission offset program
14 is essentially equivalent under CEQA to a cumulative
15 impact mitigation program that's mandated under
16 regulations. Emission offsets don't provide any
17 localized benefits. They do provide regional benefits.
18 And when we're talking about ozone and PM10, those are
19 the kinds of problems that we're talking about.

20 We were not predicting any specific
21 violations of either of those standards at the project
22 site. Rather, the project's contribution to existing
23 ozone and PM10 levels in Sacramento County, in general.

24 Our conclusion went beyond that to take a
25 look at air quality impacts with respect to PM2.5

1 because of issues that were raised by the Commission
2 Staff in the staff assessment. And in that analysis we
3 concluded that even when we evaluated impacts on a
4 PM2.5 basis, that the project's impacts were fully
5 mitigated through the emission offset package that was
6 provided to satisfy the District's requirements.

7 And then the third element of our regional
8 analysis was the performance of an air quality impact
9 analysis and a cumulative impact analysis. And in that
10 cumulative impact analysis once again we took a look at
11 the project impacts; combined that with worst case
12 background levels, which reflect the operation of other
13 existing sources in the region. And once again
14 concluded that the project would not cause any
15 violations of any state or federal air quality
16 standards, but would contribute to the existing
17 violations of the ozone and PM20 standards. And hence
18 the need for mitigation that we've already discussed to
19 mitigate those cumulative regional impacts.

20 Q And then did you participate in workshops
21 that were held last week with staff?

22 A Yes, I did.

23 Q And during those workshops did you discuss
24 proposed modifications to conditions of certification
25 with staff and other intervenors and other folks who

1 were available?

2 A Yes, I did.

3 Q And are those conditions, at least to the
4 best of your quick review, reflected in staff's March
5 12, 2003 filing? And I'm just referring to the air
6 quality section of that filing. It's entitled, the
7 Cosumnes Power Plant project, supplemental testimony
8 and revised conditions of certification.

9 A To the best of my knowledge that document
10 reflects the revised conditions that were agreed to
11 with a few minor changes. And then there were still
12 some provisions that are in dispute between us, the
13 applicant, and the staff.

14 MS. LUCKHARDT: And we have provided, I
15 believe, to all the parties and the Committee a
16 document entitled, Cosumnes Power Plant Air Quality
17 conditions of certification, versions agreed to by CEC
18 Staff and applicant.

19 This would be the first document in the
20 group of documents that I've handed, or that Mr.
21 Rubenstein has handed out to folks. We would like to
22 mark this as an exhibit, and use it going forward for
23 illustrative purposes. We believe it contains
24 information that was discussed in the workshop. And we
25 have tried to consolidate that here to help describe

1 the differences in position between -- the remaining
2 differences in position between CEC Staff and
3 applicant.

4 HEARING OFFICER SHEAN: Why don't we do the
5 following. I have four pages, I believe, that were
6 what you gave --

7 MS. LUCKHARDT: I think it's five pages.

8 HEARING OFFICER SHEAN: Well, let me just
9 say four different packets.

10 MS. LUCKHARDT: Oh, four different pieces,
11 yes.

12 HEARING OFFICER SHEAN: Why don't you
13 identify each of those now, and essentially indicate
14 that you will docket these. And therefore, rather than
15 go into exhibit numbers, we can identify them by their
16 titles, since each of them is titled.

17 MS. LUCKHARDT: Okay. The first document,
18 then, is the Cosumnes Power Plant air quality
19 conditions of certification, versions agreed to by CEC
20 Staff and applicant.

21 The second document is a one-page table
22 entitled, Summary of wind data, Sacramento Executive
23 Airport.

24 The third document is a stapled document,
25 three pages in length, entitled, Applicant comments

1 regarding proposed condition AQSC-8.

2 And the final document is a table entitled,
3 Summary of ammonia slip levels in recent CEC siting
4 cases.

5 Those are the four different documents we
6 have.

7 HEARING OFFICER SHEAN: All right. If
8 you'll docket those eventually we'll just use them by
9 referring to them by their titles as we go through today.

10 BY MS. LUCKHARDT:

11 Q Okay, can you describe what is contained in
12 the document entitled, Cosumnes Power Plant air quality
13 conditions of certification, versions agreed to by CEC
14 Staff and applicant?

15 A Yes. I prepared this document to indicate
16 which conditions have been fully agreed to as of today
17 between staff and applicant, and where there are issues
18 that are in dispute.

19 In addition, although I based this document
20 on my review of the staff's March 12th errata, there
21 are yet a few other errata changes to the errata, if
22 you will, which are also reflected in this document and
23 subject to confirmation from the staff later.

24 It was our hope -- my hope that this would
25 provide to the Committee a clear roadmap as to where

1 the air quality conditions are in agreement, and what
2 the final versions of those are, and where there are
3 any remaining disagreements.

4 Q Okay, let's go through this document and
5 describe the conditions or sections of conditions that
6 remain in dispute.

7 Which is the first one?

8 A The first condition that remains in dispute
9 is AQSC-3, subparagraph (a). That is a condition which
10 establishes a requirement for watering of unpaved roads
11 and other disturbed areas in the construction site.

12 The staff's version of that language
13 specifies that watering has to be performed every four
14 hours. And provides for a reduction in that frequency
15 during periods of rain, basically.

16 I believe that condition is inappropriately
17 vague because it says simply sufficiently wet without
18 identifying what it means by sufficiently wet.

19 And also it's inappropriate in that it
20 arbitrarily establishes a four-hour frequency --

21 HEARING OFFICER SHEAN: Okay, can I just,
22 maybe to shorten this up, I understand fundamentally
23 your objection is that their provision is prescriptive
24 and you would prefer something prescriptive as either
25 goal- or objective-oriented, is that right?

1 MR. RUBENSTEIN: Yes.

2 HEARING OFFICER SHEAN: Okay.

3 BY MS. LUCKHARDT:

4 Q Okay, moving on to the next one.

5 HEARING OFFICER SHEAN: I do read this
6 stuff.

7 MR. RUBENSTEIN: Just protecting the record,
8 Mr. Shean.

9 BY MS. LUCKHARDT:

10 Q Okay, let's go to the next one.

11 A The next one that's still in dispute is
12 subparagraph (n); that's a fairly simple one where the
13 staff has proposed that construction activities that
14 can cause fugitive dust in excess of the goals for the
15 dust program be stopped any time the wind speeds exceed
16 15 miles per hour.

17 We proposed that that language should be 25
18 miles per hour. The document that we referred to a
19 minute ago entitled, Summary of wind data, Sacramento
20 Executive Airport, shows that the difference between a
21 15 mile per hour threshold and a 25 mile per hour
22 threshold is, in fact, quite significant. With over
23 700 hours during basically a 6:00 a.m. to 6:00 p.m.
24 workshift, over 700 hours per year on average, would
25 fall into the 15 mile or greater category.

1 This condition is supposed to be a condition
2 for dealing with severe wind and severe dust potential.
3 And the problem is that the way the condition is worded
4 it both refers to activities that can cause dust in
5 excess of the goals, which is inappropriate because, of
6 course, the purpose of the mitigation requirements is
7 to make sure you do not exceed those goals.

8 And then, second of all, the wind speed
9 threshold is, to my mind, arbitrary in that staff
10 indicated at the last workshop that is simply one-half
11 of another guideline that they reviewed, which was the
12 30 mile per hour, 30 percent relative humidity
13 threshold.

14 In contrast, District regulations that deal
15 with dust mitigation are either silent with respect to
16 the wind speeds associated with this type of
17 requirement, or indicated 25 mile an hour speeds
18 appropriate. Same is true for other Commission
19 decisions. We believe the 25 mile per hour value is
20 what should be applied here.

21 HEARING OFFICER SHEAN: Okay, I have a
22 question. Real practical. We have this guy who's
23 going to be designated as the AQCMM. I'd love to have
24 that title. Even if you're 25 miles an hour, how does
25 this person determine the wind speed? Are you going to

1 have one of those little deals that goes around, you
2 know, parks somewhere out on the construction site?
3 Does he have to call up and find out what the wind
4 speed at Exec is? I know he can get the Aetius from
5 Exec and they'll give him the wind speed. But does
6 that -- on the ground, why do we want to include a
7 number that usually, it would seem to me, you know, if
8 it's 24 you don't have to do something; if it's 26 you
9 do have to do something. And how would you find that
10 out in a practical, real world application?

11 MR. RUBENSTEIN: Well, frankly, I don't
12 think there should be a number at all. If there was a
13 number, then there would have to be some way of
14 determining the wind speed. But, the whole objective
15 here, with AQSC-4, which I support wholeheartedly, is
16 to establish performance requirements, which are easily
17 determined based
18 on -- and those are included in the, I'm afraid they're
19 in the FSA, they're not in my mark-up, because that's
20 no longer in dispute.

21 But, I'm sorry, the AQSC-4 is in there. It
22 says that there's no visible dust allowed beyond the
23 fence property boundary; and no visible dust that can
24 exceed 20 percent opacity at any location. That's
25 regardless of wind speed. That's what the objective of

1 the dust program is. That should be the standard.

2 I'm just trying to offer a compromise with
3 respect to condition (n), but I don't think there
4 should be, there's any need for any wind specific
5 number in there at all.

6 HEARING OFFICER SHEAN: Okay. So now you
7 don't even like your compromise?

8 MR. RUBENSTEIN: Excuse me?

9 HEARING OFFICER SHEAN: You don't even
10 really like your compromise?

11 MR. RUBENSTEIN: Well, I was just answering
12 your question.

13 HEARING OFFICER SHEAN: Okay.

14 MR. RUBENSTEIN: I think the compromise is
15 acceptable.

16 HEARING OFFICER SHEAN: All right. If we
17 use this method, all right.

18 BY MS. LUCKHARDT:

19 Q Okay, and just to clarify, Mr. Rubenstein,
20 all the information that is contained in your summary
21 of wind data at Sacramento Executive Airport is
22 information that was used by you and analyzed by, I
23 assume, staff and other -- and the Air District, to
24 evaluate the project, is that correct?

25 A That's correct, it's the same meteorological

1 data set used for all of our air quality modeling
2 analyses for this project.

3 Q Okay, then moving on to the next section
4 that's in dispute, would you please explain that
5 dispute?

6 A Yes, this relates to, again, condition AQSC-
7 3, paragraphs p, q and r. Those paragraphs represent a
8 fundamental change in the staff's position compared to
9 what it was just a year ago with respect to the
10 requirement for using soot filters on construction
11 equipment.

12 One year ago, and this is reflected in the
13 table that's presented in the applicant's version, the
14 staff, after negotiations with a number of applicants
15 and with the California Air Resources Board,
16 established requirements that for large construction
17 equipment over 100 horsepower, that either the engines
18 had to be equipped with certified low emission engines
19 or alternatively equipped with soot filters.

20 And in the version that's before you today,
21 from the staff, they are saying that both of those
22 requirements have to be met.

23 I have two concerns about that. First has
24 to do with the fact that there are no soot filters that
25 are approved by the Environmental Protection Agency for

1 retrofit to existing construction equipment that is
2 certified, meaning 1996 or newer engines.

3 And as a result, anyone who would, in fact,
4 install a soot filter on a certified engine, runs the
5 risk of running afoul of EPA anti-tampering
6 requirements.

7 Second of all, there is a question of
8 federal preemption that I raised in my testimony.
9 That's related to a -- it was a 1996 court decision in
10 a case that was filed by the Engine Manufacturers
11 Association, a trade association representing this type
12 of equipment manufacturer. And it indicated that
13 federal preemption of adopting motor vehicle emission
14 standards, went in the case of this offroad program, to
15 existing or used equipment as well as to new equipment.

16 That's different than the nature of the
17 preemption issue with respect to the cars and trucks,
18 for example, where the preemption only applies to new
19 cars.

20 The version that's represented here as the
21 applicant's proposal is very much similar to what was
22 included in the preliminary staff assessment for this
23 project, and also similar to what has been required for
24 a number of different projects throughout the state.

25 I don't believe that the staff has

1 demonstrated that the health risks associated with
2 diesel exhaust for this project rise to a level that
3 creates any significant impact that warrants any
4 unusual treatment here.

5 As I note in my testimony, the worst case
6 health risk at any location from construction is less
7 than 10 in 1 million. In the region where the risk
8 exceeds 1 in 1 million, extends no more than 300 meters
9 from the property boundary. That's a fairly tight
10 radius.

11 As a result, I believe that the previous
12 version of the condition which the Commission has
13 approved in many cases is what should be required in
14 this case, as well.

15 Q Okay, and what is the next condition that
16 remains in dispute?

17 A The next condition that remains in dispute
18 is condition AQ-32; and the dispute there only relates
19 to the verification language. AQ-32 is a condition
20 imposed by the Sacramento Air District. And it
21 indicates that continuous monitoring systems for three
22 parameters, fuel consumption, exhaust flow rate and TDS
23 level, total dissolved solids level, in the cooling
24 tower have to be recorded or monitored on a consistent
25 basis.

1 The disagreement here is that the CEC Staff
2 believes that they should have the ability to approve
3 these monitoring systems. In addition to the fact that
4 those monitoring systems have to be approved by the Air
5 District, we believe that although the protocols for
6 monitoring and the specifications should be submitted
7 to the CEC Staff for review, that there should be no
8 independent approval authority because otherwise we
9 have two agencies, both the CEC Staff and the Air
10 District, evaluating compliance with a single
11 requirement that ultimately is a requirement that was
12 established by the Air District in the first place.

13 These monitoring requirements are not
14 independent in the sense that they're not associated
15 with any unique staff requirements that they've imposed
16 for CEQA reasons. This is, in my opinion, simply them
17 piggybacking their own approval onto a requirement
18 that's already established by the Air District.

19 Q And is there a potential to get conflicting
20 direction from the two agencies?

21 A Certainly. The problem is that, for
22 example, with respect to the TDS level that the Air
23 District may accept what's proposed, and the CEC Staff
24 may say, well, no, we don't like it. We want you to do
25 something else. And we may get caught in a bind where

1 the two agencies require us to do completely different
2 monitoring protocols for that parameter that are
3 inconsistent.

4 Q And then does that conclude the areas of
5 dispute that are indicated on the document entitled,
6 Cosumnes Power Plant air quality conditions of
7 certification, versions agreed to by CEC Staff and
8 applicant?

9 A Yes, it does.

10 Q And then are there some additional
11 conditions contained in CEC Staff's March 12, 2003
12 document entitled, Cosumnes Power Plant project,
13 supplemental testimony and revised conditions of
14 certification?

15 A Yes, there are.

16 Q And are there some conditions contained in
17 that document that are in dispute?

18 A Yes, there are two. They are two new
19 conditions proposed by the staff, AQSC-7 and AQSC-8.

20 AQSC-7 is related to ammonia slip; and AQSC-
21 8 is related to additional monitoring requirements.
22 And those are included in the staff errata at pages 11,
23 continuing to 12.

24 Q Okay, let's start, I guess, with AQSC-8,
25 which deals with additional monitoring requirements.

1 And could you please describe what the issue is there?

2 A Yes. One of the documents that we
3 distributed earlier is entitled, Applicant comments
4 regarding proposed condition AQSC-8. That is a three-
5 page document. And it summarizes for each of the
6 elements on the staff's proposed condition what our
7 objections are.

8 Without going through in painful detail,
9 basically this condition establishes separate
10 independent monitoring requirements for the project
11 covering parameters that the Air District already
12 requires to be monitored and reported.

13 The difference is that the CEC Staff does
14 not like the manner in which the Air District has asked
15 the reporting to be done, and they want the reporting
16 to be done differently.

17 There are specific concerns --

18 PRESIDING MEMBER PERNELL: Can I ask a
19 question on that real quickly.

20 MR. RUBENSTEIN: Sure.

21 PRESIDING MEMBER PERNELL: Do the Air
22 District monitor, or do the Air District require the
23 applicant to monitor?

24 MR. RUBENSTEIN: In both AQSC-8 and the Air
25 District's requirements they're requiring the applicant

1 to do the monitoring.

2 PRESIDING MEMBER PERNELL: Right. Okay.

3 MR. RUBENSTEIN: In addition to that, the
4 Air District has inspectors that they send out to all
5 sites, not just this site, periodically to review
6 records that are being required to be retained onsite.

7 The fundamental difference between what the
8 Air District is requiring in the FDOC, and what the
9 staff is requiring here is that the Air District
10 requires the reporting to be done by exception. And by
11 that I mean the applicant is required to record much of
12 the information that is contained in AQSC-8. What
13 they're required to report to the District periodically
14 are violations of any permit conditions. They're
15 required to keep these records onsite for a period of
16 five years.

17 But if the plant goes through a calendar
18 quarter without any violations, the report very simply
19 is a letter certified by a responsible official from
20 the company, from SMUD, indicating that the plant was
21 in compliance with all of its limits. If there was a
22 violation the plant's required to report what the
23 violation is.

24 In contrast, what the staff is asking for
25 here is what appears to be a large volume of paper,

1 even when the plant is fully in compliance. And
2 because these monitoring requirements are not related
3 to -- or reporting requirements, rather, are not
4 related to new or unique Commission conditions under
5 CEQA, all they're really doing once again is second-
6 guessing the Air District and saying we want to do
7 something different, although we're looking at exactly
8 the same fundamental requirements. The same NOx
9 emission limits, the same continuous monitoring
10 requirements, the same emission offset requirements,
11 all of them are identical. But the staff is saying we
12 want it reported differently.

13 Q And is that condition, is the District's
14 condition contained in the final determination of
15 compliance and the, I guess, FSA, as a reference
16 document, as AQ-34?

17 A Actually, as I note in our comments on AQSC-
18 8, the staff's additional requirements are redundant in
19 part with requirements established by the District in
20 AQSC-5, AQSC-33, AQSC-34 and AQSC-35. Except the staff
21 wants them in a different format, or with different
22 reporting frequency or something else.

23 But in terms of the substance, all of the
24 conditions in the FDOC are subject to monitoring. The
25 staff just wants the monitoring done differently.

1 Q And does the District, in fact, go out and
2 check documents on sites?

3 A Yes. In my experience, the District goes
4 out and checks documents and I've had clients who have
5 had violation notices issued when those documents are
6 not properly retained.

7 Q Okay, let's move on to AQSC-7.

8 A AQSC-7 is a staff condition that proposes to
9 establish an ammonia slip limit of 5 ppm for this
10 project. I believe that's inappropriate for a number
11 of reasons.

12 First, I don't believe that the staff has
13 identified a significant environmental impact that
14 warrants this as an additional mitigation measure.

15 Second, the staff, from time to time, has
16 referred to comments by EPA in other proceedings as
17 supporting a 5 ppm ammonia slip limit. However, in the
18 case of Cosumnes Power Plant, EPA reviewed and provided
19 written comments on the District's proposed permit.

20 And that proposed permit included a 10 parts
21 per million ammonia slip limit. And EPA did not object
22 to that for this case.

23 Third of all, if you take a look at the
24 final determination of compliance, and in particular,
25 it's on page 361, and these are the hand-numbering

1 numbers at the bottom of the page, there's a discussion
2 that's consistent with the testimony of Mr. Krebs
3 earlier, that the Sacramento area is ammonia rich.

4 What that means, as a practical matter, is
5 that there is relatively less benefit to reducing
6 ammonia emissions with respect to PM10 or PM2.5
7 formation. And that there is relatively greater
8 benefit to reducing emissions of precursors such as
9 sulfur dioxide and nitrogen oxides.

10 And then lastly, I prepared a summary which
11 was distributed earlier this morning that's entitled,
12 Summary of the ammonia slip levels in recent CEC siting
13 cases. And that presents both the numbers contained in
14 the final staff assessment and where available, the
15 information contained in the Commission's decision.

16 And as you can see, for the recent siting
17 cases, meaning over the last three to four years, those
18 projects all have been between 5, or actually either 5
19 parts per million or 10 parts per million. And as you
20 can also see that, in general, regions have been fairly
21 consistent, and particularly the Air Districts have
22 been fairly consistent with their determinations.

23 San Joaquin Valley Air Basin has
24 consistently determined that a 10 ppm slip limit is
25 appropriate. The South Coast Air Quality Management

1 District has consistently determined that a 5 ppm
2 ammonia slip limit is consistent.

3 In cases where there are differences between
4 projects within an air basin, as you can see, those
5 differences are related to applicant proposals. Where,
6 just to say an applicant has proposed to go beyond what
7 the Air District has required for reasons that are
8 probably specific to that individual siting case.

9 And I think the pattern that you see here is
10 appropriate. Ammonia slip is not a BACT question.
11 There are no BACT requirements for ammonia slip
12 anywhere except for the South Coast Air Basin. There's
13 certainly none in Sacramento.

14 Ammonia is regulated as a corollary
15 environmental impact associated with the use of a NOx
16 control system, in this case SCR.

17 The judgments that are made by the District
18 obviously vary depending on their perception of what
19 criteria should be used to evaluate the significance of
20 ammonia impacts.

21 And in the case of the Sacramento District,
22 they have concluded that 10 ppm slip level is
23 appropriate and is adequate.

24 Once again, this is not a case where the
25 Commission Staff is gap-filling. They're not

1 attempting to fill the void in a District regulatory
2 program. They're attempting to second-guess the
3 judgment of the Air District in terms of appropriate
4 ammonia slip level. And I don't think that's
5 appropriate in this case.

6 As I say, there is no basis that's been
7 presented to indicate that there's a significant
8 environmental impact that's unmitigated that warrants
9 this as a mitigation measure.

10 The Sacramento Air Basin, as I note in my
11 testimony, Sacramento County, rather, has, except for
12 exceptional events, high wind storms, forest fires,
13 things like that, has had no violations of the federal
14 PM10 standard since the, I believe it was 1993. And
15 Sacramento has had no violations of the federal PM2.5
16 standard since, I believe it's 1999.

17 Consequently, I don't see any environmental
18 impact that warrants the use of a lower ammonia slip
19 level. That's an opinion that personally and
20 professionally varies with need, depending on the Air
21 Basin. And I think that is appropriate. And that
22 should be the way that the Commission views it here, as
23 well.

24 MS. LUCKHARDT: And then, Mr. Shean, I've
25 got a question for you procedurally; how you'd like us

1 to proceed at this point. I had created some
2 additional questions in response to comments that were
3 made by intervenors at the prehearing conference, and
4 prefiled testimony from the intervenors.

5 If you would like, I could go through those
6 now. Or if you would prefer, I can hold that.

7 HEARING OFFICER SHEAN: I think we should go
8 ahead, because there's at least the potentiality that
9 it might address --

10 MS. LUCKHARDT: It may be more efficient.

11 HEARING OFFICER SHEAN: -- or answer a
12 question and therefore we're not doing a ping-pong,
13 just to do it in a ping-pong manner, but trying to get
14 the information out. So why don't you proceed.

15 BY MS. LUCKHARDT:

16 Q And then, Mr. Rubenstein, have you been
17 informed of the comments made by Mr., I believe it's
18 Roskey, at the prehearing conference regarding air
19 quality?

20 A Yes, I have.

21 Q And was one of those comments based on the
22 adequacy of the PM10 monitoring data in the location of
23 the monitor relative to the project site?

24 A Yes.

25 Q And do you have a response?

1 A Yes. The PM10 monitoring data that we used
2 to represent the background conditions at the project
3 site were the highest concentrations recorded during
4 the last three years at the monitoring station that's
5 closest to the project site. I don't believe there is
6 a better source of data that can be used. And because
7 we used the highest concentration in the last three
8 years, I believe it's appropriately conservative, as
9 well.

10 Q Okay. And another one of Mr. Roskey's
11 comments related to the inclusion of motor vehicle
12 emissions in the final determination of compliance
13 analysis and in the state implementation plan, is that
14 correct?

15 A Yes.

16 Q And do you have a response to that, as well?

17 A Yes. Motor vehicle emissions were not
18 reflected in the final determination of compliance
19 because from a regulatory perspective the Sacramento
20 Air District does not regulate motor vehicle emissions
21 from projects such as this.

22 They do evaluate motor vehicle emissions as
23 part of other regulatory programs, but not the final
24 determination of compliance process.

25 With respect to the state implementation

1 plan, I'm not sure I understood Mr. Roskey's comment
2 because motor vehicle emissions and their controls are
3 certainly included in the state implementation plan.
4 Always have been, and continue to be.

5 Q And those include growth projections, as
6 well, I imagine?

7 A Oh, yes, they do.

8 Q And then moving on to Ms. Peasha's comments.
9 Was one of her comments related to the imposition of
10 Bureau of Automotive Repair standards on construction
11 equipment?

12 A That's my understanding, yes.

13 Q And are you familiar with those
14 requirements?

15 A Yes, I am.

16 Q And is that commonly called the smog check
17 program, is that --

18 A Yes, it is. The Bureau of Automotive Repair
19 is the state agency in California that's responsible
20 for the motor vehicle inspection program, also called
21 the smog check program.

22 Q And does that program apply to construction
23 equipment?

24 A No, it does not. I'm quite familiar with
25 that program because our firm does quite a lot of work

1 in designing and evaluating the effectiveness of smog
2 check programs around the country, including
3 California. And, no, California smog check program
4 does not apply to construction equipment.

5 Q Would it apply to employee vehicles?

6 A Yes, it would.

7 Q And how is that program implemented?

8 A The smog check program is implemented and
9 enforced through the Department of Motor Vehicles.
10 Basically when it's time for you to get your smog check
11 you cannot re-register your car with DMV unless you
12 have passed a smog check test.

13 Q And does the Sacramento Air Quality
14 Management District have any role in implementing or
15 enforcing that program?

16 A No, they don't.

17 Q And does the Energy Commission?

18 A No, it does not.

19 Q Does the applicant?

20 A No, they do not.

21 Q Okay. Have you had a chance to review the
22 prefiled testimony of Ms. Peasha in the area of air
23 quality?

24 A Yes, I have.

25 Q And do you have any comments in response to

1 it?

2 A Yes. First, in Ms. Peasha's statement of
3 issues on page 1 is a reference to a claim that the Air
4 District is required to obtain a final biological
5 opinion prior to issuance of the final determination of
6 compliance. That is simply not correct.

7 A section 7 consultation process is required
8 to be completed prior to issuance of a prevention of
9 significant deterioration or PSD permit. In some cases
10 with which the Committee may be familiar, the PSD
11 permit is the same document as the final determination
12 of compliance. In most cases it is not the same
13 document. In this case it is not the same document.

14 And the PSD permit has not been issued yet.
15 Consequently there is no flaw with respect to issuance
16 of the final determination of compliance.

17 Q And which document is the PSD permit
18 commonly issued with for the Sacramento District?

19 A The Sacramento District doesn't issue many
20 permits for projects that are subject to Commission
21 review, and consequently it's inappropriately to say
22 commonly.

23 But in this case I anticipate that the PSD
24 permit will be the same document as the authority to
25 construct, and it will not be issued until after the

1 Commission approves the project.

2 In addition to Ms. Peasha's comments
3 directly, I also reviewed the comments of Mr. Sarvey,
4 which were contained within Ms. Peasha's filing. And
5 his comments mostly focused on the use of road paving
6 credits.

7 There are two aspects to that. First of
8 all, in this case, from a regulatory perspective, the
9 road paving credits were reviewed not only by the
10 Sacramento District, but also by the California Air
11 Resources Board and U.S. Environmental Protection
12 Agency.

13 The California Air Resources Board had no
14 objections to the use of road paving credits for this
15 project. EPA expressed some concerns which the
16 District responded to when they issued the final
17 determination of compliance.

18 Consequently, from a regulatory perspective
19 I don't think there were any outstanding issues or
20 questions about the validity of the credits.

21 With respect to the second part of Mr.
22 Sarvey's comments which relate to PM2.5 impacts, that
23 is, in fact, an issue that was raised by the California
24 Air Resources Board a number of years. And in the CEQA
25 review that I performed, as well as in the revised CEQA

1 review that's reflected in the staff's March 12th
2 errata, we both looked at PM2.5 impacts and adjusted
3 the road paving credits down to reflect PM2.5.

4 And our conclusion, meaning the applicant's
5 conclusion, and the staff's conclusion is the same,
6 which is that even on a PM2.5 basis with those
7 adjustments the project's impacts were fully mitigated.

8 Consequently, I don't believe that -- I
9 think we've addressed the concerns that Mr. Sarvey
10 raised.

11 The third element of Ms. Peasha's filing
12 were comments that were submitted by Mike Boyd. I am
13 quite familiar with these comments. A number of them
14 appeared literally to have been cut-and-pasted from
15 documents he has filed in other proceedings.

16 The --

17 HEARING OFFICER SHEAN: Cut-and-paste is a
18 lawyer's art. Don't rag on that.

19 (Laughter.)

20 MR. RUBENSTEIN: Looking specifically at
21 paragraph 25 on page 10 of Mr. Boyd's testimony he
22 indicates that, quote, "the FSA contains no
23 concentration based BACT limit for CO except for full
24 load operations."

25 Understanding Mr. Shean's admonition, I'd

1 simply like to point out that that was true in another
2 proceeding that Mr. Boyd commented on. It is factually
3 inaccurate for this proceeding. There is no such
4 limitation on the CO limit. The CO concentration limit
5 for this project applies at all operations except for
6 startups and shutdowns.

7 Similarly, in paragraph 27 on page 11, Mr.
8 Boyd indicates that the FSA has concluded that BACT for
9 CO is an emission limit of 6 parts per million. Once
10 again, that is copied from a comment he made in another
11 proceeding. In this case the BACT limit is 4 ppm for
12 CO, which is exactly what MR. Boyd proposes in this
13 paragraph.

14 On paragraph 26 just above that, on a
15 separate issue, Mr. Boyd indicates that, quote, "the
16 Environmental Appeals Board of EAB acknowledged in
17 CARE's MEC appeal that the CEC had entirely failed to
18 respond to three instances of comments made by CVRP."

19 That is incorrect. That is not what the
20 Environmental Appeals Board decision was in that case.
21 In that case the Environmental Appeals Board was
22 criticizing the Bay Area Air Quality Management
23 District and not the California Energy Commission.

24 Those are just three examples of the lack of
25 care and inaccuracies included in Mr. Boyd's filing

1 here. I won't belabor the issue further except to
2 suggest that I don't believe Mr. Boyd raises any
3 comments that are either unique or germane to this
4 proceeding.

5 BY MS. LUCKHARDT:

6 Q Mr. Boyd raises a question about SCONOx.
7 Did you evaluate SCONOx in the application for
8 certification for this proceeding?

9 A Yes, I did. I performed a top-down best
10 available control technology analysis which was
11 included in, I believe it was appendix 8.1F, like in
12 Frank, in the application for certification, which
13 discussed, among other technologies, SCONOx in
14 particular.

15 Q And what was your conclusion?

16 A My conclusion was that even if you were to
17 consider SCONOx to be technically achievable and
18 feasible for this project, that it offered no benefits
19 with respect to reducing NOx emissions compared to
20 selective catalytic reduction. And that the benefits
21 that SCONOx provided in terms of reducing ammonia
22 emission levels were not necessary and were not cost
23 effective.

24 Q And did the District also consider SCONOx in
25 their preliminary determination of compliance?

1 A Yes, they did.

2 Q And what did the District conclude?

3 A In the preliminary determination of
4 compliance the District concluded that SCONOx was not
5 achieved in practice; and consequently, after their
6 review they concluded that it was not appropriate to
7 require that technology for this project.

8 Q And did they reach the same conclusion in
9 the final determination of compliance?

10 A Yes, they did. They reached the identical
11 conclusion which is at the bottom of the third full
12 paragraph on page 12 of 34 of the final determination
13 of compliance.

14 Q And did USEPA comment on the preliminary
15 determination of compliance in this case?

16 A Yes, they did. And a copy of their comment
17 letter is included in the back of the final
18 determination of compliance. The pages, I'm afraid,
19 are not numbered here, but it is most of the way
20 towards the back. And it's a letter dated September
21 30, 2002, from EPA Region IX to the Sacramento Air
22 District commenting on the PDOC.

23 Q And did anyone else comment on that
24 particular issue?

25 A No. No, EPA did not comment on that issue,

1 either.

2 Q Okay.

3 A EPA did not comment on the SCONox issue at
4 all.

5 Q And no one else did, as well?

6 A That's correct.

7 Q Okay. I'd like you to go back to the final
8 determination of compliance, page 361 that you spoke of
9 before regarding whether the area is ammonia rich. And
10 could you please describe again what that document was
11 used for? I believe that's an ARB document. Was that
12 for an offset approval?

13 A That particular quote on page 369 is from a
14 document prepared by the Sacramento Air District, but
15 it is quoting from a May 22, 2002 email from the
16 California Air Resources Board to the Sacramento Air
17 District.

18 This analysis of whether the region is
19 ammonia rich or not was performed because that question
20 is one of several questions you have to answer in
21 determining whether a project should be allowed to use
22 sulfur dioxide emission reduction credits to offset
23 increases in particulate emissions. And if you are
24 allowed to do so, what the appropriate trading ratio
25 should be.

1 The trading ratio can be significantly
2 affected by whether a region is ammonia rich or not.
3 And in some cases, and I've seen this, for example, in
4 the South Coast Air Basin, the conclusion is such that
5 trades of this type are not allowed at all. Or they're
6 allowed at ratios that are impractical, such as 8 to 1
7 or 10 to 1.

8 It consequently is part of the review that
9 was done jointly by the Air Resources Board, EPA and
10 the Sacramento Air District interpollutant trading
11 ratios for the Cosumnes project, the Air Resources
12 Board volunteered to look at this issue and perform
13 some more detailed analyses than would normally be
14 performed to determine whether the region was ammonia
15 rich or not. And that was the context in which they
16 reached this conclusion.

17 Q And again the issue of ammonia rich is
18 important when determining the ammonia slip level, is
19 that correct?

20 A It is one of many factors, but in terms of
21 the specific question of whether reducing ammonia slip
22 levels will provide a real air quality benefit, it's
23 probably the determinative issue.

24 If an area is ammonia rich that means that
25 there is sufficient ammonia present already from other

1 sources such that there's enough ammonia to react with
2 whatever NOx emissions might form nitrates or sulfur
3 dioxide emissions might form sulfates.

4 And if you've got a fairly high ammonia slip
5 -- or a fairly high ambient ammonia level, and you have
6 relatively smaller quantities of NOx and SOx available
7 for participating in those reactions, changing that
8 ammonia level up or down by a little bit isn't going to
9 change how much particulate is formed. The amount of
10 particulate that is formed is limited by how much
11 precursors are present, in particular the NOx and the
12 SOx.

13 Obviously, that kind of analysis is not
14 consistent every single hour of the year. And, in
15 fact, it varies quite a bit from between different
16 times of the year. Might be different conclusions in
17 the summertime versus the wintertime.

18 But the analyses that were done by the Air
19 Resources Board concluded that, in general, for the
20 Sacramento area, the region was among the rich, which
21 in turn led them to conclude that reducing sulfur
22 dioxide emissions would have a benefit.

23 But similarly, it diminishes the benefit
24 associated with making changes in ammonia emissions.

25 Q And then final question. If you could

1 please just restate your conclusions based upon your
2 analysis of this project.

3 A Yes, based on my analysis I believe the
4 project will comply with all applicable laws,
5 ordinances, regulations and standards with respect to
6 air quality.

7 I believe that the project will not result
8 in any unsafe or unhealthy levels of air quality under
9 any operating conditions, under any meteorological
10 conditions, at any location.

11 I believe that the project will not cause
12 any significant air quality impacts that have not been
13 mitigated by the mitigation measures contained -- by
14 the requirements contained in the final determination
15 of compliance, and mitigated by the mitigation measures
16 proposed by the staff as modified as I expressed
17 earlier in my testimony.

18 MS. LUCKHARDT: I have nothing further at
19 this time.

20 HEARING OFFICER SHEAN: All right.
21 Commission Staff.

22 CROSS-EXAMINATION

23 BY MS. HOLMES:

24 Q Good morning, Mr. Rubenstein. I'd like to
25 focus a little bit on the question of ammonia slip, and

1 perhaps for the benefit of people that may not be as
2 conversant in this issue as some of us in this room
3 have unfortunately become, I'd like to start with a
4 little background.

5 First of all it's fair to say that ammonia
6 is used in a selective catalytic reduction process in
7 which NOx formation is reduced, that's correct?

8 A Yes, that's correct.

9 Q And some of the ammonia escapes, if you
10 will, from the catalyst and goes out the stack and
11 becomes what we refer to as ammonia slip?

12 A That's correct.

13 Q And the amount of ammonia that's emitted
14 depends, in part, on the efficiency of the catalyst, is
15 that a fair statement?

16 A Yes, that is.

17 Q And typically, as catalysts age, more
18 ammonia slip is created, that's correct?

19 A Due to the way that most SCR control systems
20 work, yes, that's correct.

21 Q And the proposed ammonia slip level -- the
22 level proposed by the applicant at 10 parts per
23 million, that's roughly 600 pounds a day of ammonia, is
24 that correct?

25 A I'd have to check, but I'll assume that's

1 the case.

2 Q Thank you. Now, for the next part of the
3 discussion I'd like to differentiate between two
4 issues. First, the necessity for reducing ammonia slip
5 from 10 to 5; and secondly, the feasibility of reducing
6 ammonia slip from 10 to 5. Do you have that
7 distinction in mind?

8 A Yes.

9 Q Would you agree that even in an ammonia rich
10 area there is a potential for ammonia slip to cause
11 secondary particulates?

12 A Without quantifying it at all, yes to some
13 level there is a potential.

14 Q And I think if I understood your testimony
15 correctly you're simply saying that the potential is
16 greater when the area has less ammonia in the air, the
17 potential is less when there is more ammonia in the
18 air, is that correct?

19 A Not quite. The reason is that it's
20 inappropriate to interpret the phrase that an area is
21 ammonia rich as meaning that every parcel of air
22 within, for example, that county has a surplus of
23 ammonia every single hour of the year.

24 And it is a fact that if a parcel of air has
25 excess ammonia compared to the precursors, then there

1 is zero benefit to reducing ammonia emissions unless
2 you reduce ammonia emissions so much that an area is no
3 longer ammonia rich.

4 Q But generally speaking, when you're talking
5 about regional particulate, -- excuse me, when you're
6 talking about the formation of secondary particulates
7 in the region, generally speaking there's less
8 contribution to secondary particulates in an area
9 that's ammonia rich from ammonia slip than there would
10 be if the area had less ammonia?

11 Is that too complicated? Should I break
12 that down --

13 HEARING OFFICER SHEAN: That's so compound
14 it -- yeah. And answer isn't going to help. Why don't
15 you rephrase that.

16 BY MS. HOLMES:

17 Q Generally speaking, then, when you're
18 considering the regional formation of secondary
19 particulates due to ammonia slip, you're unlikely to
20 have zero contribution?

21 A I agree with that.

22 Q So, really it's just a question of how much
23 contribution ammonia slip makes to secondary
24 particulate formation?

25 A What's just --

1 Q It's not a question of it being zero. It's
2 simply a question of whether it's more or less?

3 A Over a broad regional area, yes.

4 Q Does your testimony contain a quantitative
5 analysis of the contribution from this project of
6 ammonia slip to regional secondary particulate?

7 A No, it did not.

8 Q Now, if I could turn to questions having to
9 do with the feasibility of reducing ammonia slip.

10 Do you believe that it is technically and
11 economically feasible to reduce ammonia slip to 5 parts
12 per million?

13 A I believe it's technically and economically
14 feasible to design a plant to meet a 5 ppm slip level.
15 I do not know whether it is economically feasible to
16 maintain a 5 ppm slip level in conjunction with the
17 other requirements in particular, the 2 ppm NOx level
18 that has been required for this project over the life
19 of the project.

20 Q Are other projects in California, licensed
21 in California, subject to those requirements?

22 A To the best of my knowledge there are no
23 projects in California that have been licensed by this
24 Commission subject to a 2 ppm NOx level and a 5 ppm
25 ammonia slip level.

1 Q Did the manufacturer of this SCR unit
2 indicate that 5 ppm is feasible?

3 A I don't know specifically but I would expect
4 that if asked they would have indicated that it was
5 technically feasible.

6 Q I want to talk for a moment about your
7 reference earlier to comments of EPA on ammonia slip
8 levels. Isn't it true that in this case the EPA letter
9 is silent on the issue of ammonia slip?

10 A That's correct.

11 Q However, in EPA comment letters on other
12 projects that have come before the Commission for
13 licensing, for example the Blythe and the Pastoria
14 cases, EPA has specifically recommended 5 parts per
15 million?

16 A If they did, that would have been in
17 conjunction with a NOx level of 2.5 parts per million
18 rather than the more stringent NOx level that's being
19 applied to this project.

20 And in the case of Blythe and Pastoria, both
21 the local Air District and the Commission disagreed
22 with those recommendations by EPA, and approved the
23 project with a 10 ppm slip level.

24 Q Has EPA ever specifically recommended an
25 ammonia slip level of 10 parts per million?

1 A No. They've issued permits with ammonia
2 slip levels of 10 parts per million, but I've never
3 seen a letter from them recommending 10 parts per
4 million.

5 Q So, it would be fair to say that EPA has
6 either recommended 5 parts per million or been silent
7 in the cases that you're familiar with?

8 A No, I disagree with that. Because I don't
9 believe that the issuance of a permit by EPA is an
10 indication of their silence.

11 Q I'm referring specifically to comment
12 letters.

13 A You might be correct if I narrow my focus to
14 comment letters, but I can't be certain.

15 Q Thank you. And are you familiar with the
16 ARB's document, guidance for power plant siting and
17 best available control technology that was published, I
18 think, in 1999?

19 A Yes, I am.

20 Q Does that document recommend 5 parts per
21 million ammonia slip level?

22 A Not exactly. It recommends that Air
23 Districts consider the 5 ppm slip level.

24 Q Earlier this morning you testified that
25 there is a greater benefit from reducing precursors to

1 secondary particulates, and I think you were referring
2 to the tradeoff between NOx reductions and ammonia
3 reductions. Did I understand your testimony correctly?

4 A Yes.

5 Q Are you implying that the Commission must
6 pick between lower NOx levels and lower ammonia slip
7 levels?

8 A No. I'm suggesting that in any particular
9 region air quality is going to dictate which is going
10 to be more beneficial. And in this region I believe
11 that's NOx.

12 Q Is it your testimony that we must pick
13 between 2 parts per million NOx and a 5 parts per
14 million ammonia slip level on a technical basis?

15 A No.

16 Q Thank you.

17 MS. HOLMES: Those are all my questions.

18 HEARING OFFICER SHEAN: All right. Anything
19 from the intervenor?

20 MS. PEASHA: I believe that Mr. Rubenstein's
21 testimony rules are, you know, relies on information
22 that I have not been able to review because of not --
23 because I haven't gotten that information. So I would
24 like Mr. Rubenstein to prepare to come back for the
25 second testimony, for cross-examination.

1 HEARING OFFICER SHEAN: Well, he has a
2 fairly extensive written testimony that's been
3 available and served on the parties. Are you
4 indicating that you are not prepared to cross-examine
5 as to that?

6 MS. PEASHA: I can cross-examine to some of
7 the questions that she asked, that his staff has
8 prepared only. But as far as the information contained
9 in the final determination of compliance I don't have,
10 I believe there's some in there that relies on his
11 testimony.

12 HEARING OFFICER SHEAN: Why don't you
13 proceed with questions that are directed to the
14 testimony that he filed. And the answers that he gave
15 here this morning.

16 MS. PEASHA: Okay.

17 CROSS-EXAMINATION

18 BY MS. PEASHA:

19 Q In your answer about improvement on the air
20 quality, is that regarding both phases of the 1000
21 megawatts project?

22 A I'm afraid, Ms. Peasha, I'm not remembering
23 what statement in particular you're talking about.

24 Q On the very first subject that we just
25 talked about, the -- you said that it would actually

1 improve the air quality in the area from the building
2 of this plant.

3 A No, I --

4 MS. LUCKHARDT: I -- go ahead.

5 BY MS. PEASHA:

6 Q Well, what was the first, very first, I'm
7 sorry, I --

8 HEARING OFFICER SHEAN: Let me help you. Is
9 your testimony today directed to phase I or phase I and
10 II?

11 MR. RUBENSTEIN: My testimony today is
12 directed to phase I.

13 BY MS. PEASHA:

14 Q Only phase I?

15 A That's all that I've spoken about today.

16 Q Okay. Referring to my testimony, was that
17 on a workshop that you were trying to help me with, or
18 was that on a recorded preconference hearing?
19 Regarding my Bureau of Automotive Repair.

20 A Those were comments that were relayed to me,
21 I believe, from the prehearing conference which I did
22 not attend. And so I was informed by others as to what
23 you had said, and asked whether I had any comments
24 about those.

25 Q I believe those comments were only made at a

1 workshop and -- were made to comply with the Bureau of
2 Automotive Repair for automobiles only.

3 A As I said, I was not present and I tried to
4 characterize my testimony as that I had been informed
5 of what your comments were. I apologize if I've
6 mischaracterized them in any way. I was just
7 responding to what I was told you had said.

8 MS. LUCKHARDT: And we also had requested a
9 copy of the prehearing conference statement, the
10 transcript. And I don't believe it's out yet, so it
11 was just based on memory.

12 HEARING OFFICER SHEAN: Okay. My notes do
13 have some BAR in automotive smog comments in them, so
14 why don't we just keep it going here.

15 MS. PEASHA: As far as Mr. Roskey's comments
16 that you referred to, Mr. Roskey notified me that he
17 did not get documents. He had to go down to his post
18 office and there was no postage on it, so he did not
19 receive the documentation. And that is why he's not
20 testifying today to back him up.

21 MS. LUCKHARDT: I don't believe that's a
22 question for us.

23 HEARING OFFICER SHEAN: Okay. Do you have
24 any questions, however, for him?

25 MS. PEASHA: For Mr. Rubenstein, no. But, I

1 have some -- I would like my expert witness, Bob
2 Sarvey, to please be allowed to ask some questions for
3 Mr. Rubenstein.

4 HEARING OFFICER SHEAN: If he --

5 MS. LUCKHARDT: I would object because I
6 believe he is a witness and not an intervenor in this
7 case. Nor is he an attorney representing --

8 HEARING OFFICER SHEAN: Do you have some
9 ability to assist her in formulating the questions to
10 Mr. Rubenstein?

11 MR. SARVEY: Make things go along a lot
12 smoother if --

13 HEARING OFFICER SHEAN: Yeah, I think that's
14 our goal.

15 MR. SARVEY: -- if I could ask the
16 questions.

17 HEARING OFFICER SHEAN: Rather than some
18 hypertechnical legal rule.

19 MR. SARVEY: But, whatever the Committee
20 rules we'll abide by.

21 HEARING OFFICER SHEAN: All right, if you
22 can help her on this, go ahead. In terms of examining
23 Mr. Rubenstein.

24 MR. SARVEY: Can I ask the questions, then?
25 Okay.

CROSS-EXAMINATION

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

BY MR. SARVEY:

Q Mr. Rubenstein, you state in your testimony that all the ambient air quality data that you relied on was taken from the California Air Resources Board publications and data sources, is that correct?

MS. LUCKHARDT: What page are you referring to in his testimony?

MR. SARVEY: Let's see, that would be page number 3.

MR. RUBENSTEIN: Yes, that's correct.

BY MR. SARVEY:

Q Okay. So, in your professional opinion do you agree that the entire area within the boundaries of an Air District are evaluated to determine whether the District has achieved attainment status for a pollutant?

A No. The attainment status is a regulatory concept that's established and interpreted separately under federal and state regulations. And the criteria for which monitoring stations and which measured concentrations are included in that determination differ by pollutant and differ between the federal and California programs.

So I would not agree to that as a blanket

1 statement.

2 Q Is it your testimony that the ozone quality
3 in Sacramento is improving?

4 A The conclusion that I drew was that ozone
5 levels in Sacramento County have gradually been
6 improving over the last 20 years.

7 Q And what is your professional opinion on
8 ozone levels in the County in the last four years or
9 five years?

10 A My professional opinion is that I've looked
11 at enough ozone trends to know that you can't determine
12 long-term trends by looking at only four years worth of
13 data.

14 Based on that kind of an analysis the former
15 head of the Los Angeles County Air Pollution Control
16 District in 1978 predicted that southern California
17 would attain the federal ozone standard by 1980.

18 Q They didn't do it yet. I'm going to hand
19 out a little list of exhibits here to ask you a couple
20 questions about.

21 MS. LUCKHARDT: Are these the same documents
22 that were identified in Ms. Peasha's prefiled
23 testimony? Or are these new documents?

24 MR. SARVEY: The majority of them were
25 identified in the testimony as excerpts from the CARB

1 manual, which is publicly available documents.

2 The other documents are already documents
3 that Mr. Rubenstein has brought up in his testimony and
4 have been brought up in the testimony that we just
5 received here.

6 MS. LUCKHARDT: Well, I guess we'll address
7 them as each one comes up.

8 MR. SARVEY: Okay, thank you.

9 BY MR. SARVEY:

10 Q Now, looking at exhibit 1, Mr. Rubenstein, -
11 -

12 MS. LUCKHARDT: Could you identify it by
13 title which --

14 MR. SARVEY: That would be annual ozone
15 summaries for selected regions.

16 BY MR. SARVEY:

17 Q And looking at the broader Sacramento area -
18 -

19 HEARING OFFICER SHEAN: Let's just indicate
20 that this is from the ARB website.

21 MR. SARVEY: Yes, that's from the --

22 HEARING OFFICER SHEAN: All right?

23 MR. SARVEY: Correct, thank you.

24 BY MR. SARVEY:

25 Q Looking at your 2000, 2001, 2002 we see the

1 state exceedance days proceed from 45, 51 to 57. Does
2 that show any type of pattern towards attainment in
3 this area?

4 MS. LUCKHARDT: I believe he's already
5 testified on ozone trends, and how you can't do that
6 over a short-term period. The last period he requested
7 was four years, and now he's talking about a three-year
8 period.

9 BY MR. SARVEY:

10 Q Are the ozone impacts from this facility
11 regional or local?

12 A I'm sorry, could you repeat that question,
13 please?

14 Q Are the ozone impacts from this facility
15 primarily regional or are they local?

16 A Ozone impacts in all regions are regional,
17 not local.

18 Q Are the PM10 impacts from this facility
19 primarily local or regional?

20 A I believe the PM10 impacts from this project
21 are primarily regional.

22 Q Now in exhibit 3, the PM10 trend summary
23 from California Air Resources Board, the three-year
24 average increases from 1998, 28; 1999, 30; 2000, 30;
25 and 2001, 32.

1 Does that indicate a trend towards
2 attainment in the last four to five years?

3 A I'm sorry, I'm still back on exhibit 1
4 because I have actually a 20-year trend table from the
5 California Air Resources Board website for the
6 Sacramento Valley Air Basin which doesn't match the
7 numbers that you have in exhibit 1. So, I'm a little
8 confused.

9 Q These are directly from the CARB summary.
10 Would you agree with the statement that most of the
11 ozone improvements experienced between 1980 and 1993
12 are due to reformulated gasoline rather than an
13 improvement in air -- in car emissions, rather than
14 improvements in stationary source?

15 A No.

16 Q You wouldn't?

17 A Reformulated gasoline regulations didn't
18 take effect until the early 1990s, and so they couldn't
19 have contributed to those benefits during the 1980s you
20 refer to.

21 Q Okay, so since the gasoline being
22 reformulated in the 1990s would you attribute a lot of
23 the drop in one-hour ozone exceedances and eight-hour
24 ozone exceedances to that factor?

25 A I'm hesitating because I'm looking to where

1 I analyzed the trend in one-hour and eight-hour ozone
2 exceedances. And I think that was in the application
3 for certification.

4 And the only place where I looked at that
5 particular trend is on figure 8.1-10B of the
6 application for certification. And if your question is
7 whether the trend in decreasing frequencies of ozone
8 violations that I show in that trend is a result of the
9 reformulated gasoline regulations I'd have to say that
10 those regulations contribute to that trend, but are not
11 solely responsible for it.

12 Q Thank you. Looking at exhibit number 5,
13 California Air Resources Board PM10 trend summary,
14 Sacramento -- you stated in your testimony that the
15 project area did not experience a violation of the
16 state PM10 standard in 2001.

17 Looking at exhibit 5 does that change your
18 testimony?

19 A I'm sorry, could you repeat that question
20 again?

21 Q You stated in your testimony that the
22 project area did not experience a violation of the
23 state PM10 standard in 2001. Looking at exhibit 5 does
24 that change your testimony?

25 A I didn't make that statement. I said there

1 were no violations of the federal standard for PM10.

2 And, no, exhibit 5 doesn't change my testimony.

3 Q It's on page 13 of your testimony. You
4 state, however, the CEC Staff does note that the area
5 did not experience of a violation of either the state
6 or federal PM10 standards in 2001.

7 Now, --

8 MS. LUCKHARDT: Excuse me, let us find that
9 particular statement.

10 MR. SARVEY: Okay, sure.

11 MS. LUCKHARDT: Because he may simply be
12 quoting from what CEC Staff said.

13 HEARING OFFICER SHEAN: Where is this, on
14 13, Mr. Sarvey?

15 MR. SARVEY: Page 13, second paragraph,
16 towards the end there. And it goes on further to say,
17 this remarkable achievement, while not sufficient to
18 indicate a long-term trend, is extremely rare for any
19 part of California.

20 MR. RUBENSTEIN: What I was referring to was
21 a statement on page 4.1-7 of the final staff
22 assessment. And I was quoting the CEC Staff. And on
23 page 4.1-7 of the final staff assessment in the last
24 sentence in the paragraph entitled, particulate matter,
25 staff says, quote, "The area did not experience a

1 violation of either the state or the federal PM10
2 standards in 2001."

3 BY MR. SARVEY:

4 Q So, do you agree with that statement,
5 looking at exhibit 5?

6 MS. LUCKHARDT: I'm sorry, there is no
7 exhibit 5. If you could please use the --

8 MR. SARVEY: PM10 trend summary Sacramento T
9 Street, California Air Resources Board. It's listed as
10 exhibit 5 in what I just handed you.

11 MR. RUBENSTEIN: As the note says at the
12 bottom of what you're referring to as exhibit 5, the
13 PM10 trend summary, an exceedance is not necessarily a
14 violation. I don't know that I have enough information
15 to know whether there was a violation of the state
16 standard.

17 It's also possible that there may have been
18 a typographical error in the staff assessment, because
19 the value for 2002, if you had printed out the PM10
20 summary to include that year, would have been zero. No
21 violations of the state standard in 2002.

22 I don't know whether it's a typographic
23 error. You'd have to ask the staff about that.

24 But, again, in terms of my testimony I was
25 quoting from the staff assessment.

1 BY MR. SARVEY:

2 Q So that's staff's testimony, not your
3 testimony, correct?

4 A That's correct.

5 Q Thank you. Okay, now drawing your attention
6 to Sacramento Valley Air Basin PM10 emission trends and
7 forecast that I have listed as exhibit 6 in my handout
8 to you.

9 A Yes.

10 Q Were you aware that the Air Resources Board
11 predicts that average daily PM10 emissions in
12 Sacramento Valley Air Basin will increase 8 percent
13 from 2000 to 2005?

14 MS. LUCKHARDT: Could you please tell us
15 what document this is from? This is a single page out
16 of what must be a close to 200-page --

17 MR. SARVEY: The ARB Almanac.

18 MS. LUCKHARDT: An ARB Almanac -- I --

19 MR. SARVEY: ARB Almanac, 2002 --

20 MS. LUCKHARDT: I object to looking at a
21 single page out of a large document that we don't have
22 present with us today.

23 MR. SARVEY: Mr. Rubenstein's testimony
24 contains several pages out of that document; and this
25 ARB is a common publication that's available to all.

1 So this is not something that's a surprise or anything.

2 MS. LUCKHARDT: It may be a common
3 publication that may be available to everyone, but
4 often documents have different parts that have
5 different caveats and different sections. And if we're
6 looking at a single page out of a large document,
7 sometimes it is difficult to know what the conditions
8 that have been placed on that are; what potential
9 footnotes are; or if there are any other items that
10 might influence that particular page out of that
11 document.

12 MR. SARVEY: Would you then agree that all
13 the testimony related to ARB excerpts from Mr.
14 Rubenstein's testimony also would bear that
15 characterization?

16 MS. LUCKHARDT: I absolutely would not,
17 because in that instance we had an opportunity to look
18 at the those documents to verify that what we were
19 saying was accurate. And we did not know or were not
20 aware that this particular page would be an issue or we
21 would have brought the entire document with us.

22 MR. SARVEY: Okay, and I'll draw your
23 attention back to my earlier question when I asked Mr.
24 Rubenstein that if his testimony depended on data that
25 he relied from the California Air Resources Board

1 publications and data sources.

2 So I think Mr. Rubenstein has had
3 opportunity to review this.

4 MS. LUCKHARDT: There are many ARB
5 publications --

6 HEARING OFFICER SHEAN: Okay, why don't we
7 just stop this. Because what we -- you can ask the
8 witness if he has seen and relied upon ARB Almanac 2002
9 and is familiar with chapter 4. Okay.

10 Because, first of all, I've been in this
11 game a long time. I understand that this is
12 essentially your testimony, and that what you're going
13 to do is ask to be allowed to present the information
14 that you got from the ARB website. And use it as an
15 affirmative statement that these are facts and we
16 should take them into consideration.

17 Which isn't necessarily the same thing,
18 given Mr. Rubenstein's testimony. He did not rely upon
19 these documents. And if they want to make -- because
20 they've been derived from the website, so that in terms
21 of your cross-examination, he needs to know of it and
22 have relied upon it for this to be appropriate cross-
23 examination.

24 MR. SARVEY: I understand that.

25 HEARING OFFICER SHEAN: Okay?

1 MR. SARVEY: And respect that. All I was
2 mentioning was that his testimony is that he relied on
3 these documents taken from the California Air Resources
4 Board, but I'll drop that line of questioning.

5 HEARING OFFICER SHEAN: We don't know. You
6 need to ask him that.

7 MR. SARVEY: Okay. Well, I'll just ask him
8 the question.

9 BY MR. SARVEY:

10 Q Were you aware that the Air Resources Board
11 predicts that average daily PM10 emissions in
12 Sacramento Valley Air Basin will increase 8 percent
13 from 2000 to 2005?

14 A Yes. And I'm also aware that on the page
15 following the one that you've presented the Air
16 Resources Board indicates that there's been a steady
17 decline in PM10 levels in the Sacramento Valley Air
18 Basin.

19 MS. LUCKHARDT: Fortunately, Mr. Rubenstein
20 has the document on his computer.

21 MR. SARVEY: Oh, good.

22 MS. LUCKHARDT: And that's exactly the
23 concern that I had, was that the surrounding pages
24 would have additional information. And now we find
25 that page 199, the one that follows that one, does have

1 that additional information. We would be happy to file
2 that, as well, with the rest of our stuff --

3 MR. SARVEY: And Mr. Rubenstein --

4 HEARING OFFICER SHEAN: Okay, we
5 don't --

6 MR. SARVEY: -- I want to differentiate my
7 question just a little bit.

8 HEARING OFFICER SHEAN: Yeah, let's just let
9 him answer the question and keep it moving.

10 MR. SARVEY: I just want to differentiate my
11 question. Mr. Rubenstein's talking about past trends;
12 I'm talking about future trends, which is what this
13 page relates to, not past trends.

14 MR. RUBENSTEIN: Actually this doesn't
15 relate to air quality trends. You understand that?
16 You asked your question about the emissions.

17 BY MR. SARVEY:

18 Q Emissions, correct.

19 A Okay, and emissions which are primarily,
20 according to the page you presented to me, due to
21 fugitive dust from paved and unpaved roads; fugitive
22 dust from construction and demolition; and particulates
23 from residential fuel combustion.

24 Q Um-hum.

25 A With that caveat, I haven't done the math,

1 but yes, I see that the Air Resources Board predicts
2 emissions increase in PM10 emissions in Sacramento
3 Valley Air Basin, as a whole, due primarily to those
4 categories.

5 Q Okay, that's the only question. Thank you.

6 A Okay.

7 Q In your testimony you state the project area
8 is ammonia rich. Have you done any air quality
9 analysis to confirm this assumption?

10 A No, I relied on the analysis that was done
11 by the California Air Resources Board that's referenced
12 in the final determination of compliance.

13 Q Have you done any analysis to determine the
14 rate at which ammonia emissions will convert to
15 secondary ammonium nitrate?

16 A No, I did not. To the extent that there was
17 any analysis done, I relied on the one that was done by
18 the California Air Resources Board that's referenced in
19 the final determination of compliance.

20 Q Is it possible that the ammonia emissions
21 from this facility may be transported to an area that
22 is not ammonia rich?

23 A Given the location of this project I don't
24 believe that's likely, no.

25 Q Have you established transport factors to

1 back that assumption?

2 A You asked me a qualitative question. Are
3 you asking me have I quantified that effect?

4 Q Yes.

5 A No.

6 Q Okay, thank you. In your testimony you
7 referred to the Three Mountain Power Project. Are you
8 aware that the EPA strongly recommended that this
9 project limit its ammonia slip to 5 parts per million?

10 MS. LUCKHARDT: Could you refer again to the
11 page number?

12 In this testimony, so at least I can be
13 there.

14 MR. SARVEY: It would be on page number 20.

15

16 MS. LUCKHARDT: In regards to his discussion
17 on road paving mitigation measures?

18 MR. SARVEY: Correct.

19 MS. LUCKHARDT: And you're asking about
20 something totally unrelated, is that correct?

21 MR. SARVEY: I'm asking him was he aware.

22 PRESIDING MEMBER PERNELL: I'm sorry, Mr.
23 Sarvey, I can't hear you. You're going to have to
24 speak up.

25 MR. SARVEY: Oh. I was asking him was he

1 aware that that particular project that he had brought
2 up in his testimony, that the EPA had recommended an
3 ammonia slip of 5 parts per million.

4 MR. RUBENSTEIN: In the document that I
5 distributed earlier today called, summary of ammonia
6 slip levels in recent CEC siting cases, I indicated
7 that in the Three Mountain Power case the applicant had
8 proposed a 5 ppm slip level.

9 Whether EPA recommended that as well, I
10 don't know.

11 BY MR. SARVEY:

12 Q Referring to the summary of ammonia slip
13 levels in recent CEC siting cases, under the Sacramento
14 Valley Air Basin would you agree that the majority of
15 these power plants are being sited here either have 5
16 ppm ammonia slips or a recommended 5 parts ammonia slip?

17 You have three of them listed there.

18 A You'd have to be more specific. Recommended
19 by who? The third of the three projects, there are two
20 different --

21 Q The Sutter and Three Mountain, Sutter's at
22 10, Three Mountain's at 5, and Cosumnes is recommended
23 at 5. So, that's what the CEC is recommending, is 5
24 parts per million.

25 A Yes, and the Sacramento Air District is

1 recommending 10 ppm for the Cosumnes project.

2 Q I'm just speaking in terms of what the CEC
3 is recommending.

4 A Okay, if you question is of the three
5 projects listed in the Sacramento Valley Air Basin,
6 have the majority of those three projects had a 5 ppm
7 slip level recommended by the California Energy
8 Commission in the final staff assessment, the answer is
9 yes.

10 Q Thank you.

11 MS. LUCKHARDT: I would like to clarify that
12 that would be staff's recommendation and not the
13 Commission's recommendation.

14 HEARING OFFICER SHEAN: That's understood.
15 The FSA at the top of the column means final staff assessment.
16 BY MR. SARVEY:

17 Q Are you aware that the Tesla project was
18 just permitted by the Bay Area Air Quality Management
19 District with an ammonia slip of 5 parts per million
20 and a 2 parts per million
21 NOx?

22 A That is my understanding. That's
23 what -- that is my understanding.

24 Q Okay. Are you aware that the principals in
25 the Palomar Power Plant also have just agreed to a 5

1 parts per million ammonia slip limit?

2 A They have just proposed one, yes.

3 Q Is it technically feasible for this project
4 to reduce its ammonia slip level to 5 parts per
5 million?

6 A The actual ammonia slip level from this
7 project will be on the order of 1 to 2 parts per
8 million. So I guess the answer to your question would
9 be yes.

10 Q Are you in agreement with the CEC Staff on
11 condition, I believe it was SQ-5, on the errata that I
12 just received when I walked into the building here,
13 about the wood stove program? That the CEC agreed to
14 eliminate that wood stove program?

15 A You're asking me --

16 Q Am I correct in assuming that?

17 MS. LUCKHARDT: I think that that question
18 is appropriately directed to staff.

19 MR. SARVEY: I was just -- earlier he was --
20 I was just given the impression that the wood stove
21 program had been abandoned by staff. And I'm just
22 asking that question, is that his understanding.

23 MR. RUBENSTEIN: That's what's indicated in
24 the staff's supplemental testimony, yes, in an errata.

25 HEARING OFFICER SHEAN: Let me also, for the

1 record, indicate that it's what's indicated in the
2 Cosumnes Power Plant air quality conditions of
3 certification versions agreed to by CEC Staff and
4 applicant handed out this morning by the applicant.

5 On the third page it states condition AQSC-5
6 additional PM10 mitigation has been deleted by
7 agreement between the CEC Staff and the applicant.

8 MR. SARVEY: So that is an agreement between
9 --

10 HEARING OFFICER SHEAN: So it's --

11 MR. SARVEY: -- staff and applicant at this
12 point?

13 HEARING OFFICER SHEAN: So, is that correct?

14 MR. RUBENSTEIN: That is correct.

15 BY MR. SARVEY:

16 Q Okay. Are you familiar with the CEC Staff's
17 position on road paving credits in the East Altamont
18 Energy Center siting case?

19 A Yes.

20 Q And can you summarize what their position
21 was?

22 MS. LUCKHARDT: I'm sorry, I have to object.
23 He's asking the applicant's witness to summarize
24 staff's position in a different siting case. And I
25 don't believe that's appropriate.

1 HEARING OFFICER SHEAN: If it's foundational
2 we'll allow it. So let's just --

3 MS. LUCKHARDT: So you'd like --

4 HEARING OFFICER SHEAN: We'll just see where
5 it goes. He's just asking if he's familiar with it and
6 to describe what that familiarity is.

7 MR. RUBENSTEIN: In that case the CEC Staff
8 expressed a preference that -- and a very strong
9 preference that the applicant find an alternative
10 source of emission reduction credits other than road
11 paving.

12 BY MR. SARVEY:

13 Q And you, as the applicant's expert, how did
14 you respond to that?

15 MS. LUCKHARDT: You know, I have to object.
16 I was not the attorney on that case. SMUD was not the
17 applicant on that case. That's a different company and
18 --

19 HEARING OFFICER SHEAN: I'm sorry, just
20 stop.

21 PRESIDING MEMBER PERNELL: Can we go off the
22 record a second.

23 HEARING OFFICER SHEAN: I can't hear over
24 the static of this thing.

25 (Off the record.)

1 HEARING OFFICER SHEAN: Okay, Mr. Sarvey, go
2 ahead.

3 And you were in the middle of an objection.

4 (Laughter.)

5 MS. LUCKHARDT: Yeah, I just feel like we're
6 moving down a track on the East Altamont project that
7 isn't necessarily common knowledge to all of us here.
8 I understand that Mr. Rubenstein was the witness on air
9 quality in that area. I didn't attend that hearing.
10 That's a Calpine project, not a SMUD project.

11 I have no idea whether Mr. Ngo was the
12 witness or not. He may have been. Or whether Ms.
13 Holmes was involved in that case. But I mean, at some
14 point, we move down the road to a point where I don't
15 think it makes sense to bring that into this case.

16 But, you know, Mr. Rubenstein's assured me
17 he can answer the question, so if you'd like him to
18 answer it.

19 HEARING OFFICER SHEAN: Yes, and I think,
20 you know, I --

21 MR. SARVEY: I'll handle that under my
22 testimony; that's okay.

23 HEARING OFFICER SHEAN: Pardon me?

24 MR. SARVEY: I can handle that under my
25 testimony. That's what my testimony goes to.

1 HEARING OFFICER SHEAN: Okay.

2 MR. SARVEY: And my other questions are
3 related to the road paving, and I'm unaware of this
4 agreement between staff and the applicant; and also my
5 other questions are related to the FDOC. So I would
6 like to just hold off on those rather than waste the
7 Committee's time. And come back when Mr. Rubenstein
8 comes back in a second set of air quality hearings and
9 ask those questions then.

10 MS. LUCKHARDT: So, wait a minute. I
11 believe the only issue --

12 HEARING OFFICER SHEAN: You may be assuming
13 something --

14 MS. LUCKHARDT: -- is the FDOC --

15 HEARING OFFICER SHEAN: -- we haven't yet
16 gotten to.

17 MS. LUCKHARDT: Yeah.

18 HEARING OFFICER SHEAN: We're asking you
19 guys to go through the examination that you have, based
20 upon his testimony. And ordinarily the extent of
21 cross-examination is related to what is in his direct
22 testimony.

23 Now, that testimony is fairly extensive
24 because he's included by reference in a lot of the
25 material in the AFC and stuff like that, so we're

1 giving you some latitude.

2 But you got to connect. I mean this can't
3 be sort of a fishing expedition through anything that
4 might be related to air quality.

5 So what we're looking for is how, if you ask
6 a foundational question, you then connect it to
7 something that's relevant to this case.

8 MR. SARVEY: My problem is a lot of his
9 testimony is related to his disagreement with staff on
10 this wood stove program, and until I walked into this
11 room this morning I didn't even know that they had
12 executed an agreement. So I'm like at a loss as to how
13 to proceed at this point, because these are new
14 developments here and a surprise to me. This happened
15 after prefiling statements, even after we filed our
16 testimony. So we just feel like we'd like to come back
17 to that later, if possible, if --

18 MS. LUCKHARDT: I --

19 MR. SARVEY: -- if it would please the
20 Committee.

21 MS. LUCKHARDT: -- yeah, this was dealt with
22 in two days of workshops that were open to the public
23 and to which everyone could attend. So I don't feel
24 like this information should be a surprise to anyone.

25 HEARING OFFICER SHEAN: Well, okay. Let's

1 just stop. We don't want to get argumentative here.
2 Did you have something you wanted to say?

3 MS. HOLMES: I was going to offer what I
4 hoped was a solution to the problem. We don't have an
5 objection to making our witnesses available at a later
6 hearing to discuss the changes that were unfortunately
7 not filed until last night. I think that's a fair
8 request. And we have no problem with making our
9 witnesses available for that purpose.

10 I believe that the testimony that he's
11 concerned about goes to the wood stove program that
12 staff had originally proposed, and is no longer
13 proposing. That's the change that happened.

14 And I think it's legitimate to give the
15 intervenor an opportunity to review that. And if they
16 cannot complete that review and formulate questions on
17 that change today, then I think it's appropriate to
18 bring our witnesses back on that specific issue at a
19 later time.

20 So, if that addresses the issue, it's
21 acceptable to us.

22 HEARING OFFICER SHEAN: Okay. And I think,
23 as a general statement, what should be very clear is
24 the role of the Commission Staff is to independently
25 review and analyze and provide to the Commission, for

1 its information, a range of information.

2 It becomes problematic when they do, you
3 know, editing so that it's what they want, right,
4 because it really should be what the Commission needs
5 to make an informed decision.

6 Among the things that would be included is
7 if you had formerly recommended a mitigation measure
8 and now have dropped it, why is that so? What has
9 satisfied you that something that you believed should
10 have been in there before is now no longer needed?

11 So, we'll cover that. So, if you can
12 proceed and -- with sort of those limitations and goals
13 in mind with regard to your cross-examination.

14 MR. SARVEY: I guess I'm a little unclear.
15 Will I be allowed to ask questions later after staff
16 clarifies their position? Because I'm at a loss here.
17 My --

18 HEARING OFFICER SHEAN: You can ask them
19 questions with regard to --

20 MR. SARVEY: My whole testimony and
21 questions to him are based on this wood stove program
22 that I didn't know until this morning when I walked in
23 that it no longer existed. So
24 that's -- I'm kind of like whoa, you know, I don't
25 really know where to go with my questions now.

1 HEARING OFFICER SHEAN: Okay, now just a
2 moment --

3 MS. LUCKHARDT: Well, our testimony that was
4 filed in opposition to that original program is still
5 stands and is still valid. So if he wants to ask Mr.
6 Rubenstein about that prefiled testimony, we just
7 didn't feel there was any need to go through it today
8 because we didn't understand that there was still a
9 dispute in that area.

10 But if the intervenor has some questions
11 about that testimony --

12 MR. SARVEY: Well, we certainly have a
13 dispute about it.

14 MS. LUCKHARDT: -- we're prepared to respond
15 now.

16 HEARING OFFICER SHEAN: Well, where do you
17 want to go with this? I mean, you should understand
18 from his testimony why they objected to it.

19 MR. SARVEY: Right.

20 HEARING OFFICER SHEAN: I think the relevant
21 question is why did staff agree and withdraw, --

22 MR. SARVEY: That's what I --

23 HEARING OFFICER SHEAN: -- which you're not
24 going to get --

25 MR. SARVEY: -- need to know before I --

1 HEARING OFFICER SHEAN: -- from Mr.
2 Rubenstein.

3 MR. SARVEY: -- ask those questions over
4 there.

5 HEARING OFFICER SHEAN: Okay? All right.

6 MR. SARVEY: That's the point. I'm sorry.

7 HEARING OFFICER SHEAN: Okay. I'm trying to
8 help you, too, because I want you guys to stay focused
9 and really get what you want out. And I think --

10 MR. SARVEY: Yeah.

11 HEARING OFFICER SHEAN: -- to some degree,
12 if I understand, you propose to testify, and would be
13 presenting some of the material here, or is this only
14 for cross-examination purposes?

15 MR. SARVEY: Some of the material in there
16 is exhibits for my testimony, yes.

17 HEARING OFFICER SHEAN: Okay. Why don't you
18 -- I mean I don't want to control your examination; I
19 just want to help you. So why don't you go to the next
20 area that you think you want to pursue.

21 MR. SARVEY: Well, it's all about road
22 paving credits now and the FDOC, which I haven't seen.
23 So, as far as that goes, that's about as far as I can -
24 -

25 MS. LUCKHARDT: I'm sorry, but the --

1 MR. SARVEY: -- go without hearing staff's
2 position --

3 MS. LUCKHARDT: -- I believe the road paving
4 credits are included in the AFC. As well as the -- the
5 FDOC was filed in October of 2002. I find it hard to
6 believe that the intervenor never received it. But if
7 that's the case,
8 then --

9 HEARING OFFICER SHEAN: Well, the point is
10 what do you want to ask about road paving credits?

11 MR. SARVEY: Okay, I'll move them.

12 BY MR. SARVEY:

13 Q Okay, on page 20 of your testimony you
14 mentioned the Three Mountain Power project. Were you
15 aware that that project also included 400 wood stoves
16 as part of the conditions of certification?

17 MS. LUCKHARDT: In Mr. Rubenstein's
18 testimony he again refers to the Three Mountain Power
19 project in regards to road paving. He may or may not
20 be aware of what additional conditions were placed on
21 the Three Mountain Power project. I have to admit that
22 I am not. And I feel at some point we're moving off
23 into directions that, you know, we may not have
24 specific knowledge on.

25 HEARING OFFICER SHEAN: Well, we're sure

1 burning time. Can you answer that question yes or no?

2 MR. RUBENSTEIN: I am aware that there was a
3 wood stove retrofit program associated with the Three
4 Mountain Power program. I'm not familiar with the
5 details or with the rationale as to why it was
6 required, or whether it was simply proposed by the
7 applicant.

8 BY MR. SARVEY:

9 Q How far are your road paving credits from
10 the project site?

11 A As presented in my testimony on page 21,
12 table 7, and the distances that are shown, depending on
13 the credit range between 1.8 miles and 15 miles.

14 Q Is there an average number?

15 A I did not calculate an average number.

16 Q On table 6 of your testimony you list the
17 High Desert project, that their road paving credits
18 were less than ten miles to project, is that correct?

19 A Yes.

20 Q And then the Three Mountain Power project,
21 their road paving credits were also less than ten
22 miles, is that correct?

23 A Yes.

24 Q Have you reviewed the EPA comments on the
25 preliminary determination of compliance on the PM10

1 emission reduction credits?

2 MS. LUCKHARDT: That would be in this
3 project, the preliminary determination of compliance?

4 MR. SARVEY: Yes, ma'am, SMUD.

5 MR. RUBENSTEIN: Yes.

6 BY MR. SARVEY:

7 Q Okay. And were they in favor of use of the
8 road paving credits in this particular case?

9 (Pause.)

10 MS. LUCKHARDT: Do you have a specific page
11 number in the PDOC that you're referring to?

12 MR. RUBENSTEIN: No, these are EPA comments
13 on the preliminary determination of compliance. We can
14 skip that question. I'll move on to another one.

15 MR. RUBENSTEIN: I'm prepared to answer it.

16 HEARING OFFICER SHEAN: Yeah, I mean, --

17 PRESIDING MEMBER PERNELL: If he wants to
18 move on --

19 HEARING OFFICER SHEAN: -- let's do that
20 editing. You can move on, but -- go ahead.

21 BY MR. SARVEY:

22 Q The 2002 CARB Almanac says that unpaved road
23 dust during the summer months averages 17.79 tons per
24 day. The average PM10 emissions from unpaved roads in
25 the wintertime is 3.92 tons per day --

1 MS. LUCKHARDT: I'm sorry, what are you
2 reading from?

3 MR. SARVEY: My question.

4 HEARING OFFICER SHEAN: Okay, you said the
5 2002 CARB Almanac?

6 MS. LUCKHARDT: Yeah, you've referenced a --

7 HEARING OFFICER SHEAN: Is that the same one
8 that --

9 MS. LUCKHARDT: -- a document.

10 HEARING OFFICER SHEAN: Do you have that
11 provided in --

12 MR. SARVEY: I got it as exhibit number, if
13 you want to look at it. That would be number 14,
14 exhibit 14 in what I handed out.

15 MR. RUBENSTEIN: Exhibit 14 is not from the
16 CARB Almanac.

17 HEARING OFFICER SHEAN: Okay, apparently
18 it's 15.

19 MR. SARVEY: You're correct, Gary. It's
20 number 15, I'm sorry.

21 (Pause.)

22 MR. RUBENSTEIN: I'm sorry, what was your
23 question?

24 BY MR. SARVEY:

25 Q The 2002 CARB Almanac says that unpaved road

1 dust during the summer month averages 14.79 tons per
2 day and the average PM10 emissions from unpaved roads
3 in the wintertime is 3.92 tons per day. Does that
4 indicate to you that road paving emissions are far less
5 effective in the winter?

6 A Exhibit 15A and 15B do not appear to me to
7 be from the 2002 Almanac. Are they? Because the
8 footers at the bottom suggest that they are printed
9 from ARB's emissions inventory website.

10 And I'm not questioning the accuracy of the
11 tables, I just want to make sure for the record we're
12 clear as to what this document is and where it's coming
13 from.

14 (Pause.)

15 HEARING OFFICER SHEAN: All right, it's noon
16 straight up.

17 MS. LUCKHARDT: I don't know what --

18 HEARING OFFICER SHEAN: We think it would be
19 appropriate to take our lunch break at this point,
20 which a combination will get us refueled; maybe we can
21 get some brain food; help the intervenors work on
22 focusing your cross-examination.

23 And we know that we're going to have some
24 additional testimony --

25 MR. SARVEY: That was our last question.

1 HEARING OFFICER SHEAN: I'm sorry, what?

2 (Laughter.)

3 MR. SARVEY: That was our last question.

4 HEARING OFFICER SHEAN: Okay, that was your
5 last question.

6 MR. SARVEY: Like I said, subject to what I
7 hear from over here about the wood stove program. But
8 that was -- and the FDOC. But other than that I have
9 no other questions.

10 HEARING OFFICER SHEAN: Okay, well, then
11 it's a very appropriate time to take our lunch break.
12 And we will -- I don't think anybody is going to wander
13 too far offsite, but we'll be back to do this -- well,
14 does anybody need to do a full hour? Can we resume at
15 quarter to one, 45 minutes?

16 All right, we'll do that.

17 PRESIDING MEMBER PERNELL: Sounds good.

18 HEARING OFFICER SHEAN: 12:45.

19 (Whereupon, at 12:00 noon, the hearing was
20 adjourned, to reconvene at 12:45 p.m., this
21 same day.)

22 --o0o--

23

24

25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

AFTERNOON SESSION

12:55 p.m.

PRESIDING MEMBER PERNELL: On the record.

Mr. Shean.

HEARING OFFICER SHEAN: All right, given that we're starting again at about 12:55, it appears that based upon where we are we will not get to the compliance portion today. So, I've suggested the staff compliance witness can depart and we'll take that first in order tomorrow morning.

Plus I understand that -- all right, well, let's just leave it at that.

And we've concluded the cross-examination by the intervenor for now. And I guess --

MS. LUCKHARDT: Mr. Shean, do I get an opportunity to do redirect?

HEARING OFFICER SHEAN: Yes. I just thought before you did that we'd see if there were any Committee questions.

(Pause.)

HEARING OFFICER SHEAN: If I understand the

1 general thrust of the staff's view, both in this case
2 and other proceedings, it is that since PM2.5 may be
3 the particulate matter that has the most serious health
4 consequences, that therefore addressing and mitigating
5 it to the extent that is feasible, both technologically
6 and economically, that that is a desirable thing to do.

7 And so my question would be first of all,
8 whether you agree with that general concept.

9 MR. RUBENSTEIN: I can't give you a simple
10 yes or no answer to that question, and the reason is
11 that environmental controls are not adopted in a
12 vacuum. And there is, in air quality at least, a
13 rational planning program that goes on that takes a
14 look at a particulate air quality problem, like a PM10
15 or PM2.5, determines which pollutants or which
16 precursors are most relevant to contributing to that
17 problem within a particular area. And then establishes
18 a schedule and a program for control.

19 That is fundamentally different than saying
20 all ammonia is bad and therefore we should control
21 ammonia to the minimum extent possible.

22 HEARING OFFICER SHEAN: Or actually to the
23 maximum extent --

24 MR. RUBENSTEIN: I'm sorry, control to the
25 maximum extent possible.

1 And my fundamental objection to the staff's
2 position is that it is based on the broad precept that
3 you've just described. And I agree with you that I
4 believe that is the position that they've been
5 espousing in several cases.

6 That position is not placed within the
7 context of any organized or rational air quality
8 planning program. In the case of this particular
9 project and this particular Air District, it's quite
10 possible, although in my opinion very unlikely, but
11 it's quite possible that the Sacramento Air District
12 could conclude that ammonia emissions from all sources
13 need to be controlled in order to achieve state or
14 federal air quality standards, either for PM10 or for
15 PM2.5.

16 And if they were to do that they could, for
17 example, amend their new source review rule to
18 establish a BACT requirement for ammonia slip. That's
19 something that the South Coast Air District has done
20 because in their PM10 planning they have concluded very
21 definitely that they need to control ammonia emissions.
22 The Sacramento Air District has not.

23 In addition, if the Sacramento Air District,
24 as part of their PM10 planning effort, concluded that
25 they needed to control ammonia, they could adopt rules

1 that affect existing sources of emissions, including
2 this power plant.

3 In the case of this power plant there's
4 nothing fundamentally inherent in its design that I'm
5 aware of, that would preclude the Air District, if they
6 decided it was necessary, from changing the ammonia
7 slip limit from 10 ppm to 5 ppm at some point in the
8 future.

9 And, again, my objection in this proceeding
10 is that the staff is suggesting because it can be done
11 it should be done. And I think the right question is,
12 is it necessary in this region. And then, and only
13 then, should you ask can it be done.

14 I don't -- this Commission does not hear me
15 opposing 5 ppm slip levels in the South Coast Air
16 Basin. This is not something that I do, as a matter of
17 principle, I always think 10 ppm is okay and 5 isn't.
18 I think it's very much a site-specific and project-
19 specific issue. And I think that it's the Air
20 Districts who have the principal responsibility and the
21 principal capability of determining whether or not
22 additional ammonia control in a particular area is
23 necessary or not.

24 HEARING OFFICER SHEAN: And in that respect,
25 I guess -- am I also correct that the difference

1 between a facility that will meet a 10 ppm versus a 5
2 ppm limit is a combination of the design of the initial
3 catalyst for the volume and temperature of the exhaust,
4 and the added operation and maintenance costs
5 associated with getting down to the 5 ppm level? Is
6 that the fundamental difference?

7 MR. RUBENSTEIN: Yes, and if I could explain
8 both of those. That's fundamentally correct.

9 With respect to catalyst size a system that
10 is designed to meet -- let me back up a second.
11 Catalyst size is one of several catalyst specifications
12 for an SCR system. And those specifications are all
13 targeted towards a guarantee level. And the guarantee
14 level is expressed as a combination of a NOx
15 concentration and an ammonia concentration at the end
16 of the catalyst's guaranteed life.

17 So that, for example, for this project that
18 might be that the catalyst is sized and designed to
19 achieve a 2 parts per million NOx level, and a 5 parts
20 per million ammonia slip level at the end of three
21 years; assuming, for example, the catalyst was
22 guaranteed for a three-year life.

23 And that guarantee holds true only during a
24 steady state test. And so what I'm about to say with
25 respect to ammonia slip only applies to steady state

1 conditions, which is an important distinction. But
2 it's not particularly relevant because that's the only
3 way people measure ammonia, is in steady state
4 conditions.

5 So, with those three parameters, the NOx
6 concentration, the ammonia concentration and the
7 catalyst life, you have, in effect, set the design
8 objectives and the engineer is then going to go figure
9 out how big a catalyst do you need; what material does
10 it need to be; what temperature range does it need to
11 be.

12 Once you have done that then the SCR control
13 system in the plant operates, controls NOx emissions to
14 a level that's slightly below the designed NOx level.
15 In the case of a plant with a 2 ppm limit that might be
16 1.8 parts per million, for example. Maybe 10 percent
17 below the limit.

18 The ammonia slip from that catalyst when
19 it's new is very low, on the order of 1 ppm or less,
20 assuming the system is well designed and well
21 engineered.

22 That ammonia slip will gradually rise over
23 time as catalyst performance gradually degrades. And
24 it's not a linear curve; it's a very gradual curve over
25 time. And then towards the end of the catalyst's life,

1 the decay will become more rapid.

2 If you have a properly designed system, if
3 the world is theoretically perfect, that curve of
4 ammonia slip will rise up and reach its guarantee
5 point, while NOx levels are being held steady, just at
6 the end of that catalyst's life.

7 If you have a system that's designed to 2 to
8 5 ppm slip level, but it has a regulatory requirement
9 of 10 parts per million, that means that you can extend
10 that catalyst's life. Because it will start coming up
11 on the curve, and perhaps after three years it might
12 reach 5 parts per million; and it may take another year
13 or two before it gets up to 10 parts per million.

14 Consequently there's an economic benefit to
15 be gained for developers to design their systems to be
16 more stringent than regulations require because it
17 costs money to replace the catalyst. It costs money to
18 have the plant down in order to do catalyst replacement
19 because it's not something that you can do overnight;
20 it's a fairly extensive operation.

21 And so that's why I think you may see
22 several developers have said, oh, yeah, we're going to
23 go ahead and agree to a 5 ppm slip level because
24 economically we think it makes sense to design the
25 plant in that way.

1 To the best of my knowledge this plant is
2 designed in that way. It's designed to reach 5 ppm
3 slip level at the end of its useful life, not because
4 we believe that -- or I believe that there's a
5 regulatory basis or an environmental need for it, but
6 because economically it's more rational to do that.

7 Now, the difference between imposing a
8 regulatory limit of 10 ppm and a regulatory limit of 5
9 ppm means fundamentally that for this project the
10 catalyst would have to be replaced more often.

11 Now, as I've laid this out, you recall that
12 I keep saying the NOx level is steady. And that's by
13 design. That's how these control systems work. So
14 there is no benefit in terms of reduced NOx emissions
15 by replacing the catalyst more often. The NOx levels
16 are going to be held to a little bit below the permit
17 limit forever. They're not going to gradually degrade
18 over time. That's the way the system's designed; it's
19 the ammonia slip level that comes up.

20 If catalyst replacements were inexpensive,
21 if they didn't require extensive plant shutdowns then
22 we might not be sitting here having this discussion
23 about what the limit should be. But, the plant and the
24 community's already going to get the benefit of the
25 fact that the plant is designed to meet that lower slip

1 level.

2 And I've not heard or seen any compelling
3 arguments as to why there's an environmental reason why
4 the catalyst needs to be replaced more frequently at
5 the tail end of that cycle, the two to three to five
6 years at the end of the cycle in order to address PM2.5
7 or PM10 air quality.

8 But that's also why I say if the Air
9 District at some point in the future were to decide
10 that ammonia control was necessary, then it would not
11 be -- it would certainly be expensive in terms of
12 operation and maintenance, but it wouldn't require any
13 fundamental redesign for this plant to have to meet a 5
14 ppm slip level should that prove necessary in the
15 future.

16 HEARING OFFICER SHEAN: Okay, if I
17 understand your testimony, then, fundamentally SMUD
18 does not have essentially the objection should the
19 District, at a later date, come out with essentially a
20 retrofit requirement or a lower emission rate
21 requirement for ammonia of saying, look, we've already
22 invested in the catalyst; it was sized at 10 ppm. And
23 to go to this rule is now going to create a substantial
24 added expense in changing the design of our facility.

25 Because I guess if you anticipate that there

1 may be a basis upon which the District will eventually,
2 at some point, whether it's five, ten or 15 years down
3 the road, come up with a lower ammonia level, I guess
4 what -- among the things that the staff's
5 recommendation would do is at least eliminate the
6 objection of you, as a developer, and other developers,
7 that we can't meet that without a substantial capital
8 cost to change the design of our project.

9 And if I understand your testimony, it
10 fundamentally is that this project is being designed to
11 accommodate a catalyst that has a greater ammonia slip
12 reduction capability than is necessary under the
13 current District rules?

14 MR. RUBENSTEIN: Everything you said I agree
15 with as correct with one caveat. And that caveat is if
16 at the time the Air District were to hypothetically
17 adopt an ammonia slip limit, if they were to require
18 that that limit be enforced using a continuous
19 emissions monitor, so that that slip limit had to be
20 met under all operating conditions, there would be a
21 significant capital cost impact to the project.

22 Because the issue there isn't the catalyst,
23 but it's the ammonia control system which would need to
24 be far more sophisticated than the current system in
25 order to achieve that kind of performance on a minute-

1 by-minute basis or even hour-by-hour basis.

2 For steady state testing I agree with you
3 completely and everything you said I concur with.

4 HEARING OFFICER SHEAN: But that would be a
5 choice of the District as to whether it was a steady
6 state requirement or a continuous requirement?

7 MR. RUBENSTEIN: That's correct. But your
8 question to me was would SMUD, for example, not object.
9 And my answer is they would object on the capital cost
10 if there was a CEM requirement.

11 HEARING OFFICER SHEAN: Would the Commission
12 engineers who might be reviewing, or at least the
13 compliance program monitor be able to verify, from
14 whatever design drawings they will eventually get from
15 SMUD that the catalyst, itself, is sized in a manner
16 that was just described here?

17 MR. RUBENSTEIN: Yes. Yes, because the
18 performance specifications you would get would include
19 an indication of what the vendor expects the
20 performance to be. And it would indicate 2 parts per
21 million NOx and 5 parts per million of ammonia on a
22 steady state basis.

23 HEARING OFFICER SHEAN: And the engineers
24 would also get information that confirms the 10 ppm
25 level that you're meeting is based upon a steady state

1 evaluation of the performance of the catalyst, and they
2 could anticipate that had -- that a rules change even
3 were to occur may or may not require the steady state
4 versus a continuous emissions essentially monitoring
5 capability, if I'm understanding what you testified to
6 before?

7 MR. RUBENSTEIN: None of the documents that
8 the staff would receive would make any reference to 10
9 ppm because this unit's designed for 5 in terms of the
10 ammonia slip.

11 HEARING OFFICER SHEAN: Okay.

12 MR. RUBENSTEIN: And the documents would
13 also clearly indicate, I think, that that performance
14 was going to be guaranteed based on steady state
15 testing.

16 HEARING OFFICER SHEAN: All right, well, I
17 think that fundamentally answers the question.

18 I have no further questions. So if you have
19 some redirect, please go ahead.

20 MS. LUCKHARDT: Okay, I just have a couple.

21 REDIRECT EXAMINATION

22 BY MS. LUCKHARDT:

23 Q Ms. Holmes asked you about whether you had
24 conducted a broad regional area analysis of ammonia as
25 it relates to particulate emissions. Do you remember

1 that discussion?

2 A Yes, I do.

3 Q And could you explain why you did not
4 conduct that analysis?

5 A It's basically for the reasons I just gave
6 in answering the questions from Mr. Shean. I did not
7 do that kind of analysis because I relied on, and do
8 rely on the Air District to do that kind of air quality
9 planning on a broad basis in determining whether in a
10 particular region more or less, in this case ammonia
11 control, is necessary.

12 And that's why, as I indicated, my position
13 on this issue has varied from District to District
14 based on what the work has been done in that particular
15 District.

16 Q Okay, you were also asked about EPA comment
17 letters on Blythe and Pastoria. Do the permits for
18 Blythe and Pastoria have a NOx limit of 2 or 2.5?

19 A The permits for both of those projects have
20 a NOx limit of 2.5 parts per million.

21 Q And you were also referred to an ARB
22 document in which I believe it is suggested that
23 projects have a 5 ppm ammonia slip, is that the correct
24 characterization?

25 A Not quite. In that document, which is ARB's

1 1999 power plant siting guideline, the Air Resources
2 Board discusses the issue of ammonia slip, and they
3 chose their words very carefully. They recommend that
4 Air Districts consider an ammonia slip level of 5 parts
5 per million.

6 if you contrast that recommendation with the
7 recommendations they give, for example, on NOx or VOC
8 or carbon monoxide, it's a very clear distinction in
9 the language they choose indicating, to my reading, and
10 I think to the mind of most Air Districts, based on
11 what I've seen, that there's more flexibility and more
12 discretion provided to the Air Districts on ammonia
13 slip than there is to the other pollutants.

14 Q And does that document also recommend a NOx
15 limit of 2.5?

16 A Yes, it does.

17 Q And then could you explain the relationship
18 between the NOx limit and ammonia? Maybe you've
19 already kind of done that, but just summarize it
20 shortly.

21 A Yeah, I pretty much have. The NOx limit and
22 ammonia limits, together, along with the catalyst life
23 are the three fundamental parameters that define the
24 rest of the SCR system design. There are two other
25 parameters just to complete that description that are important.

1 One is the NOx emissions that are going into
2 the catalyst. And then the second is the quality of
3 the exhaust gas, meaning what type of fuel you're
4 burning and how contaminated it is. For all the
5 projects or most of the projects this Commission
6 reviews, that's not an issue because they're all gas-
7 fired plants.

8 The answers that I've given today both to
9 questions from Mr. Shean and also from the staff
10 regarding technical feasibility are pretty specifically
11 focused on the turbines proposed for this project.
12 Because the turbines proposed for this project are
13 expected to have NOx emission rate of about 9 parts per
14 million or less.

15 Many of the turbines that are proposed for
16 projects that the Commission reviews have expected NOx
17 levels that may range from 15 to 25 parts per million
18 or more.

19 The combination of getting that higher
20 efficiency from 15 or 25 or 30 parts per million going
21 all the way down to 2, in combination with a 5 parts
22 per million slip, is a much greater technological
23 challenge than is the case for the turbines proposed
24 for this project.

25 And so I just wanted to make that clear in

1 the event, as is always the case I think I said one
2 proceeding ending up in another, are differences
3 between the turbines that can lead to problems.

4 Two very simple examples of that are that in
5 the Alliance -- Century facilities in southern
6 California, which I believe were licensed by the
7 Commission under the emergency siting process, those
8 turbines were required by the South Coast District to
9 meet NOx levels of 5 parts per million because they're
10 small peaking units. And an ammonia slip level of 5
11 parts per million because that is BACT in the South
12 Coast.

13 All eight of those units are under variance
14 because they've been unable to meet their ammonia slip
15 levels.

16 And the second example relates to the Sutter
17 Power project, which was one of the first of the new
18 generation projects licensed by this Commission, it had
19 an ammonia slip level of 10 parts per million. And
20 during its initial source tests it was unable to meet
21 that level.

22 And as you recall, when I was talking about
23 the interaction between these pollutants I indicated
24 that ammonia slip levels are generally very low at the
25 beginning of the catalyst life, and gradually

1 deteriorate upwards.

2 That plant came into compliance shortly
3 after its initial tests, but it has ammonia slip levels
4 that are far higher than what one would normally
5 expect. And part of that is attributable to the fact
6 that the turbines for that particular plant have NOx
7 levels that are on the order of 30 parts per million.

8 Consequently these all factor in, and
9 perhaps I'm a little more sensitive than others in
10 terms of not simply relying on vendor guarantees,
11 because for both of the projects I referred to, the
12 Alliance and Sutter plants, there were vendor
13 guarantees. They said, fine, sure, we'll meet it, but
14 the fact is that we're really pushing things quite a
15 bit. Which is another reason why I think it's
16 appropriate to over-design a plant, as is the case
17 here, but still provide for flexibility in the
18 regulatory limits.

19 Q And then Mr. Sarvey referred you to a page
20 198 out of, I believe, an ARB document. Could you
21 describe what that page is intended to show within the
22 context of that document?

23 A That was the page that was titled Sacramento
24 Valley Air Basin PM10 emission trends and forecasts.

25 And that is taken out of a publication that

1 ARB issues roughly every year or so, referred to as the
2 ARB Almanac. It includes a compilation of basic air
3 emissions and air quality trends data for the entire
4 state.

5 And on that particular page what's
6 referenced are emission trends as opposed to air
7 quality trends. And it's looking at directly emitted
8 PM emissions.

9 Trying to draw a conclusion between PM10
10 emissions and PM10 air quality is extremely tenuous.
11 As we know, most of the discussion we've had today have
12 dealt with emissions of oxides of nitrogen, ammonia and
13 sulfur dioxide, which are precursors to PM10. And none
14 of those emissions are reflected in the table that Mr.
15 Sarvey presented.

16 The photochemistry involving PM10 and PM2.5
17 formation is very complicated. And most of what we
18 breathe as PM10 is not directly emitted as PM10. It's
19 formed in the atmosphere from these other precursors.

20 So, in terms of this particular chart I
21 don't think there are any conclusions that you can draw
22 regarding PM10 air quality trends based on PM10
23 emissions.

24 Q And just as a clarification does the Three
25 Mountain project contain a NOx limit of 2.0 or 2.5?

1 A Three Mountain Power NOx limit is 2.5 parts
2 per million.

3 Q And one last question. You were asked about
4 the Palomar condition. Could you explain that
5 condition?

6 A Yes. The staff had, I believe it was Mr.
7 Sarvey who asked me a question about that today, and
8 the staff had cited that as an example at the last
9 workshop we had.

10 The developer of the Palomar project has
11 apparently agreed to a condition limiting ammonia slip
12 to 5 parts per million with some exceptions for
13 transient conditions.

14 And when I saw that condition it confused me
15 because ammonia slip is only measured during source
16 testing at a steady state. There isn't any need for a
17 transient exclusion. And I called the consultant for
18 that project to try to understand more what the
19 applicant's thinking was along those lines. And as is
20 typical these days, we traded voicemails, and we never
21 actually spoke.

22 But in that exchange she indicated to me
23 that she believed that that condition derived from
24 language that was proposed in the East Altamont
25 project. I worked on the East Altamont project and

1 there wasn't any such condition there.

2 There was similar language related to NOx
3 emissions, and so perhaps there was some monumental
4 confusion.

5 But, in any event, the Palomar condition, as
6 I said, it was a 5 ppm slip level. It was accepted by
7 the applicant in that case as a means of getting to
8 some resolution with the CEC Staff. And it has some
9 exception language in it which I think is comparable to
10 what the staff has proposed here, but which, to my
11 mind, is meaningless because, as I said, you don't
12 measure ammonia emissions during transient conditions.
13 You only measure them during steady state.

14 MS. LUCKHARDT: I have nothing further.

15 HEARING OFFICER SHEAN: Recross?

16 MS. HOLMES: Just a couple of questions.

17 //

18 //

19 RECCROSS-EXAMINATION

20 BY MS. HOLMES:

21 Q Mr. Rubenstein, the ARB guidance document
22 that we've been referencing earlier this afternoon, in
23 the discussion of that document --

24 HEARING OFFICER SHEAN: Let's make sure it's
25 clear, because it's not the 2002 Almanac, it's the 1999

1 document --

2 MS. HOLMES: Thank you very much.

3 HEARING OFFICER SHEAN: -- document,
4 correct?

5 BY MS. HOLMES:

6 Q It's the 1999 guidance for power plant
7 siting and best available control technology. And
8 earlier today we've had several discussions, actually,
9 about the fact that there's a recommendation in that
10 document that ammonia slip would be limited to 5 parts
11 per million. Do you recollect that discussion?

12 A The recommendation that Districts consider 5
13 ppm slip level, yes.

14 Q And in that document does ARB distinguish
15 between areas that are ammonia rich and areas that are
16 not?

17 A No, they do not.

18 Q A few moments ago we had a discussion, or
19 you offered a discussion about some difficulties that
20 certain projects had encountered in meeting certain
21 permit limitations.

22 I'd like to ask you whether or not there's a
23 difference between the performance of an SCR unit for
24 peaker projects and for combined cycle projects.

25 A Not in the context of ammonia slip, no.

1 Q Isn't it true that the SCR performance, in
2 terms of NOx control, tends to be a bit more difficult
3 with peakers than it does for the combined cycle
4 projects?

5 A The durability of the catalyst is more
6 problematic, not the performance when units are new.

7 Q Is that because the peaker units run much
8 hotter?

9 A All of the units that I'm familiar with use
10 dilution air to cool the exhaust temperature down to a
11 point where the catalysts are in their proper operating
12 range.

13 Q So it's fundamentally you're talking about
14 application to a fundamentally different type of
15 technology when you're discussing peaker plants?

16 A Not in the context of ammonia slip.

17 Q You had a discussion -- you offered a
18 discussion earlier this afternoon in response to a
19 question from the Committee concerning the relationship
20 between NOx levels and ammonia slip levels. And let me
21 see if I understood what you were saying.

22 I believe that what you were saying was that
23 the NOx level gets established. And typically the
24 performance of the catalyst results in the actual NOx
25 emission levels of being slightly under that whereas

1 the ammonia slip levels tend to start out fairly low
2 and then increase, I believe you indicated with your
3 hand, a sharp curve towards the end of the lifetime of
4 the catalyst.

5 Did I understand that correctly?

6 MS. LUCKHARDT: I guess I have an objection
7 because the cross should be limited to question on my
8 redirect, and not those of the Committee.

9 MS. HOLMES: You --

10 HEARING OFFICER SHEAN: Well, let's not get
11 that technical. Let's see where this goes.

12 BY MS. HOLMES:

13 Q Did I understand your explanation correctly?

14 A Close. The only change that I'd make is
15 when you refer to the NOx level being slightly lower
16 than the limit, that's not because of the performance
17 of the catalyst. That's the way the control system is
18 set to operate.

19 Q Would it be fair to say that the NOx level
20 doesn't affect the ammonia slip level?

21 A No. For a given catalyst design they're
22 inversely -- in general they're inversely related.
23 Once you have a given catalyst design, if you inject
24 more ammonia in order to further reduce NOx emissions,
25 there will come a point when your ammonia slip levels

1 start to go up.

2 Q Let me ask the question a different way. I
3 hope we can move off of this quickly. Given that I
4 believe your testimony was the NOx levels stay at or
5 below the limit for the life of the catalyst. And that
6 the ammonia slip levels tend to rise towards the end of
7 the life of the catalyst. Do you have -- let me just
8 stop right there and say, is that correct?

9 A Yes.

10 Q And is that true regardless of whether or
11 not the NOx levels are 2 or 2.5 or any other number?

12 A If the catalyst is designed correctly then
13 yes, that's the correct answer.

14 MS. HOLMES: Those are all my questions.

15 HEARING OFFICER SHEAN: Okay, you got what
16 you wanted. Intervenors, any recross? Understanding
17 it's relatively limited to what --

18 MS. PEASHA: No, I do not, sir. Thank you.

19 HEARING OFFICER SHEAN: All right, thank
20 you. All right, that'll conclude Mr. Rubenstein's
21 testimony. Thank you very much.

22 MS. LUCKHARDT: Mr. Shean, before you go on,
23 Mr. Cohn just wanted to clarify the filing issues
24 regarding the FDOC, so if you'll just allow him a
25 second.

1 MR. COHN: Just real briefly. There's been
2 a contention that Ms. Peasha did not receive the FDOC,
3 and therefore has made a request to make witnesses
4 available at a later date. And I understand that's
5 under advisement by the Committee, and I respect that.

6 I just want to be sure when the Committee
7 considers what opportunity is reasonable in this
8 regard, that you take into account the following.

9 First of all, the preliminary determination
10 of compliance, which is virtually identical to the
11 final, was released on June 28th and docketed and
12 served on all parties, including -- of 2002 -- and
13 served on all parties including Ms. Peasha, and was
14 docketed with the Energy Commission.

15 In addition, the Air District mailed out
16 notice to a separate mailing list that also included
17 Ms. Peasha, that that was available.

18 On October 23rd, the FDOC was filed,
19 docketed with the Energy Commission, original and 12
20 copies. We have a proof of service under penalty of
21 perjury by Mr. John Carrier. That was docketed with
22 the Energy Commission and served on the service list
23 which includes all intervenors including Ms. Peasha.

24 It does not include Mr. Sarvey because he's
25 not an intervenor. Of course, he could, if he wanted

1 to, scan the website. He would have been aware,
2 because it was also -- all documents are either in
3 their entirety included in the electronic files, which
4 are on the website; or in the case of a large document
5 of this type, the notice is put on there that it's
6 available upon request.

7 In addition, on November 15th SMUD filed a
8 status report to this Committee, served once again on
9 Ms. Peasha and all parties, docketed, referencing the
10 FDOC. The FDOC was referenced numerous times,
11 including in her own testimony, by a witness who isn't
12 here, but obviously Ms. Peasha's in contact with by the
13 name of Mr. Boyd, who references the document.

14 On January 13th we had a status conference
15 before this Committee at which time we talked at some
16 length about the FDOC. Also, February 21st the
17 prehearing conference at which time we also referenced
18 this, and even discussed the Air District being present
19 today to present the FDOC.

20 And, of course, it's referenced in the staff
21 FSA; it's referenced in the SMUD's testimony, all of
22 which were filed well in advance of this hearing.

23 So I just want that to be on the record so
24 the Committee can take that into account when you
25 decide what level of additional hearing is required on

1 air quality.

2 Thank you very much.

3 MS. PEASHA: I would like to comment to
4 that. I have had many documents delivered the day
5 before my meetings when they were my data responses.
6 And John Carrier said, well, we sent them to you. And
7 I received them after checking with my post office
8 twice, because I know that I'm supposed to get them ten
9 days prior to any meetings.

10 Mr. Carrier then promised that any documents
11 that was going to be sent out he would call in advance
12 and would let me know so that I would expect them. It
13 happened a few times he called; his substaff did call
14 me and verify that I was getting documents, and I would
15 verify back.

16 And then I got documents without
17 verification. So -- and I have several different
18 witnesses that will -- that are on my witness list
19 tomorrow -- that will verify that they are on mailing
20 lists and have not received the documents that they
21 have signed up for. And they haven't even received the
22 public hearing notices, which they are on mailing lists
23 three and four times over.

24 So I cannot rely on the fact that they've
25 docketed it, and I did not receive it. When I talked

1 to Mr. Roskey yesterday he said he had to go down and
2 pay the postage on something that he -- and I cannot,
3 you know, I live at the same address. I get three
4 copies now of meetings, one under each name that I've
5 retained under.

6 But, I have no record of it. And I cannot
7 explain why. And with the inconsistency with John
8 Carrier's promises to me, what more can I say. And I'd
9 like to see it proved on the docket log, too.

10 HEARING OFFICER SHEAN: Okay. Interesting
11 discussion from both, but we already dealt with this
12 matter. We were going to give you a chance to deal
13 with this, and --

14 MS. PEASHA: Thank you.

15 HEARING OFFICER SHEAN: -- we're ten minutes
16 later and nothing productive has happened. Staff,
17 let's go with you and your witness.

18 MS. HOLMES: Staff's witnesses in the area
19 of air quality are Tuan Ngo and Mr. Layton. I believe
20 they were both present this morning when there was --

21 HEARING OFFICER SHEAN: Okay, you both
22 having been previously sworn.

23 Whereupon,

24 TUAN NGO and MATTHEW LAYTON

25 were called as witnesses herein, and having been

1 previously duly sworn, were examined and testified as
2 follows:

3 HEARING OFFICER SHEAN: Let's get them a
4 microphone.

5 MS. HOLMES: One change I would like to make
6 since Mr. Layton participated in the preparation of the
7 changes that were filed yesterday, is that I would like
8 to add his name to the FSA, as well. He is the -- I
9 don't actually know what his title is, but I know he
10 participated in the preparation of the testimony. I
11 believe he's the Technical Senior.

12 And so if there's no objection, without
13 having to go through all of his qualifications, I'd
14 simply like to add his name to the FSA witnesses, as
15 well.

16 MS. LUCKHARDT: Yeah, we have no objection.

17 HEARING OFFICER SHEAN: All right, --

18 MS. HOLMES: All right, then I'll --

19 HEARING OFFICER SHEAN: -- we'll allow that.

20 MS. HOLMES: -- I'll proceed.

21 DIRECT EXAMINATION

22 BY MS. HOLMES:

23 Q Mr. Layton and Mr. Ngo, did you prepare the
24 testimony on air quality that is found in the FSA and
25 the filing that staff made yesterday afternoon?

1 MR. NGO: Yes, we did.

2 MS. HOLMES: And were statements of your
3 qualifications included, Mr. Ngo, in the FSA? And, Mr.
4 Layton, in yesterday's filing?

5 MR. NGO: Yes.

6 MR. LAYTON: Yes.

7 MS. HOLMES: Do you have any corrections or
8 changes?

9 HEARING OFFICER SHEAN: Apparently can't be
10 heard.

11 MS. HOLMES: Do you have any changes or
12 corrections to make to your testimony at this time?

13 HEARING OFFICER SHEAN: May I ask the staff,
14 do you have another copy of your filing from yesterday?

15 UNIDENTIFIED SPEAKER: (inaudible).

16 MS. HOLMES: I can give you a --

17 MR. LAYTON: Yes, we do. The applicant has
18 indicated that we have agreed to a change to air
19 quality staff condition 4. The applicant has provided
20 that agreed-upon language in Cosumnes Power Plant air
21 quality condition of certification versions agreed to
22 by CEC Staff and applicant that was handed out today by
23 the applicant.

24 Staff did not include that in their FSA
25 errata. It should have been there. The language that

1 is contained in the applicant's document from today is
2 correct. And staff agrees to the changes in SC-4.

3 MS. HOLMES: Are there other changes, as
4 well?

5 MR. LAYTON: Similarly, staff left out the
6 changes that were being proposed for air quality
7 condition 42 and air quality condition 43. Again, the
8 correct version is contained in the Cosumnes Power
9 Plant air quality conditions of certification, version
10 agreed to by CEC Staff and applicant, that applicant
11 handed out today.

12 Again, the correct language for 42 and 43 is
13 contained in that document.

14 MS. HOLMES: And with those corrections are
15 the facts contained in your testimony true and correct?

16 MR. LAYTON: Yes.

17 MR. NGO: Yes.

18 MS. HOLMES: And do the opinions contained
19 in that testimony represent your best professional
20 judgment?

21 MR. NGO: Yes.

22 MR. LAYTON: Yes.

23 MS. HOLMES: In the interest of time I would
24 like you to keep your summary quite focused and short -

25 -

1 HEARING OFFICER SHEAN: Okay, in the
2 interest of time we have one little housekeeping thing
3 we have to go through. Is there objection to these
4 witnesses being qualified to testify as experts?

5 Hearing none, they are qualified.

6 MS. HOLMES: Thank you, Mr. Shean.

7 HEARING OFFICER SHEAN: Now, is there
8 objection to the admission into evidence AFC section
9 4.1-1 and the pertinent air quality errata in the
10 staff's filing of March 12, 2003?

11 MS. LUCKHARDT: We have no objection.

12 MR. SARVEY: Objection to condition AQSC-5
13 being removed.

14 HEARING OFFICER SHEAN: I'm sorry?

15 MR. SARVEY: Object to the condition
16 removing the wood stove program from the conditions of
17 certification.

18 HEARING OFFICER SHEAN: Okay. Just by way
19 of understanding, the conditions are merely
20 recommendations by the staff. They're not assertions
21 of a factual matter, such as the sun rises in the east.
22 That's the kind of thing that ordinarily would be
23 objectionable. These are merely recommendations. Any
24 recommendation that you have has equal standing with
25 that.

1 So, with that little informational piece,
2 their testimony is admitted.

3 MS. HOLMES: Thank you. Now I'd like to ask
4 the witnesses to provide a brief summary of their
5 testimony, focusing perhaps on the two issue that have
6 been of contention here today. The elimination of the
7 wood stove program and the question of what the
8 appropriate ammonia slip level would be. And perhaps
9 just a very very brief discussion about the difference
10 between staff and the applicant on the reporting
11 requirements.

12 HEARING OFFICER SHEAN: On the what?

13 MS. HOLMES: Reporting requirements.

14 HEARING OFFICER SHEAN: Okay.

15 MR. NGO: Staff will evaluate the project
16 and find out that the project have an impact on PM2.5
17 and PM10. So what we do, we recommend wood stove
18 replacement.

19 After the meeting with the applicant and we
20 agree to revise the calculation method to be consistent
21 with other cases. And what we did was we recalculate
22 the emission calculation that's provided in the revised
23 air quality table 8 and 9 of the errata.

24 There were two different thing that we do,
25 we revised in table 8 and 9. One of them --

1 MS. HOLMES: Tuan, could you provide the
2 page number for the people that are trying to follow
3 this?

4 MR. NGO: Air quality, revised air quality
5 table 8; it's in page 3 of the supplemental. And table
6 9 on page 4 of the supplemental.

7 MR. SARVEY: Excuse me, Mr. Hearing Officer,
8 we do not have a copy of that errata.

9 MS. HOLMES: It's on the back table.

10 HEARING OFFICER SHEAN: Apparently not. I
11 saw Mr. Ringer go back and be unable to find it. So
12 let's see what we can do here.

13 (Pause.)

14 MS. HOLMES: I have one extra copy I can
15 make available --

16 HEARING OFFICER SHEAN: Okay, I think so far
17 we're --

18 MS. HOLMES: -- to people.

19 HEARING OFFICER SHEAN: -- all right.

20 MS. HOLMES: Doesn't have a POS on it.

21 Okay.

22 MR. NGO: Anyway, go back to my testimony.
23 There were two things that we do different. There was
24 two things that I revised out of -- revised air quality
25 table 8 and 9.

1 Number one, we -- in the original table we
2 type in the number directly from the District with the
3 discount factor 1.2 to 1.5 for sources that are located
4 far away from the project.

5 And what we did with this, with air quality
6 table 8 and 9, we took out the discount factor, so we
7 give them full credit for SOx, with the sulfur oxide
8 compound, and PM2.5.

9 The second thing that we do was we revise
10 the emission from both the facility and two fugitive
11 sources of emission reduction credit to account for the
12 PM2.5 fraction.

13 After we do that we tally up the whole thing
14 for SOx and for PM2.5. And then we coming up with --
15 if I could recall you to table, revised air quality
16 table 9 on page 4 of the supplemental, we have an
17 increase of PM2.5 by 3500 pound, approximately, in
18 quarter four. And we have a surplus of 13,560 pound in
19 the quarter one. And identify in the FSA the problem
20 for the area was within November, December and January.

21
22 So the two month, November and December,
23 will fall under quarter four. And the January month
24 will fall under quarter one.

25 So what I did was to check two-third of the

1 portion of the increase of PM2.5 in quarter four, and
2 add on top of that the surplus of one month in quarter
3 one, and the result was to make it short, that they
4 have a surplus for the problem and for PM2.5 direct
5 emission.

6 Because of that we realize that the need for
7 PM2.5 mitigation that identified the wood stove
8 replacement program identified in the FSA is no longer
9 justified. And so we withdraw that.

10 MS. HOLMES: Thank you. Could one of you
11 please focus on the ammonia slip issue?

12 MR. NGO: The ammonia slip issue, there was
13 a lot of discussion on this one. And I believe what we
14 have say so far, and I think the applicant agree, is
15 that the ammonia slip feasibility is not really an
16 issue.

17 An issue here is what are the emission from
18 the ammonia. What we did with the -- what we provide,
19 an analysis in the FSA, we are not arguing with the
20 applicant about whether the ammonia, that this area in
21 general, Sacramento, whether it's ammonia rich or
22 ammonia lean.

23 What we are saying is that even in the area
24 that we know there is information to certify that the
25 area is rich; for example, Denver area, The potential

1 for ammonia conversion is 30 percent. And therefore,
2 with the 10 ppm ammonia slip, even -- let's just assume
3 that -- let's for a moment accept that Sacramento is
4 ammonia rich.

5 We are talking about roughly 800 pound a day
6 of ammonium nitrate. Now, I didn't want to confuse the
7 matter, but assume that if the area is ammonia lean,
8 then that number going to be higher.

9 Okay, bear with me for a minute, I try to
10 find that page.

11 (Pause.)

12 MR. NGO: This 800 pound per day of ammonia
13 emission, this one will be equal to about 125, a little
14 more than 125 tons of PM2.5 that will be contribute to
15 the ambient area in Sacramento. That is a fairly
16 significant amount.

17 Now, if we just focus only the three months
18 out of the year where we have a problem with the PM2.5,
19 which is November, December and January, a fourth of
20 that is still a little more than 30 tons a year of
21 PM2.5 that have not been mitigated.

22 So, that pretty much is the basis of what we
23 are recommending the ammonia slip emission to be
24 maintained at 5, so just to mitigate that contribution
25 from PM2.5.

1 MS. HOLMES: Could one of you please respond
2 to the table that Mr. Rubenstein provided this morning
3 that listed other siting cases and the ammonia slip
4 level that was certified for those. And explain why
5 you believe that a 5 ppm level at 2 parts per million
6 NOx is feasible?

7 MR. LAYTON: What we see as a trend in
8 projects going to 2 ppm NOx and 5 ppm ammonia, and in
9 fact, out of state some projects have gone to 2 ppm NOx
10 and 2 ppm ammonia, as well.

11 The Three Mountain project actually was
12 certified at 2.5 in the license. However, there's an
13 agreement that they will try to achieve 2 ppm NOx and 5
14 ppm ammonia.

15 The Palomar project is currently not yet at
16 a decision, but it is at 2 ppm NOx, 5 ppm ammonia. El
17 Segundo and Inland Empire also FDOCs have been issued,
18 but the decision has not been rendered yet. They're at
19 2 ppm NOx and 5 ppm ammonia. And Tesla project is at 2
20 ppm NOx and 5 ppm ammonia.

21 We think that these particular projects are
22 able to compete in California, and at that same time
23 address this potential contribution to the PM2.5.

24 That's it on that.

25 MS. HOLMES: And then finally perhaps the

1 Committee would like a brief discussion of why there's
2 a difference between SMUD and the Energy Commission
3 Staff with respect to the reporting requirements.

4 MR. LAYTON: Staff is obviously licensing
5 this project for 30 years. And staff is always
6 interested in knowing if the project actually complies
7 with its license; and also if its conditions are
8 relevant to the safe and reliable operation of that
9 particular project.

10 What we're asking for in SC-8 is information
11 that will help us verify that the project is actually
12 operating in compliance. And also let us know if these
13 kind of projects are actually going to continue to be
14 reliable and safe in the State of California.

15 The Air District has a very specific goal in
16 mind, reporting violations. Staff is trying to go
17 beyond that. And so we're asking for more information.

18 And also I guess I'd like to address some of
19 the other conditions that have come up. Going back to
20 staff condition 3, subparagraph (n), which is for
21 Nancy. And we appreciate the applicant putting
22 together this wind table for the area. We concur, the
23 area is windy. And there will be a lot more emissions
24 from that site in the way of fugitive dust during those
25 windy events. So we continue to stress that we would

1 like to see some curtailment of operation or activity
2 during those windy times.

3 PRESIDING MEMBER PERNELL: Is that because
4 of the dust? Or is that because of a job safety issue?

5 MR. LAYTON: We're concerned with the
6 fugitive dust. But I'm sure that if it gets too windy
7 and the plumes start to interfere with the visibility
8 there could be a safety issue. We had not addressed
9 that, though.

10 PRESIDING MEMBER PERNELL: But your
11 recommendation is watering every four hours?

12 MR. LAYTON: Yes, sir. However, during dry
13 conditions and during windy conditions the ground can
14 dry out very quickly.

15 Also, staff condition 3, items (p), (q),
16 (r), we understand the concern about tampering. We
17 understand the concern about preemption. We have
18 talked to the Air Resources Board in developing this
19 particular set of conditions.

20 We, too, were very concerned about not
21 having a condition that would require the owner/
22 operator to number one, install a soot filter on a
23 machine or piece of equipment that was not appropriate
24 or not safe, or that would violate its emissions
25 warranty or manufacturer's warranty.

1 We have written into this particular
2 condition the language that allows the applicant to opt
3 out if such device is not practical for that specific
4 engine.

5 We believe if there's a violation of state
6 or federal law that would be an appropriate opt-out for
7 the applicant, and they wouldn't have to install a soot
8 filter on that particular piece of equipment.

9 We've written this condition to anticipate
10 the future where EPA and ARB, the tampering rules might
11 change. They might allow post combustion equipment to
12 be installed on this type of equipment.

13 And therefore we continue to believe that
14 our condition, as written, is more flexible and
15 addresses the potential where we could incorporate more
16 equipment into the soot filter program.

17 We also continue to seek approval of the
18 CEM, condition 32. The applicant has requested that we
19 delete -- that be deleted from that condition, the CPM
20 approval of the CEM system. We continue to recommend
21 that the staff have an option to review and approve the
22 CEM system.

23 And those are the staff conditions that have
24 been discussed earlier.

25 MS. HOLMES: Does that conclude the summary

1 of the more salient points of your testimony today?

2 MR. LAYTON: Yes.

3 MS. HOLMES: Thank you. The witnesses are
4 available for cross-examination.

5 HEARING OFFICER SHEAN: Okay. SMUD.

6 CROSS-EXAMINATION

7 BY MS. LUCKHARDT:

8 Q Okay, I can't recall which one of you
9 discussed the table --

10 MR. NGO: We are identical twins.

11 (Laughter.)

12 MS. LUCKHARDT: -- and it was just a moment
13 ago, so this is really pretty pathetic, but the summary
14 of ammonia slip levels in recent CEC siting cases, but
15 whoever that individual is --

16 MR. LAYTON: That was me.

17 MS. LUCKHARDT: Then, Mr. Layton, looking at
18 that table do you see any information in that table
19 that appears to be in error?

20 MR. LAYTON: I did not prepare the table and
21 I have not had time to review it in great detail. This
22 is your table that you handed to us?

23 MS. LUCKHARDT: Yes. I'm just curious if
24 you've seen anything that you believe is in error.

25 MR. LAYTON: I have not seen anything, but I

1 have not reviewed it that closely. I guess you could
2 ask the person that prepared the table.

3 MS. LUCKHARDT: I just want to have a double
4 check. We did prepare it, but I wanted to make sure
5 there wasn't anything glaring that you saw.

6 Looking at the top --

7 HEARING OFFICER SHEAN: Is this a trick
8 question? I mean is there something?

9 MS. LUCKHARDT: No, no, it's not a trick
10 question. It's just --

11 (Laughter.)

12 PRESIDING MEMBER PERNELL: We're all looking
13 now. We're going to find something.

14 (Laughter.)

15 HEARING OFFICER SHEAN: All right.

16 MS. LUCKHARDT: Okay. Starting at the top
17 of the page looking at the Mojave Desert Air Basin, and
18 that area, is it correct that that area is
19 nonattainment both in the state and federal PM10
20 standards? is that correct?

21 MR. LAYTON: That is correct.

22 MS. LUCKHARDT: And the ammonia slip levels
23 required by the Energy Commission in that area was 10
24 ppm, is that correct, for High Desert and Blythe?

25 MR. LAYTON: Yes, that project was licensed

1 three years ago and had an ammonia slip of 10 ppm and
2 2.5 ppm NOx.

3 MR. NGO: I also want to add to that
4 qualifying statement that three years ago when we first
5 start this project, the PM2.5 was just start. That the
6 ambient concentrations for PM2.5 were just started to
7 collect, you know, somebody start to collect them then.

8 The information from the PM2.5 at the time
9 indicates that the area will probably be attainment for
10 PM2.5, but they are nonattainment for fugitive dust,
11 because they have a high dust storm.

12 Am I clarify or confusing you.

13 MS. PEASHA: I missed that last part of
14 that.

15 MR. NGO: The last part, what I'm saying
16 that the area is nonattainment for PM10 because it's a
17 dust storm area, a lot of dust storm. But for PM2.5
18 they're not really, there isn't a problem.

19 MS. HOLMES: Let me interject here because I
20 think what got missed was that he's talking about the
21 High Desert project, not about this project. I don't
22 want to do anything procedurally inappropriate, but I
23 believe that that clarification is in order.

24 HEARING OFFICER SHEAN: That helps a lot.

25 MS. HOLMES: When he says that the area is

1 dominated by fugitive dust, I believe he's talking
2 about the High Desert project area.

3 MS. LUCKHARDT: Okay. And then moving on to
4 the San Joaquin Valley Air Basin projects towards the
5 bottom, and is it correct that the San Joaquin Valley
6 Air Basin is also nonattainment for both the federal
7 and state PM10 standards, is that correct?

8 MR. LAYTON: That is correct.

9 MS. LUCKHARDT: And the ammonia slip level
10 required by the Energy Commission for all but the San
11 Joaquin projects is 10, is that correct?

12 MR. LAYTON: That is correct.

13 MS. LUCKHARDT: And do you know why that 10
14 ppm was found acceptable in those instances?

15 MR. LAYTON: A lot of those projects were
16 licensed a few years ago; and as Mr. Ngo indicated,
17 there was less concern about PM2.5, or less
18 understanding of the components that fed into PM2.5.

19 Staff is slowly becoming aware of the 2.5
20 issue. I think we're ahead of the curve on some of the
21 Districts. Obviously the Districts are trying to
22 follow a regulatory program. We, on the other hand,
23 are looking at a project at its full 30-year life.

24 For example, the Sacramento area, the
25 applicant has handed out today information about the

1 population growth of the area and the vehicle miles
2 traveled in the area in their supplemental testimony.

3 We agree, this area's continuing to grow. I
4 think it's going to be difficult to assume that air
5 quality is going to automatically get better with that
6 population growth. I think that would be a very
7 difficult hypothesis.

8 However, when we're trying to formulate what
9 kind of controls might be appropriate for a project,
10 we're looking at the full life of the project, out 30
11 years.

12 So we're anticipating that, yes, ammonia
13 will become more important and ammonia controls will
14 become more important. We think San Joaquin should
15 have more controls. Obviously they have very poor air
16 quality and continue to have problems in reaching any
17 of their attainment goals.

18 (Pause.)

19 MS. LUCKHARDT: Okay, isn't it correct that
20 for all of the projects that are listed in this table,
21 except for East Altamont and Cosumnes, that staff has
22 accepted the local Air District's determination of the
23 appropriate ammonia slip level?

24 MR. LAYTON: Which exceptions did you have?

25 MS. LUCKHARDT: East Altamont and Cosumnes.

1 MR. LAYTON: Are you saying that the, for
2 example, in some of the other cases where there's a 5
3 ppm NOx level that the District recommended that level?

4 MS. LUCKHARDT: Yes.

5 MR. LAYTON: I'm not sure that's correct.

6 MS. LUCKHARDT: Okay, so you're just not
7 aware?

8 MR. LAYTON: Again, I think we may be ahead
9 of the District in these instances. The District can
10 recommend 10, has recommended 5 in some of these cases.
11 Staff continues to identify impacts and they look for
12 mitigation.

13 In this instance, for example, on this
14 project, we believe that at 5 ppm ammonia we look to
15 mitigate the impacts that can potentially rise from the
16 secondary formation of PM2.5.

17 We're not looking for offsets at this point
18 in time because we do understand Mr. Rubenstein talked
19 a lot about how the ammonia for most of the life of the
20 catalyst is at 1 ppm. But towards the end of the life
21 then the ammonia goes up, ammonia slip goes up, and
22 therefore the potential formation of PM2.5 goes up.

23 It's difficult to require mitigation for all
24 four years, for example, when, in fact, the PM2.5
25 potential contribution can be really low during the --

1 when the slip is very low. And then later in life, at
2 the end of the cycle for a catalyst, the 2.5
3 contribution can potentially be much higher.

4 PRESIDING MEMBER PERNELL: Let me understand
5 something. You're suggesting a 5 ppm slip with no
6 mitigation?

7 MR. LAYTON: We're suggesting that 5 ppm is
8 the appropriate mitigation given the uncertainty about
9 the potential conversion, which it can vary; given also
10 that over the life cycle of a particular set of
11 catalysts the ammonia slip can be very low during some
12 of those periods; and towards the end of the life can
13 be much higher.

14 PRESIDING MEMBER PERNELL: All right, I just
15 kind of misunderstood the last statement.

16 MS. LUCKHARDT: Isn't it correct that PM10
17 or PM2.5 is a regional pollutant and a regional issue?

18 MR. LAYTON: It's both a direct local impact
19 and also a regional impact, has regional impacts.

20 MS. LUCKHARDT: Do you believe with respect
21 to ammonia that it's a local issue or a regional issue?

22 MR. LAYTON: I believe it's more of a
23 regional. Again, the conversion can be a very
24 complicated process. Because the conversion can take
25 time does not necessarily mean that the plume from the

1 stack has left the area.

2 So the impacts can be delayed, or the
3 conversion can be delayed, but the impacts can still be
4 local.

5 MS. LUCKHARDT: So then is it your testimony
6 that ammonia conversion to PM is a local issue or
7 regional issue?

8 MR. LAYTON: I think I said both.

9 MS. LUCKHARDT: And has CEC Staff ever
10 prepared air quality plans for PM10 or PM2.5?

11 MR. LAYTON: I think that's a trick
12 question. No, the answer is no.

13 (Laughter.)

14 MS. LUCKHARDT: Does the District typically
15 prepare these types of plans?

16 MR. LAYTON: Yes, the District is
17 responsible for preparing ozone and PM10 plans with
18 some degree of success.

19 MS. LUCKHARDT: And do you believe that the
20 CEC Staff has a better understanding of regional air
21 quality issues than the District?

22 MR. LAYTON: CEC Staff is not attempting to
23 do regional air quality planning for the District.
24 However, we are trying to mitigate impacts from
25 projects. And in this case, the SMUD project, the SMUD

1 Cosumnes project. We believe that the ammonia
2 emissions from this project have a potential to
3 contribute to PM2.5 in the area.

4 PM2.5 attainment or not is not yet
5 determined. But we believe that given the population
6 growth and other industries coming into the area, that
7 this project can contribute to potential violations of
8 that PM2.5 standard.

9 So we are very concerned about this impact,
10 the impact of this project on air quality in this
11 region.

12 MS. LUCKHARDT: I have a couple more. Then
13 I believe, Mr. Ngo, you mentioned a 30 percent factor
14 for ammonia conversion. Which study in the Denver area
15 was this from?

16 MR. NGO: I believe I already referred in
17 the FSA. I can read it to you if you want.

18 MS. LUCKHARDT: Just the page number so I
19 can just get myself at the right spot.

20 MR. NGO: Oh, I don't remember the page
21 number. I referenced the entire --

22 MS. HOLMES: The page number in the FSA.

23 MR. NGO: Oh, I'm sorry.

24 MS. LUCKHARDT: Oh, yeah, not in that
25 documentation. I'm sorry.

1 MR. NGO: Well, you scared me for a minute
2 there, anyway. 4.1-53.

3 Let me clarify. I mentioned the research
4 and the result on page 4.1-15; and the name of the
5 reference is listed on page 4.1-53.

6 MS. LUCKHARDT: Okay. That's great; that 15
7 one was the reference I was actually looking for.

8 Did you find any study showing that this
9 particular, this 30 percent conversion rate would also
10 apply to the Sacramento area?

11 MR. NGO: Say that again? I don't get your
12 question.

13 MS. LUCKHARDT: Did you find any studies
14 that would show that the 30 percent conversion rate
15 would also be applicable in the Sacramento area?

16 MR. NGO: Not on this particular study. But
17 we do find information provided by the Air Resources
18 Board. And I want to reference -- I think the
19 reference listed on page 4.1-50; and the research by
20 one of the -- by the ARB Staff on the PM2.5 particulate
21 emission.

22 And what it say here is that the area is,
23 the area PM2.5 problem -- let me read from the FSA if I
24 can.

25 MS. LUCKHARDT: Yeah, when you get there

1 give us a page number that --

2 MR. NGO: Okay. On page 4.1-8, what we see
3 there is that the analysis from Dr. Montabelli, is that
4 what it say there is that the primary vehicle exhaust
5 and wood smoke has significant source of both PM10 and
6 PM2.5 in winter. Nitrate, a secondary form of
7 particulate matter from the complex reaction of NOx and
8 ammonia, as a major cause of high PM2.5 and PM10 level
9 during the winter months.

10 In another research which I did not list in
11 here because that document have a little things I do
12 not (inaudible), so I didn't cite it in the FSA, that
13 research done by Dr. Seinfeld is one of the author, I
14 didn't write out the rest of the name of the author,
15 but it in the PM2.5 staff report for the ARB to
16 consider PM2.5 air quality standard.

17 What they do in there was they find out that
18 if you reduce 50 percent of ammonia in the South Coast
19 area with the general -- well, the South Coast is
20 ammonia rich, they already determined that part of it.

21 What they say there is if you reduce 50
22 percent of the ammonia in the South Coast area, you
23 will reduce the total PM2.5 by 19 percent. If you
24 reduce, by the same token, if you reduce 50 percent
25 ammonia in the study area, you will reduce 31 to 41

1 percent of nitrate, PM2.5, in the ambient and 25 to 30
2 percent of ammonium particulates in the same area.

3 So, this number here is very consistent with
4 what we have cited in the FSA; and therefore I hope I
5 answer your question.

6 MS. LUCKHARDT: You referred to a couple
7 different reports, and I believe they refer to the
8 South Coast area, is that correct? Am I understanding
9 that?

10 MR. NGO: Yeah, the last one that I
11 mentioned, the one that I say I cannot quote, I cannot
12 cite it in the FSA because they told me to.

13 MS. LUCKHARDT: And that was South Coast,
14 right? That was not Sacramento, is that correct?

15 MR. NGO: Yes, but that the only one in
16 the -- the only one beside the Denver where they have
17 actually measure ambient concentration of ammonium and
18 acid, both dry and in the gaseous form and liquid form,
19 and everything, to determine whether they ammonia rich
20 or poor.

21 MS. LUCKHARDT: Okay, so again, you didn't
22 find anything that specifically addressed Sacramento?

23 MR. NGO: For Sacramento, no.

24 MR. LAYTON: I think what Mr. Ngo is saying
25 is that we did find specifics for Sacramento.

1 Obviously we'd be looking to mitigate those specific
2 contributions. We understand there is some uncertainty
3 in transferring data from Denver to here. And that's
4 why we're only recommending 5 ppm as opposed to looking
5 on a say, ton-per-ton reduction.

6 Denver is very similar to this area. A lot
7 of wood smoke, wintertime inversions, mountains that
8 hold in a lot of the air quality, dominated by
9 vehicles. I would say that the data would probably
10 transfer quite well. However, we do not have the data
11 specifically transferred, so we're looking just to
12 mitigate on say, just to reduce -- given the
13 uncertainty, we're recommending 5 ppm as the most
14 appropriate mitigation, not the ton-for-ton mitigation
15 of PM2.5.

16 MS. LUCKHARDT: Are you aware of what ppm
17 levels -- what ammonia slip levels are required in
18 Denver?

19 MR. NGO: No.

20 MS. LUCKHARDT: Where that study was
21 conducted?

22 MR. LAYTON: Again, there's many sources of
23 ammonia. I don't think that suggesting that an ammonia
24 slip level in Denver would dictate the overall ammonia
25 in the inventory. There's a lot of sources of ammonia.

1 For the SMUD project we're looking at its
2 contribution, or potential contribution as a project.
3 We're not looking at doing regional air quality
4 planning as you alluded to earlier.

5 MS. LUCKHARDT: Right, but you referred to
6 Denver as being very similar to Sacramento. So, I was
7 asking whether Denver required the same ammonia slip
8 level as you are requiring here.

9 MR. LAYTON: I don't know. I'd be happy to
10 look it up for you.

11 MS. LUCKHARDT: When you refer to -- I'd
12 like to refer you back to AQSC-3, subpart (n), and
13 whichever of the many documents we have. We can use
14 your version, so it can either be out of the final
15 staff assessment, the supplement filed yesterday or Mr.
16 Rubenstein's document entitled, Cosumnes Power Plant
17 air quality conditions of certification versions agreed
18 to by CEC Staff and applicant.

19 Now, Mr. Layton, isn't it correct to say
20 that construction activities are limited at certain
21 wind speeds only when the fugitive dust exceeds the
22 limits specified in AQSC-4, is that correct?

23 MR. LAYTON: The intent of --

24 MS. LUCKHARDT: I'm not asking the intent.
25 I'm asking what it says.

1 MR. LAYTON: Could you repeat the question,
2 then?

3 MS. LUCKHARDT: Doesn't your condition only
4 limit construction activities under certain wind speeds
5 if they cause fugitive dust in excess of the visible
6 emission limit specified in condition AQSC-4?

7 MR. LAYTON: The concern is that PM10 is not
8 necessarily visible. And therefore, the SC-4 and the
9 visible plume does not necessarily prevent PM10 and
10 PM2.5 from those construction activities from leaving
11 the site.

12 Therefore, the intent of this -- excuse me,
13 the condition is written to require that operation
14 construction activity stop when the winds exceed 15
15 miles per hour.

16 MS. LUCKHARDT: I'm sorry, would you please
17 read subsection (n), because I don't believe that
18 that's what it states. If you would please read that
19 into the record.

20 MR. LAYTON: Any construction activities
21 that can cause fugitive dust in excess of the visible
22 emission limit specified in SC-4 shall cease when the
23 winds exceed 15 miles per hour.

24 MS. LUCKHARDT: Isn't it correct that it
25 states, that can cause fugitive dust in excess of?

1 MR. LAYTON: Yes, that is correct, that's
2 what it says.

3 MS. LUCKHARDT: Therefore you are trying to
4 limit construction under conditions when wind speeds
5 exceed 15 miles an hour? In other words, shut down
6 construction of the facility when wind speeds exceed 15
7 miles an hour?

8 MR. LAYTON: That's correct.

9 MS. LUCKHARDT: Regardless of whether --

10 MR. NGO: Only the construction that --

11 MS. LUCKHARDT: -- dust is caused or not?

12 MR. LAYTON: Yes, because dust can be
13 leaving the site. It's not necessarily visible.

14 MS. LUCKHARDT: Then I'm not understanding
15 why you have the reference to AQSC-4.

16 I just want to clarify that you do want to
17 shut down construction when wind exceeds 15 miles per
18 hour?

19 MR. NGO: Not all construction activity,
20 just the one that might cause fugitive dust.

21 MS. LUCKHARDT: Okay, but when we're talking
22 about the beginning of construction and grading, aren't
23 those the types of activities that could cause fugitive
24 dust?

25 MR. NGO: Any activity that can cause

1 fugitive dust is -- we're not recommending any of those
2 activities when the wind exceed 15 mile per hour.

3 MS. LUCKHARDT: You're not -- you're
4 actually stating, in accordance with the way Mr. Layton
5 was reading this, that those types of activities must
6 stop, must cease when wind exceeds 15 miles per hour?

7 MR. LAYTON: That's correct.

8 MS. LUCKHARDT: Therefore you're willing to
9 shut down the construction site when wind exceeds 15
10 miles per hour?

11 MR. NGO: No, I don't think we did.

12 MR. LAYTON: As Mr. Ngo attempted to say,
13 the activities that are causing the fugitive dust in
14 excess shall cease. Not all activities onsite are
15 going to cause fugitive dust that exceeds SC-4.

16 MS. LUCKHARDT: But, Mr. Layton, isn't it
17 true that when you start construction and you're moving
18 dirt with earthmovers, that aren't those the very
19 activities that you're trying to restrict in AQSC-4
20 with your requirements that the ground be wet or
21 otherwise treated?

22 MR. NGO: AQSC-4 is a ceiling limit. And
23 AQSC-3 is to minimize the emission to the level that
24 are feasible.

25 What we are doing, we are trying to make

1 that AQSC-3 so that to minimize that emission as much
2 as possible in the interest of the recommendation that
3 are recognized in the FSA.

4 And AQSC-4 is sort of like a ceiling. You
5 shouldn't go over that.

6 MS. LUCKHARDT: So then is AQSC-4 irrelevant
7 to subsection (n), or is that simply a prohibition to
8 construction when wind exceeds 15 miles per hour?

9 MR. NGO: I'm going to have to ask you to
10 repeat your question. I did not -- I don't understand
11 your question.

12 MS. LUCKHARDT: Is the inclusion of AQSC-4
13 within subsection (n), is that intended to have any
14 impact on subsection (n)? Or is subsection (n) simply
15 a prohibition on construction when wind speeds exceed
16 15 miles an hour?

17 MR. NGO: I don't think section (n) of AQSC-
18 3 have anything to prohibit all construction activity.

19
20 If you have -- let me be a little more
21 clearer -- say if you have a welding going on with
22 that, which doesn't cause a fugitive, then you can do
23 it. But if you, you know, what we're saying is that if
24 we see there's a condition in the morning you see on
25 the webpage, you know, the weather service, they have

1 the webpage where it tell you what kind of wind it is.

2 Then what you have to do, you're in the are,
3 then you're not going to go out and use your heavy duty
4 equipment to try to mow down all the -- or to level the
5 land, or to clear the land, you know, just something to
6 minimize the emission rather than -- we are trying not
7 to prohibit you. I mean I don't think that was the
8 intention of the AQSC-3 at all.

9 MS. LUCKHARDT: Well, I guess I need to
10 restate the question. All construction activities that
11 can cause fugitive dust therefore then should cease
12 when wind exceeds 15 miles per hour, is that accurate?

13 MR. NGO: How about we have to delete the
14 word all? Just say construction activity, is that
15 okay?

16 MS. LUCKHARDT: That was my misstatement.
17 Construction activities that can cause fugitive dust
18 shall cease -- I'm leaving out the AQSC-4 clause, as
19 Mr. Layton clarified that it doesn't matter -- shall
20 cease when wind speeds exceed 15 miles per hour. Is
21 that accurate?

22 MR. LAYTON: Again, I think Mr. Ngo has --
23 you've asked this question several times. And
24 obviously you're trying to get to a point that we're
25 not helping to get to.

1 We are trying to mitigate construction
2 activities --

3 MS. LUCKHARDT: We're just trying to
4 understand what the condition means, because --

5 MR. LAYTON: I understand you're trying to
6 understand.

7 MS. LUCKHARDT: -- because construction
8 activities, as I'm sure you're well aware, you don't
9 start welding until you've cleared the ground, so there
10 are certain activities that must occur in the first
11 stage. Those activities tend to cause fugitive dust.

12 And all I'm trying to clarify is that is
13 your intent that those activities shall cease, those
14 activities that can cause fugitive dust shall cease
15 when wind exceeds 15 miles per hour?

16 MR. LAYTON: Yes, in the construction
17 activities that cause fugitive dust in excess of SC-4
18 shall cease. It does not say shall cease all
19 construction activities.

20 HEARING OFFICER SHEAN: Let's ask this as a
21 hypothetical, because I'm getting tired of it.

22 MR. LAYTON: I am, too.

23 HEARING OFFICER SHEAN: If initially the
24 site grading is being done by machinery that moves the
25 earth. And that is fundamentally all that is

1 occurring. And they are doing this within a surveyed
2 area to get the site regraded to what they need.

3 If that is the activity and condition (n)
4 applies as you have written it, if the winds go above
5 15 miles an hour, does all that site preparation
6 activity have to cease?

7 MR. LAYTON: If that site preparation
8 activity would cause a visible dust plume in exceedance
9 of 20 percent opacity or at any location on the site,
10 or if you're on a linear 200 feet from the centerline,
11 yes, that activity would have to cease.

12 HEARING OFFICER SHEAN: So, under those
13 circumstances hypothetically if that is all the
14 activity that is going on, then all activity has to
15 cease? Under that hypothetical?

16 MR. LAYTON: Hypothetically, yes.

17 MS. LUCKHARDT: Thank you, Mr. Shean, I have
18 nothing further.

19 HEARING OFFICER SHEAN: Okay. I have a
20 couple questions to follow that up. But, if
21 you --

22 PRESIDING MEMBER PERNELL: Here's another
23 hypothetical.

24 (Laughter.)

25 PRESIDING MEMBER PERNELL: And this is he

1 issue where you said you only need to run the water
2 truck once every four hours. If you're doing a water
3 truck and you're wetting the soil before you use the
4 earthmoving equipment, and the wind is 15 miles per
5 hour, does everything cease?

6 MR. LAYTON: As we discussed, in your
7 hypothetical if your earthmover comes along and removes
8 that top layer of soil that's been wetted, what's below
9 it is a dry layer of soil. And another earthmover
10 comes along --

11 PRESIDING MEMBER PERNELL: No, no, no,
12 another water truck comes along.

13 MR. LAYTON: Well, then we would love to see
14 the water truck come along frequently. We are looking
15 at if the activity on the site starts to cause dust
16 plumes that exceed 20 percent opacity, and the wind
17 speeds are above 15 miles per hour, or if you're on a
18 linear and then the dust plume in excess of 200 feet
19 beyond the centerline of the construction of that
20 linear facility, then those activities would have to
21 cease.

22 PRESIDING MEMBER PERNELL: All right, go
23 ahead.

24 HEARING OFFICER SHEAN: But, as written,
25 your condition calls for cessation of activity before -

1 - and it doesn't even mention further mitigation,
2 right? Such as watering.

3 So if you had an earthmover traversing the
4 site and it was causing the dust that you find to be
5 problematic, if it were immediately followed by a
6 watering truck that was used for dust suppression,
7 isn't that a means of mitigation that's not addressed
8 in your condition?

9 MR. LAYTON: I think that's addressed in
10 condition SC-3(a). We are looking for water, yes. And
11 if they water frequently, then they probably will not
12 run into the 20 percent opacity of that plume.

13 HEARING OFFICER SHEAN: Okay, so if we look
14 at SC-3(a), if we follow your more proscribed version
15 of wind to water, it might be that in that four-hour
16 period as you get to the end of that you have some
17 drier earth that you're moving, whereas if you look at
18 the applicant's version of SC-3(a), which is wet
19 sufficiently to comply with the dust mitigation
20 objectives of SC-4, then wouldn't complying with the
21 applicant's version of (a) basically mean that you'd
22 never run into a situation where a construction
23 activity had to cease due to the wind?

24 MR. LAYTON: I guess if that were true then
25 they wouldn't be concerned about (n).

1 HEARING OFFICER SHEAN: Well, you know, they
2 may be covering both sides of the street; if they lose
3 on (a) they want to cover (n). I don't know what their
4 motive is, but we're trying to merely deal with
5 mitigating a potential problem, rather than being cute.

6 So, in your mind would the applicant
7 modification of (a) be sufficient to cover the
8 potential that you see in the CEC version of (n)?

9 MR. NGO: You're asking that the applicant
10 version AQSC-3(a) would satisfy the intent of staff
11 version of AQSC(n)?

12 HEARING OFFICER SHEAN: That's affirmative.

13 MR. NGO: It's okay.

14 HEARING OFFICER SHEAN: Say again?

15 MR. NGO: It's all good.

16 HEARING OFFICER SHEAN: All right. Let me
17 just make sure. Did the (n) version that you were
18 talking about also include mitigating invisible dust?
19 Did I hear you say that there was visible dust and
20 invisible dust?

21 (Laughter.)

22 MR. LAYTON: If it's invisible you can't see
23 it. The dust plumes that do come off of construction
24 sites, obviously they have a lot of different
25 components or size particles in them. The smaller

1 particles can be difficult to see with the naked eye.

2 HEARING OFFICER SHEAN: Okay, at my age I'm
3 quite sure that there are many more invisible particles
4 --

5 (Laughter.)

6 HEARING OFFICER SHEAN: Okay. We have some
7 people who are here from the public who have been
8 sitting patiently because we did not do the public
9 comment just prior to lunch.

10 So, what we'd like to do is shift over now
11 and allow that to happen. Why don't we move this
12 microphone over for you and we'll start that now.

13 PRESIDING MEMBER PERNELL: Yeah, if you can
14 move it to the end. We'd like you to state your name
15 and organization you're representing, or whether you're
16 just a community concerned retired person.

17 (Laughter.)

18 MR. MURPHY: That doesn't mean old fart,
19 does it? My name's Jim Murphy; I live in Sacramento
20 County. And, Mr. Chairman, I want to thank this Board;
21 you have a lot of patience. Not as much as the
22 construction folks sitting here listening to this, but
23 I would like to ask the gentleman, if I may, at the end
24 of the table, where have you been?

25 During my lifetime, 40-some years as a

1 construction worker, with the dust. I'm trying to
2 think what construction site are you ever on when
3 there's not a certain amount of dust. I've never been
4 on one. I'm just wondering if you're singling out this
5 project, or is this now going to prevail on all of our
6 projects?

7 It was a little confusing to me listening to
8 this.

9 MR. LAYTON: These are standard conditions.
10 They are being implemented across the state for
11 construction projects, for power plants or refineries
12 or even gas stations. They are prohibited in the sense
13 that they're trying to control dust as much as
14 possible.

15 Obviously the event that's occurring out
16 there is short term, and in some instances unavoidable.
17 We do not anticipate that we will control dust down to
18 zero. We're just trying to prevent, say, extreme dust
19 events.

20 MR. MURPHY: What are you doing tomorrow? I
21 want to take you for a ride.

22 (Laughter.)

23 MR. LAYTON: Well, I don't --

24 MS. HOLMES: I'm afraid he's going to still
25 be here.

1 MR. LAYTON: -- I hope it's on a --

2 MR. MURPHY: Well, I'm going to save you;
3 I'm going to get you out of this dusty room here.

4 MR. LAYTON: -- paved road, not an unpaved
5 road.

6 MR. MURPHY: Again, I want to thank the
7 panel for your patience.

8 I look at this power plant as any other
9 infrastructure project, whether it's a sewer plant, an
10 airport, a freeway or whatever, for the public good.

11 As soon as you build a sewer plant or an
12 airport people start moving out to it. And they say,
13 oh, my god, it's noisy. Well, it was noisy when you
14 moved here. That sewer plant smelled the same the
15 first day we flushed the toilet as it does today.

16 So, my problem is that people move out here,
17 and I happen to raise animals. And don't stop by my
18 place because you'd write me up a ticket, because they
19 are a little obnoxious.

20 But people move out and the first thing they
21 want to tell me is my animals stink. Yeah, they stunk
22 yesterday, and the last 1000 years. And they're
23 probably doing something to the ozone zone, I'm not
24 sure, but the guy I like to hate on the radio says they
25 are.

1 You can study these projects. You can sit
2 here and talk about the environmental damage. The
3 environmental damage is what you do to senior citizens,
4 small farmers, small businesses, those that depend on
5 dependable, affordable electricity.

6 That plant, and I happened to work on it
7 probably, god, 40 years ago, 35 years ago, is an ideal
8 plant. You could not pick a better site in the State
9 of California for a power plant. You have the existing
10 power lines leaving that plant. You have the water.
11 You have everything this community needs to save money
12 for affordable electric rates.

13 Now, we can sit here and shut the project
14 down as I know I got some construction worker friends
15 here, they'd love to, get an early go-home. But that
16 is not reality. There has to be some common sense in a
17 bureaucracy.

18 This plant should be built. It should be
19 built for the people of this community. I can hire an
20 outside expert to come in and argue till the cows come
21 home. But listen to the people that you have served so
22 well for the last several decades, providing us with
23 affordable power. SMUD has done that, and I appreciate
24 it and so do my neighbors.

25 Thank you.

1 PRESIDING MEMBER PERNELL: Thank you.

2 HEARING OFFICER SHEAN: Thank you. Any
3 other members of the audience that want to do this now
4 as opposed to some time a little bit later on?

5 All right, thank you very much.

6 PRESIDING MEMBER PERNELL: No?

7 HEARING OFFICER SHEAN: No, apparently not.
8 I have an additional question here with regard to the
9 staff.

10 Is it correct that the air quality staff
11 reviews post construction compliance of facilities that
12 the Commission has already certified? In addition to
13 the CPM?

14 MR. NGO: Yes.

15 HEARING OFFICER SHEAN: Okay. Now, in that
16 context, can you tell me whether or not there have been
17 reported violations in any past Commission projects
18 that relate to the use of diesel fuel construction
19 equipment with respect to either the use of ultralow
20 sulfur diesel fuel? Well, let me just ask that one
21 first. Violations of someone failing to comply with
22 that?

23 MR. LAYTON: Yes.

24 HEARING OFFICER SHEAN: And in what number
25 or percentage of the ones that you've reviewed, just so

1 we can get a relative number?

2 MR. LAYTON: I guess I'm only aware of a
3 couple projects out of the numerous projects we have
4 licensed recently. But my familiarity is limited to
5 projects that I'm assigned to. There are more, other
6 projects that I'm not assigned to.

7 HEARING OFFICER SHEAN: Okay, I don't have
8 anything more. Do you have any -- I think redirect at
9 this point would be appropriate?

10 Did you have an opportunity --

11 PRESIDING MEMBER PERNELL: No, they haven't.

12 MR. SARVEY: We haven't crossed.

13 MS. PEASHA: No, we have not.

14 HEARING OFFICER SHEAN: I'm sorry, I guess
15 that's why I was scratching my head. Why don't you go
16 ahead.

17 MR. SARVEY: Well, we'd like to take up the
18 CEC's attorney on the opportunity to cross-examine the
19 staff later. We've got approximately 19 pages of a
20 testimony we've never seen, which is a significant
21 revision to their testimony, which we just received
22 maybe 15, 20 minutes ago. And it's kind of hard for us
23 to verify these numbers. And we would like to have an
24 opportunity to have them come back and cross-examine
25 them, if that would be --

1 HEARING OFFICER SHEAN: Okay, do you have
2 anything that's not on this revised material?

3 MR. SARVEY: We spent most of our effort
4 trying to back the CEC's position; and now they've
5 turned around and that position has changed.

6 HEARING OFFICER SHEAN: Are you talking with
7 respect to those wood stove thing --

8 MR. SARVEY: With the road paving; with the
9 wood stove program. And now that's all changed, so we
10 pretty much have been surprised with some testimony
11 that we feel was not prefiled in a proper manner. We
12 would like the opportunity, if it's okay with the
13 Committee, to bring these people back when we talk to
14 the Air District.

15 HEARING OFFICER SHEAN: All right. As we've
16 done before, we'll review that at the point when we
17 establish what the future hearings are.

18 MR. SARVEY: Okay. Well, we are done with
19 Mr. Rubenstein, thank you.

20 HEARING OFFICER SHEAN: Any redirect?

21 MS. HOLMES: Just one question to Mr.
22 Layton.

23 REDIRECT EXAMINATION

24 BY MS. HOLMES:

25 Q There were some cross-examination questions

1 from Ms. Luckhardt earlier this afternoon with respect
2 to the study that was performed in Denver, do you
3 recollect that discussion?

4 MR. LAYTON: Yes.

5 MS. HOLMES: And perhaps I am addressing
6 this to the wrong witness, I can't remember who answer
7 it. At any rate, either one of you can answer it.

8 When you're referring to Denver being
9 similar to the Sacramento area, were you referring to
10 atmospheric chemistry and air quality characteristics,
11 as opposed to regulatory requirements?

12 MR. LAYTON: Yes.

13 HEARING OFFICER SHEAN: I'm going to
14 interrupt you because I found that line of inquiry by
15 Ms. Luckhardt mildly interesting, but almost totally
16 irrelevant. Okay? And I don't think we should get
17 into Denver because the witness said he did not use
18 that and did not refer to it specifically in his
19 testimony. So, --

20 MS. HOLMES: In fact, the witness did refer
21 to that. It's the study from the South Coast that was
22 not referred to.

23 HEARING OFFICER SHEAN: Pardon me?

24 MS. HOLMES: It was the study from the South
25 Coast that was not specifically referred to in his

1 study. He does specifically refer to and cite the
2 Denver study.

3 But if --

4 HEARING OFFICER SHEAN: All right, then I've
5 gotten -- I misunderstood that from his testimony. So,
6 -- and Ms. Luckhardt is indicating that I guess the 50
7 percent, 30 percent reduction, that discussion was
8 through his Denver study, so, go ahead.

9 MS. HOLMES: I'll just re-ask the one
10 question then. When you referred to the similarity of
11 Denver to Sacramento and the applicability of the
12 results of the Denver study to the Sacramento area.

13 Were you referring to similarities in
14 atmospheric and air quality characteristics rather than
15 regulatory requirements?

16 MR. LAYTON: Yes.

17 MS. HOLMES: Thank you. That's my only
18 question. I'm sorry to belabor that.

19 HEARING OFFICER SHEAN: Okay, any recross?
20 I guess we're going to -- do you know the way to
21 Denver? Any recross?

22 MS. LUCKHARDT: Nothing further.

23 HEARING OFFICER SHEAN: None? All right.
24 Thank you, gentlemen, you're excused till we see you
25 again next time.

1 Ms. Peasha, it's your turn. Do you want to
2 have your direct witness called and testify?

3 MS. PEASHA: As Bob Sarvey said, we'd like
4 to -- okay. With our testimony, yeah, I'm sorry, I'm a
5 little confused on --

6 Mr. Sarvey, would you please state --

7 HEARING OFFICER SHEAN: Mr. Sarvey, you were
8 previously sworn, is that correct?

9 MR. SARVEY: Yes, sir.

10 Whereupon,

11 ROBERT SARVEY

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

15 DIRECT EXAMINATION

16 BY MS. PEASHA:

17 Q Would you state your name for the record,
18 please?

19 A Robert Sarvey.

20 Q And your qualifications?

21 A I intervened on project that I'm testifying
22 to, the East Altamont Energy Center and the Tesla
23 project related to their staff's position on road
24 paving.

25 Q Are there any changes or additions to those

1 statements that you have presented?

2 A Not at this time.

3 Q Thank you.

4 HEARING OFFICER SHEAN: All right, before it
5 goes further, are you purporting to testify as an
6 expert based upon your education or experience? Or --
7 let me just ask it that way.

8 MR. SARVEY: My experience as an intervenor
9 in these two projects. And I'm only testifying as to
10 the staff's position in these projects as backed up by
11 this documentation that I have here in my hand and
12 admitted as exhibits.

13 HEARING OFFICER SHEAN: All right, on that
14 basis let me just ask a question. Is there objection
15 to the admission of the testimony of Mr. Sarvey as a
16 citizen witness?

17 MS. LUCKHARDT: So he's not testifying,
18 then, as an air quality expert, is that accurate?

19 HEARING OFFICER SHEAN: That would be
20 correct because I understand that his experience is
21 derived from analyzing and comparing information in
22 essentially the Energy Commission regulatory proceedings.

23 MS. LUCKHARDT: I have no objection.

24 HEARING OFFICER SHEAN: Okay. All right,
25 then it's admitted. And if you could just speak up a

1 little bit, sir.

2 MR. SARVEY: Would you like me to summarize
3 my testimony?

4 HEARING OFFICER SHEAN: Pardon me?

5 MR. SARVEY: Would you like me to summarize
6 my testimony?

7 HEARING OFFICER SHEAN: Yes, please. If you
8 can just do it a little bit louder.

9 MR. SARVEY: Okay. Basically my testimony
10 relates to the CEC Staff's position on the Tesla Power
11 project. And to this point, to date, in terms of the
12 road paving credits that have been certified by the Bay
13 Area Air Quality Management District, the CEC Staff
14 disagrees to the efficacy of using PM10 ERCs from the
15 Altamont landfill road paving as mitigation.

16 And also I'm testifying to the fact that the
17 East Altamont Energy Center proposed road paving
18 credits as a substitute for PM10 credits. And the
19 Commission Staff strongly discouraged it. And the
20 applicant complied.

21 HEARING OFFICER SHEAN: So what do you want
22 the Committee to draw from what you've just testified
23 to? I mean --

24 MR. SARVEY: The fact that the CEC's
25 position on current projects is that road paving is not

1 acceptable substitution for combustion-related PM10.

2 HEARING OFFICER SHEAN: Okay. And how do
3 you want us to apply that information in this case?

4 MR. SARVEY: Well, I thought that was the
5 staff's position until I just received this document.
6 And I was assuming that they were being consistent.
7 But now I'm not quite so sure that that's the case.

8 MS. HOLMES: If I could just offer a comment
9 at this point, Mr. Shean. Staff's position has not
10 changed with respect to road paving ERCs. There's
11 nothing in the document that was filed today that
12 changes staff's position on that issue.

13 In the FSA the road paving ERCs were
14 discounted to reflect the fact that only a small
15 fraction of the ERCs are PM2.5 in nature. That was the
16 position in the FSA. It's still staff's position
17 today.

18 The recalculations that are provided in the
19 supplemental filing that was made yesterday reflect
20 that, and in fact I believe there are additional
21 reductions to discount for the larger fractions, as
22 well, that are represented in that table.

23 So, if anything, the corrections that were
24 filed yesterday, I believe, are more in the direction
25 that Mr. Sarvey wishes the staff to go, rather than

1 less so.

2 HEARING OFFICER SHEAN: All right, then
3 rather than take hearing time we'll give you the
4 opportunity to mull that over and see whether or not
5 you essentially concur with that characterization.

6 MR. SARVEY: Okay.

7 HEARING OFFICER SHEAN: All right. Do you
8 have any other witness you want to present at this
9 time? I'm sorry, do you want to cross the witness?

10 MS. LUCKHARDT: No.

11 HEARING OFFICER SHEAN: Staff?

12 MS. HOLMES: No cross.

13 MS. PEASHA: No, I'm finished at this time.

14 HEARING OFFICER SHEAN: Okay. So you're
15 prepared for us to move off of air quality, given what
16 we've talked about, about returning to the --

17 MS. PEASHA: Can I have just one second to
18 consult?

19 HEARING OFFICER SHEAN: Sure. Why don't we
20 take a brief break. We'll be back here in ten minutes.

21 (Brief recess.)

22 HEARING OFFICER SHEAN: Back on the record.
23 Before we leave the air quality topic, Ms. Peasha, you
24 had filed, among your testimony, the testimony of Mr.
25 Mike Boyd. And --

1 MS. PEASHA: Yes, I --

2 HEARING OFFICER SHEAN: -- since he's not
3 present, we're not in a position to admit that as
4 testimony, but we can take that into our administrative
5 record as public comment.

6 MS. PEASHA: Mr. Shean, would it be possible
7 to give it as testimony when we get back to the
8 biological, because much of it does deal with the
9 biological studies that are --

10 HEARING OFFICER SHEAN: It may or may not,
11 but for today's purpose I want to at least get it in as
12 a public comment. And we can assess what we're going
13 to do with it at some later point.

14 I think that, you know, you heard the
15 witnesses address, particularly the SCNOx issue and
16 others, so why don't we just attempt to assess the
17 value of this beyond public comment; and then come back
18 to it when these additional --

19 MS. PEASHA: At a later date Mike Boyd is
20 going to make it to our biological staff -- our
21 testimony. May he present his testimony at that time?

22 MS. LUCKHARDT: I would object to that,
23 because his testimony is based on -- it's primarily
24 focused on SCNOx and alternative technologies. And it
25 does not relate to anything regarding biology or it's

1 not at all dependent upon the biological opinion.

2 And, you know, air quality was noticed for
3 today. We'd like to complete as much of it as we can.

4 MS. PEASHA: Well, then we will just submit
5 it as public comment. And we will let Mr. Boyd come up
6 on his biological. Thank you.

7 HEARING OFFICER SHEAN: All right, thank
8 you.

9 MR. SARVEY: Do we need to move any exhibits
10 in at this time, or will that be at the end of air
11 quality?

12 HEARING OFFICER SHEAN: Do you mean the
13 material that you have here?

14 MR. SARVEY: Yes.

15 HEARING OFFICER SHEAN: Well, number one, we
16 haven't gone through each of them. Number two, -- why
17 don't we do this. Is Ms. Mendonca still here? Okay.

18 Why don't we take this exhibit list that's
19 listed here as tentative exhibit list, intervenor
20 Peasha, air quality, and make sure that it's docketed
21 and reproduced in sufficient numbers to have been
22 essentially proofed. First of all, that will put it in
23 the record. We can use these if there is other
24 evidence that supports them.

25 A lot of these documents are essentially

1 references either to ARB, mostly to ARB materials. And
2 you have some transcripts in other Commission
3 proceedings. Since those can be -- we can take
4 official notice of those, if need be.

5 I think it's going to get it in the record
6 sufficiently, at least if I understand your purpose,
7 for what you have in mind doing.

8 So, --

9 MR. SARVEY: Well, we actually are
10 submitting them as exhibits.

11 HEARING OFFICER SHEAN: Sorry?

12 MR. SARVEY: We're actually submitting them
13 as exhibits.

14 HEARING OFFICER SHEAN: Well, they have
15 other references to them, and you know, whether or not
16 it's the -- and I've gone through each of these, and
17 I'm going through them again here.

18 And I think they are, as we characterized
19 them, and it'll show that you've marked them as
20 exhibits 1 through 14. All right.

21 MR. SARVEY: I'll give you my copy --

22 HEARING OFFICER SHEAN: -- one to work from.

23 MR. SARVEY: I'm not sure what he's saying
24 here.

25 HEARING OFFICER SHEAN: What I'm saying is -

1 -

2 MR. SARVEY: I want them in as evidence,
3 exhibits as evidence. Now, if I have to bring them
4 back and cross-examine staff with them and use them
5 then as offers of proof, I'll do it then. But --

6 HEARING OFFICER SHEAN: Well, for example,
7 you have a couple of transcripts in there from other
8 proceedings. All right. If you want to use those,
9 they don't need to be independently shown as exhibits.
10 But you would need to establish a reason for the
11 Commission to take notice of one of its other
12 proceedings --

13 MR. SARVEY: Right. And the other documents
14 that are in there, those are part of my testimony.

15 HEARING OFFICER SHEAN: Okay, part of the
16 testimony you had today?

17 MR. SARVEY: Right.

18 HEARING OFFICER SHEAN: Okay. And I think
19 they're in there sufficiently to support what you say,
20 right? Because your testimony dealt with this issue of
21 the use of road paving ERCs.

22 MR. SARVEY: Yeah, the staff's position on
23 road paving ERCs, and those are specifically exhibits
24 from other evidentiary hearings that support my
25 statements of staff's position.

1 HEARING OFFICER SHEAN: Correct. And
2 they're there. You can refer to them. So, at any
3 future point in this proceedings you can say, I am
4 referring to the following that I introduced. And if
5 you want to give it an exhibit number within your
6 package, or identify it by the textual reference on the
7 top of it, or letter dated so-and-so, that's what you
8 can do.

9 You have the ability to refer to them, and
10 they may be used.

11 MR. SARVEY: All right.

12 HEARING OFFICER SHEAN: I think --

13 PRESIDING MEMBER PERNELL: Do you understand
14 what you're doing with the documents now?

15 MS. MENDONCA: What I'm doing is copying
16 them, docketing them and creating a proof of service.

17 HEARING OFFICER SHEAN: Correct. That's
18 great.

19 MS. MENDONCA: I think what he's asking
20 anyway is are they exhibits. They are amplifications
21 of what you're stating, but they are not exhibits
22 entered in with an exhibit number, is that --

23 HEARING OFFICER SHEAN: That's essentially
24 correct, and I'll just note for the record that the
25 court reporter can't pick up what you're saying, but --

1 MS. MENDONCA: I'm sorry.

2 HEARING OFFICER SHEAN: -- that is correct.

3 You may refer to them either as your total package, or
4 exhibits within what you call your package. I think
5 we've gotten to where you want to get, which is you can
6 use the information you filed.

7 Okay. We're going to leave air quality
8 unless someone has something further to say on the
9 subject.

10 Hearing none, we will wait until our next
11 hearing to cover anything additional on that.

12 All right, this hazardous materials is a
13 sort of cross-over area between hazardous materials,
14 water quality and soils. SMUD had a specific request
15 in the prehearing conference to deal with staff's
16 proposed condition Haz-8, or Hazmat-8. So we'll deal
17 with that now.

18 MR. COHN: Mr. Shean, Mr. Pernell, staff
19 from the Energy Commission and SMUD have now reached
20 agreement on a revised condition, Haz-8, which is in
21 the document that was referenced earlier today, the
22 March 12th amended COCs, conditions of certification.

23 So, we no longer have a need to cross-
24 examine staff. And we do now have agreement with staff
25 on all of Hazmat, including Haz-8.

1 MS. HOLMES: Could I offer some additional
2 points at this time?

3 HEARING OFFICER SHEAN: Yes.

4 MS. HOLMES: There were changes, in addition
5 to those, to Haz-8 that are identified in staff's March
6 12 filing. I believe those were discussed at the
7 workshops last week.

8 Staff provided yesterday not only changes to
9 the hazardous materials conditions, including Haz-8.
10 We also provided supplemental testimony on hazardous
11 materials management.

12 We have also -- one of the questions that
13 SMUD had raised earlier had to do with Com-8. Com-8 is
14 actually being sponsored by the same witness who would
15 sponsor the hazardous materials management testimony.

16 What I'm suggesting it might be appropriate
17 to do at this point is to make our witnesses available
18 for the intervenor if she has any questions of staff on
19 either the FSA section hazardous materials management,
20 or the changes that were submitted yesterday, along
21 with the additional testimony on hazardous materials
22 management. And finally, the testimony and revised
23 condition of certification Com-8 that were also filed
24 yesterday.

25 HEARING OFFICER SHEAN: Okay.

1 MR. GARCIA: I have a question.

2 HEARING OFFICER SHEAN: Sure, of the witness
3 or just the --

4 MR. GARCIA: Of the staff.

5 HEARING OFFICER SHEAN: -- of the attorney,
6 so far?

7 MR. GARCIA: Staff witness.

8 HEARING OFFICER SHEAN: Okay, he's
9 not --

10 MS. HOLMES: Staff witness that can speak to
11 hazardous materials and to Com-8 is Rick Tyler. I
12 don't know -- I don't believe he was here and wasn't
13 sworn this morning, so if there's any --

14 HEARING OFFICER SHEAN: Okay, first let's
15 swear him in.

16 MR. COHN: Okay, --

17 HEARING OFFICER SHEAN: Yes?

18 MR. COHN: -- before we do that, did you
19 want us to go ahead and introduce into evidence our
20 witnesses in this area, as well? We have no need to
21 cross-examine staff, but it would be appropriate to get
22 our materials into evidence. And we can either do that
23 now or after staff.

24 HEARING OFFICER SHEAN: Let me just ask Ms.
25 Peasha. Do you have questions of SMUD on, let me see -

1 -

2 MS. PEASHA: Well, I'm just getting this
3 material. I would like to know the changes that they -
4 - that staff and SMUD have agreed on that obviously was
5 made on Thursday when I was not at the workshop.

6 HEARING OFFICER SHEAN: Okay, why don't we
7 go through and at least explain that. That may
8 determine --

9 MS. PEASHA: Yeah, just --

10 HEARING OFFICER SHEAN: -- the degree of
11 detail and depth we go into.

12 MR. COHN: Yes. We'd be happy to do that,
13 but for the record the changes that we're discussing
14 now on both Haz-8 and Com-8 were actually discussed on
15 Tuesday at the workshop where Ms. Peasha was present.

16 HEARING OFFICER SHEAN: All right.

17 MR. COHN: I don't know if she was
18 listening, but they were --

19 MS. PEASHA: On Haz-8?

20 HEARING OFFICER SHEAN: You know, all
21 right --

22 PRESIDING MEMBER PERNELL: Ms. Peasha.

23 MR. COHN: Yes, on Haz-8. At any rate,
24 we're prepared to go forward --

25 HEARING OFFICER SHEAN: Let's leave some of

1 this gratuitous stuff out, please.

2 MR. COHN: -- on that.

3 HEARING OFFICER SHEAN: Okay? All right,
4 would you explain the changes that are represented by
5 Haz-8 and Com-8, please.

6 MR. COHN: Yes. Do you want us to go ahead
7 and do that through witnesses? Or do you want me just
8 to explain that?

9 HEARING OFFICER SHEAN: Since conditions are
10 not factual testimony, it's fine with me if you do it.

11 MS. HOLMES: Mr. Shean, let me also point
12 out that we did have supplemental testimony on both
13 Com-8 and Hazmat with respect to the change in
14 conditions in Hazardous. So it's not just changes in
15 conditions, we have additional testimony, as well. It
16 can come in by declaration if you'd like. Or we need
17 to put a witness on.

18 Perhaps it would be easiest to put our
19 witness on and --

20 HEARING OFFICER SHEAN: Let's not have him
21 do it then, --

22 MS. HOLMES: -- discuss -- yeah.

23 HEARING OFFICER SHEAN: -- let's have you do
24 it, then. Swear your witness. Go through the changes
25 and through the supporting evidence for the changes.

1 MS. HOLMES: Could the court reporter swear
2 the witness, please.

3 Whereupon,

4 RICK TYLER

5 was called as a witness herein, and after first having
6 been duly sworn, was examined and testified as follows:

7 DIRECT EXAMINATION

8 BY MS. HOLMES:

9 Q Mr. Tyler, was the testimony in the FSA on
10 hazardous materials management and Com-8 prepared by
11 you or under your direction?

12 A Yes, it was.

13 Q And was the testimony that was filed
14 yesterday with respect to hazardous materials
15 management, including changes to conditions of
16 certification, and including changes to text, prepared
17 by you or under your direction?

18 A Yes.

19 Q And was the testimony that was filed
20 yesterday with respect to Com-8, including both the
21 changes in the conditions of certification and the
22 textual material, prepared by you or under your
23 direction?

24 A Yes, it was.

25 Q And was a statement of your qualifications

1 included in the FSA?

2 A Yes, it was.

3 Q And do you have any changes or corrections
4 to make to your testimony today?

5 A No, I do not.

6 Q Are the facts contained in your testimony
7 true and correct?

8 A Yes, they are.

9 Q And do the opinions contained in your
10 testimony represent your best professional judgment?

11 A Yes, they do.

12 Q And perhaps what would be easiest to do now
13 instead of having him prepare a summary of all of the
14 Hazmat and Com-8 testimony, is to simply have you focus
15 a summary on what changes were made to Haz-8 and to
16 Com-8 specifically.

17 A Okay. Haz-8 was changed to remove the
18 requirement for a lead car to the facility under clear
19 conditions. That was done in the context of SMUD
20 agreeing to restrict the hours such that the trucks
21 would not traverse the path, or the route, during
22 periods when there would likely be children present
23 along the route.

24 That was the primary concern we had in
25 initially making this requirement. So we felt, and we

1 have, by the way, accepted that in other cases, that
2 type of mitigation.

3 So we still have a requirement that there be
4 a lead vehicle during fog conditions. We have changed
5 the requirements so that the lead vehicle is not
6 required during clear conditions but that the use of
7 the route would be restricted during periods when
8 children would be present along the route.

9 Q Can you briefly summarize the proposed
10 changes to Com-8, as well?

11 MS. PEASHA: Could I intervene here for a
12 second? Are you saying then clear, as in daylight hours?

13 MR. TYLER: No. We're saying clear as in
14 not obstructed by fog or visibility.

15 MS. PEASHA: And how will you know by -- how
16 will you know that there's not fog at CPP when you can
17 sit down here and there will be fog up there thicker
18 than -- that you cannot see for three miles.

19 How are your trucks going to know that?

20 MR. TYLER: The trucks are required to check
21 with the CHP. The restrictions on hours, as they are
22 now, would suggest that the trucks would not be present
23 during the early morning hours when children would be
24 present.

25 It's very likely that heavy fog conditions,

1 if they existed, would exist during those periods. And
2 I would also point out that it would be incumbent on
3 the drivers to use their judgment, as well.

4 So I am comfortable that the CHP, that
5 calling the CHP regarding road conditions and Caltrans
6 to evaluate road conditions; and also exercise of
7 judgment by the drivers, themselves, is sufficient to
8 insure that they do not drive under unsafe conditions.
9 That they do not go there.

10 MS. PEASHA: And what time of hours at this
11 time of year would you say would have been clear last
12 night?

13 HEARING OFFICER SHEAN: I'm sorry, Ms.

14 Peasha, --

15 MS. PEASHA: Which was, which was,
16 a --

17 HEARING OFFICER SHEAN: -- your question's
18 got an inconsistency in it.

19 MS. PEASHA: -- was a total clear day; it
20 was a totally clear day all day. Last night up there
21 you couldn't even see the towers from my home, which is
22 less than a mile away. That's what I'm getting at.

23 So how can you depend on DOT and CHP to give
24 you reports up the hill unless they are sitting up
25 there with us.

1 HEARING OFFICER SHEAN: All right, well,
2 he's --

3 MS. PEASHA: That is --

4 HEARING OFFICER SHEAN: -- testifying as to
5 why he thinks it's adequate. If you think it's
6 inadequate, either you can address it in comment or
7 testimony or something like that.

8 But if you're asking him why they've done
9 what they've done, I think he's tried to explain that
10 to you.

11 MR. TYLER: First off, I would also point
12 out that one of the primary concerns along this route
13 is not just the stretch along the one road that's very
14 narrow. It's along the entirety of 104.

15 That the vast majority of releases of
16 hazardous materials in accidents occur at high speed.
17 In other words, the accident was at high speed, or the
18 collision involved another vehicle of similar weight
19 that was traveling at high speed, or collision with a
20 train.

21 Those are the kinds of things, these are
22 high integrity vehicles with heavy stainless steel
23 walls. They do not -- you don't see releases from
24 someone backing out of their driveway and hitting the
25 truck.

1 These releases are usually from overturns at
2 high speed on freeways or highways.

3 So the concern becomes the entirety of the
4 whole route. There's no system that's going to be
5 perfect or zero risk. The idea here is that we try to
6 preclude driving of this route with hazardous materials
7 at high speed during periods when there could be a
8 serious collision in the fog.

9 I'm not saying that it is absolutely
10 perfect. And, again, I would point out that the
11 drivers that actually operate these vehicles are highly
12 trained; they're accident rate, the records of
13 accidents associated with drivers of this type of
14 vehicle are extremely low, far below most other vehicle
15 carriers.

16 So, what I'm saying is I would not expect
17 one of these drivers to drive in any kind of unsafe
18 manner under any road condition.

19 So if there is a pocket of fog or there is
20 some other aspect of conditions along the route, that
21 cannot be controlled under every circumstance. But I
22 would expect that drivers of this caliber would not
23 operate a vehicle in any manner that would compromise
24 the safety of that transport.

25 MS. PEASHA: Is compromising not by putting

1 a lead truck in front when you say that you have 1200
2 trips a day on those two roads from 99 to Clay East
3 Road? You're saying one more vehicle on the road is
4 going to be just one more vehicle, and you are not
5 taking that safety mitigation?

6 MS. HOLMES: I don't believe that's his
7 testimony, but perhaps he can elaborate about how you
8 did your analysis.

9 MS. PEASHA: Well, that's what the -- that's
10 what SMUD has prepared, that they said it would be just
11 one more on the road.

12 But I'm saying if you're going to mitigate
13 it to safety, which is something that is, that you
14 cannot mitigate for one person's life, then why would
15 you put one more vehicle on the road with safe lights
16 so that those commuters knew that, hey, there's
17 something there that we're going to watch out for.
18 Because that's the only thing that's going to get their
19 attention.

20 HEARING OFFICER SHEAN: Okay, Ms. Peasha,
21 just so we can keep this proceeding kind of manageable,
22 --

23 MS. PEASHA: Sorry.

24 HEARING OFFICER SHEAN: No, that's -- I
25 understand your concerns. But I just want to do it in

1 a manner that really gets your concerns focused,
2 because you heard what he's testified. And it is
3 apparent to me you have a different feeling about it.

4 And no question or comment that you can make
5 to him is going to change his analysis and his
6 conclusion. So, what we'll do is hear from him. If
7 you have a question you want to ask him as to any of
8 the facts he relied upon or some other thing like that,
9 that's great.

10 But we'll come back to you and you can voice
11 a combination of your concerns and fears and questions
12 when it's essentially your turn.

13 But, if you're going to ask him questions,
14 let's ask the questions that go to the basis for his
15 conclusions.

16 MS. PEASHA: Is CHP allowed to testify
17 without a pre-testimonial hearing -- pre --

18 HEARING OFFICER SHEAN: Well, you have filed
19 the testimony of a police officer --

20 MS. PEASHA: I know I have, but I heard,
21 because of their standing, that they can come in here
22 without pre-testimony -- prefiled testimony.

23 HEARING OFFICER SHEAN: Well, I mean is
24 there something that you think is --

25 MS. PEASHA: Yes, because I have CHP sitting

1 on this road daily and they know of the accidents that
2 happen.

3 HEARING OFFICER SHEAN: Okay, my question
4 is, is there something that you think is deficient
5 about the testimony you've gotten from the police
6 officer?

7 MS. PEASHA: No, I think there's something I
8 would like to add more to that. And if I do bring in
9 someone, traffic and transportation tomorrow, is a CHP
10 officer qualified without pre-testimony to present
11 testimony at our hearings?

12 HEARING OFFICER SHEAN: Well, I would say
13 this. If the police office -- you can substitute
14 witnesses. If the police officer you have you want to
15 substitute a CHP officer for him, and his testimony is
16 fundamentally within the scope of the testimony that's
17 already been offered, there's not going to be a problem
18 with that.

19 And, so either bring the local police
20 officer --

21 MS. PEASHA: He's prepared to be here.

22 HEARING OFFICER SHEAN: -- or --

23 MS. PEASHA: That's fine.

24 HEARING OFFICER SHEAN: -- if you want to
25 substitute someone. But, you know, given the activity

1 that the Highway Patrol has to do, if it's only a
2 little addition you can probably get that out of the
3 police officer.

4 And so, you understand what I'm saying?

5 MS. PEASHA: Well, I'm just saying that if
6 you're going to depend on CHP, unless you have a CHP
7 sitting up there like he is telling me,
8 or -- how can you get a significant report on fog if
9 you are not sitting at that site? And it changes from
10 this 30-foot elevation that we're sitting at.

11 MS. HOLMES: Perhaps it would be helpful to
12 have the witness discuss what he knows about fog
13 conditions, and whether they're likely to be prevalent
14 up at the site when they're not prevalent down here.
15 And the pattern in which they dissipate. Maybe that
16 would be helpful?

17 HEARING OFFICER SHEAN: Well, you know, your
18 witness has already testified --

19 MS. PEASHA: That's fine.

20 HEARING OFFICER SHEAN: -- that he
21 understands that there's variability in the information
22 that's received by the people who are doing the
23 transport. And that under conditions where there is
24 that variability you rely upon the expertise of the
25 driver and the skill of the driver to attempt to avoid

1 a situation that is dangerous.

2 So I don't think we need to repeat that.

3 Okay. Any further questions of the witness?

4 All right. Let's move to -- you're going to
5 do Com-8, as well?

6 MR. TYLER: Yes. Com-8, the changes to Com-
7 8 were basically predicated on the fact that SMUD has
8 operated a nuclear facility for many many years and has
9 significant expertise in security matters.

10 That is not the case -- this is a general
11 condition that we apply to all power plants, knowing
12 full well that the vast majority of these power plants
13 have little or no experience with addressing issues of
14 terrorism and the concerns we have now today about
15 security of these facilities.

16 So, we have basically removed some of the
17 requirements for preparation of specific guidelines for
18 the plans, and have basically restricted the review of
19 that to personnel, to only personnel who are qualified
20 to review that at the Commission, and personnel who do
21 not pose any security risk in terms of reviewing that
22 data, or reviewing those plans.

23 HEARING OFFICER SHEAN: I guess given that
24 this is a unique circumstance, which is what you've
25 just testified to, for the questions that I might have

1 about the level of training of the CPM and other
2 Commission personnel and their security clearance, let
3 me just ask this because I'm noticing here on page 30
4 of your errata, the revisions.

5 What either are the competencies or
6 experience or jurisdiction of the Commission to approve
7 the security plan which is essentially the third word
8 from the end of your revised condition?

9 MR. TYLER: At present we have a contractor
10 that we're relying on, Mr. Greenberg. And he has
11 additional expertise that he's brought on board from
12 experts who have dealt with security issues extensively
13 in Israel.

14 We're also getting training for staff at
15 this point in time on design of security systems,
16 procedures, equipment and all other aspects.

17 So we envision that by the time any of these
18 plants actually prepare a plan, that we will be fully
19 capable of providing for review either through contract
20 or by trained staff at that point in time.

21 HEARING OFFICER SHEAN: And will these be
22 plans that have been reviewed and approved by other
23 federal and state authorities?

24 MR. TYLER: That is precisely the problem.
25 There really is no mechanism to insure that that

1 happens. And our concern is that, in fact, we address
2 the issues of site security in the interim, and that we
3 insure that there is at least some reasonable level of
4 site security for power plants.

5 And in particular, I guess, one of our
6 biggest concerns is transportation of hazardous
7 materials to and from the facility, how those enter the
8 facility and so on.

9 So, we have concerns about how materials
10 that are routinely used at these facilities might fall
11 into the hands of someone and be used as the jet
12 aircraft were in the 9/11 attacks.

13 So what I'm saying is --

14 HEARING OFFICER SHEAN: That -- all right,
15 well, let me --

16 MR. TYLER: -- is that's our --

17 HEARING OFFICER SHEAN: -- ask you with
18 respect to that, because you just said, if I heard you
19 correctly initially, that after these hazardous
20 materials have reached the plant, but the second item
21 you're talking about is prior to these materials
22 reaching the plant, is that correct?

23 MR. TYLER: Well, that -- obviously these
24 materials are transported every day and the security is
25 increasing constantly for the people who haul these.

1 But, again, we have plants that are very
2 remote, that are lightly manned. Not necessarily this
3 one. But we have plants throughout the state where
4 trucks would arrive at the facility and have to wait at
5 the gate and call somebody; have them sit there for
6 extended lengths of time. And they do come there
7 frequently.

8 I'm just giving you one example. So, we
9 don't want to set up a situation where that hasn't been
10 thought through, and where there haven't been
11 provisions made to insure that that truck enters the
12 facility rapidly; that the plant personnel are aware
13 that it's on its way to the facility; when it leaves
14 the place where it loads, that sort of thing.

15 So, to the extent that there are existing
16 requirements for security plans at the federal level,
17 we will, of course, keep track of that and reflect, to
18 the extent we can, any changes in policy or practice or
19 regulation at the federal level, or at the state level.

20 HEARING OFFICER SHEAN: Okay.

21 MR. TYLER: In the interim we have a concern
22 that we still have to address security in the interim,
23 at least in some sort of reasonable manner.

24 And so that's what the intent of these plans
25 were. We have been convinced by the fact that this

1 applicant has extensive experience that we can take a
2 slightly different approach here.

3 HEARING OFFICER SHEAN: All right. I notice
4 your Com-8 doesn't have a verification, but I assume
5 that would be something like notifying the CPM of the
6 availability of the plans when they are available?

7 MR. TYLER: Right. And we specifically have
8 difficulties with protection of sensitive information
9 from the Freedom of Information Act, so there's a lot
10 of really thorny issues about maintaining the
11 confidentiality of this type of information.

12 We do not want to receive this type of
13 information. We want it to exist at the facility. and
14 we do not want access, public access to this type of
15 information. That's why we're producing model plans
16 and model guidelines so the public can see that the
17 kinds of things that we're doing to protect security.
18 But the specifics of where the monitors are, where the
19 cameras are, where the guards are, what sort of other
20 protections are at the facility, we don't think that
21 should become general information that's available to
22 everyone.

23 HEARING OFFICER SHEAN: No. And if I
24 understand the rewrite of this condition it is that
25 those materials will remain onsite. And the Commission

1 representative will go to the site?

2 MR. TYLER: That's correct.

3 HEARING OFFICER SHEAN: And will not be in
4 possession of those documents, themselves?

5 MR. TYLER: That's correct.

6 HEARING OFFICER SHEAN: Okay. Are there any
7 questions on this matter?

8 MR. COHN: We have no questions for the
9 staff's witness at this time. We would ask whether he
10 is available tomorrow when we talk about traffic and
11 transportation; or will that be a separate witness?

12 MS. HOLMES: The order doesn't identify any
13 staff witness for traffic or transportation. We had
14 not planned to have anybody present.

15 MR. COHN: It's not critical; it might be
16 useful. Certainly they had asked for us to provide a
17 witness in that area, which we will.

18 Mr. Tyler does have some expertise that
19 might be helpful at that time. But it's not critical.
20 We can cover the issue.

21 HEARING OFFICER SHEAN: Well, it probably is
22 going to be helpful because I know the Committee has
23 some questions, whether it's Mr. Tyler or somebody
24 else, some questions with regard to your traffic and
25 transportation.

1 And while you have addressed the delivery of
2 hazardous materials and the potential effect upon
3 students and children in the area along 104 and Clay
4 East Road, I think -- I know that the Committee has
5 some additional questions that we want to ask with
6 regard to the safety of school children, not only from
7 the hazardous materials delivery, but the
8 transportation, the commuting of construction workers
9 and the delivery of construction materials, as well as
10 therefore necessarily, the operational employees and
11 materials. But mostly with respect to the
12 construction, given what is in this section on traffic
13 and transportation, the peak construction worker force
14 and the peak construction deliveries.

15 MR. TYLER: I have no problem with being
16 here, but as far as testifying outside the issue of
17 transportation involving hazardous materials, I really
18 have no expertise or certainly have not prepared any
19 testimony in that regard.

20 So, I'm certainly willing to be here to
21 address any question about transportation of any
22 hazardous material to the facility, but --

23 HEARING OFFICER SHEAN: That actually may be
24 either too specific in one area and not specific enough
25 in our other area. Because I think we're trying to get

1 a handle on how the school children transportation
2 system works on 104 and Clay East Road so that we
3 understand the nature of the potential for an impact
4 from the construction worker transportation and
5 construction delivery transportation.

6 MS. HOLMES: I think your questions go more
7 to the area of the technical area of traffic and
8 transportation which deals with the nonhazardous
9 materials --

10 HEARING OFFICER SHEAN: That's affirmative.

11 MS. HOLMES: -- deliveries. Since the order
12 did not identify any cross-examination of staff
13 witnesses in that area, we had not asked our witnesses
14 to be available. We can certainly go check right now
15 and see if they are. And have them available if it
16 doesn't conflict with something else, or perhaps even
17 if it does, make some arrangements.

18 HEARING OFFICER SHEAN: Okay. Yeah, because
19 it's just a matter of reviewing the mitigation that's
20 offered, and why they think it's adequate.

21 MS. HOLMES: Okay, the Project Manager is
22 going to find out their availability --

23 HEARING OFFICER SHEAN: Okay.

24 MS. HOLMES: -- as we move on.

25 MR. TYLER: Again, I would, you know, offer

1 to be here if anyone feels that there's going to be
2 further discussion regarding --

3 MR. COHN: As long as he's available I would
4 like to at least have him available, if needed. I
5 don't know whether we will or not.

6 HEARING OFFICER SHEAN: All right. If you
7 want to come down to rainy downtown Herald tomorrow,
8 you're welcome, we'll welcome you.

9 MR. TYLER: If you guys desire me to be
10 here, I'll be here.

11 HEARING OFFICER SHEAN: Okay.

12 MR. COHN: All right.

13 MS. PEASHA: I have a couple of questions
14 about his delivery then. May I ask those?

15 HEARING OFFICER SHEAN: Sure.

16 CROSS-EXAMINATION

17 BY MS. PEASHA:

18 Q Where is the hazardous material response
19 coming from? I mean, are you going to call from
20 highway 5, or are you going to call from 99? Where are
21 you going to --

22 HEARING OFFICER SHEAN: Let's focus this
23 question. In the event of an accident where is the
24 response coming from?

25 MS. PEASHA: Yeah.

1 HEARING OFFICER SHEAN: Okay.

2 MR. TYLER: That's really -- I can go look
3 in the testimony and go back over that. You're talking
4 about emergency response in the event that there is a
5 release?

6 MS. PEASHA: Absolutely.

7 MR. TYLER: Okay. The intent of Haz-8 is to
8 mitigate the potential for release. So, and the
9 changes to this address the issue of whether the
10 mitigation is consistent or relatively equivalent to
11 the condition that we previously proposed.

12 I can review the testimony if you want,
13 again, and go back over that.

14 HEARING OFFICER SHEAN: Okay, she's just
15 asking you whether at this moment you know where a
16 response would come from to respond to let's say an
17 aqueous ammonia spill on 104 or Clay East Road.

18 MR. TYLER: I would have to go back and
19 review the testimony again.

20 HEARING OFFICER SHEAN: Okay, he doesn't
21 know right now.

22 MR. TYLER: I haven't --

23 MS. PEASHA: You have no idea?

24 MR. COHN: Mr. Shean, --

25 HEARING OFFICER SHEAN: He doesn't know

1 right now.

2 MS. PEASHA: -- whether --

3 MR. COHN: Mr. Shean, if it's helpful we can
4 provide a witness to respond to that question. If you
5 would like such a response.

6 MR. TYLER: If --

7 PRESIDING MEMBER PERNELL: Do you have the
8 answer today?

9 MR. COHN: Right here with us.

10 MR. TYLER: If you'll give me just a minute
11 I can find that. It's actually under worker safety, so
12 it's something we've already covered. I didn't come
13 prepared to address that today, but I'm sure I can find
14 it very quickly.

15 PRESIDING MEMBER PERNELL: So maybe we can
16 move on.

17 HEARING OFFICER SHEAN: All right, why don't
18 we sort of shift from focusing this way to this way,
19 and we have is it one or two applicant witnesses with
20 respect to --

21 MR. COHN: What I would suggest, Mr. Shean,
22 is that we have both Mr. Colin Taylor, our Project
23 Director, and Mr. Kevin Hudson, who are both already
24 sworn in this morning. We could introduce their
25 testimony in support of Haz-8 and Com-8.

1 I would indicate we also did file prefiled
2 written testimony of Jerry Salamy and Bob Nelson
3 specifically on Haz-8. And they are also available.
4 But I think Mr. Hudson and Mr. Taylor are available to
5 answer the questions that have come up. And if needed,
6 we can delve into more detail with the others.

7 So I would request we at least proceed with
8 Mr. Taylor and Mr. Hudson. I believe Mr. Hudson can
9 answer this question.

10 HEARING OFFICER SHEAN: Okay. You've been
11 previously sworn.

12 Whereupon,

13 COLIN TAYLOR and KEVIN HUDSON
14 were called as witnesses herein, and having been
15 previously duly sworn, were examined and testified as
16 follows:

17 MR. COHN: And if I could just ask a few
18 preliminary questions to lay the proper foundation.
19 And I'll ask these of both of you.

20 DIRECT EXAMINATION

21 BY MR. COHN:

22 Q Please state your name and spell it for the
23 record.

24 MR. HUDSON: My name is Kevin Hudson;
25 K-e-v-i-n H-u-d-s-o-n.

1 MR. TAYLOR: I'm Colin Taylor; C-o-l-i-n
2 T-a-y-l-o-r.

3 MR. COHN: And could you please state your
4 respective job titles and duties?

5 MR. TAYLOR: Colin Taylor, I'm the Project
6 Director.

7 MR. HUDSON: Kevin Hudson, I'm the Senior
8 Project Manager, Licensing Manager for the project.

9 MR. COHN: And do you have before you, in
10 the case of Mr. Taylor, testimony that was prefiled on
11 March 3rd, general project development, including
12 project description, facility design, power plant
13 reliability, power plant efficiency and general
14 conditions including compliance monitoring and closure
15 of plant?

16 HEARING OFFICER SHEAN: Please say yes.

17 MR. TAYLOR: Yes.

18 (Laughter.)

19 HEARING OFFICER SHEAN: I don't want him to
20 have to repeat that.

21 MR. TAYLOR: I was looking for it, that was
22 all.

23 MR. COHN: And the corresponding r, sum, that
24 was attached to appendix A of that document?

25 MR. TAYLOR: Yes.

1 MR. COHN: And I'll ask the same of Mr.
2 Hudson, a similar document, but with your name and
3 testimony?

4 MR. HUDSON: Yes.

5 MR. COHN: And I'll ask both of you, were
6 these documents prepared by you or under your
7 direction?

8 MR. TAYLOR: Yes, they were.

9 MR. HUDSON: Yes, they were.

10 MR. COHN: And do you have any changes or
11 additions to your testimony at this time?

12 MR. TAYLOR: No, I do not.

13 MR. HUDSON: No.

14 MR. COHN: And to your knowledge is the
15 testimony true and correct?

16 MR. TAYLOR: Yes, it is.

17 MR. HUDSON: Yes, it is.

18 MR. COHN: And do you adopt this testimony
19 as your testimony under oath today?

20 MR. TAYLOR: Yes, I do.

21 MR. HUDSON: Yes.

22 MR. COHN: All right, I then move into
23 evidence the testimony of Mr. Taylor and the testimony
24 of Mr. Hudson.

25 HEARING OFFICER SHEAN: All right. Is there

1 any voir dire of the witnesses with respect to their
2 qualifications to testify as experts?

3 Hearing none, they are qualified.

4 Any objection to admission into evidence?

5 Hearing none, it's admitted.

6 BY MR. COHN:

7 Q All right. Could you, Mr. Hudson, describe
8 in response to the question from Ms. Peasha, who would
9 be the first responder in the event of a spill in the
10 vicinity of the plant?

11 MR. HUDSON: Yes. Fire Support Services
12 first responder would be the Herald Fire Department.
13 Closest fire station is located at 11620 Clay Station
14 Road in Herald. And that's about two miles away from
15 the plant. The response time to the project site is
16 about ten minutes.

17 As a backup there is the main station
18 located at 12746 Ivie Road in Herald, with a response
19 time to the site at about 15 minutes.

20 In addition, the City of Sacramento
21 Hazardous Materials Team Station 7 is assigned as the
22 offsite hazardous materials first responder for CPP.

23 MS. PEASHA: And their time of arrival?

24 MR. HUDSON: Estimated to be 30 minutes.

25 PRESIDING MEMBER PERNELL: Where is Station

1 7 located? General area? South? North?

2 MR. HUDSON: North of Elk Grove.

3 PRESIDING MEMBER PERNELL: So South
4 Sacramento?

5 MR. HUDSON: Yes.

6 MR. COHN: And if the accident were to occur
7 on the freeway or close to the freeway off Twin Cities
8 Road?

9 MR. HUDSON: We'd expect Station 7 to be the
10 responder.

11 MR. COHN: The witness is available for
12 further questions. Both witnesses.

13 HEARING OFFICER SHEAN: All right.

14 CROSS-EXAMINATION

15 BY MS. PEASHA:

16 Q Are we aware that the two Herald Fire
17 Departments are volunteer fire departments?

18 MR. HUDSON: Yes.

19 MS. PEASHA: And do you know their hazardous
20 waste material procedures?

21 MR. HUDSON: I don't know their hazardous
22 waste material procedures, but we've had several
23 discussions throughout the last two years with the
24 Herald Fire Department Chief, and he has raised no
25 problem with either the site or the transportation

1 routes.

2 MS. PEASHA: Is he certified as a HazMat
3 certification through their classes?

4 MR. HUDSON: I don't know.

5 MR. TYLER: If I might add, I don't know if
6 that's okay, but the information that was just provided
7 is completely consistent with the testimony that staff
8 has provided previously under worker safety.

9 And further I would point out that generally
10 when you talk about a response of the type of team that
11 exists at Station 7, you're talking about a very
12 serious release. First responders are trained with
13 regard to responding to some level of hazardous
14 materials release.

15 Aqueous ammonia is hazardous, but it's
16 certainly not anywhere near as hazardous as materials
17 such as anhydrous ammonia. That would have been an
18 alternative that wasn't used at this facility.

19 So, normally the way you deal with aqueous
20 ammonia spills is you dilute those to the point where
21 there is no evolution of material off the pool. And I
22 don't see, personally I don't believe that most fire
23 departments would resort to a full hazmat team to
24 address a spill with this material unless it was a very
25 very large spill.

1 MS. PEASHA: We are talking about 1000
2 gallons or more.

3 MR. TYLER: Yes, and again, --

4 MS. PEASHA: And you expect a hazardous
5 volunteer fire department that groups themselves
6 together from their homes and their businesses to
7 respond to a haz waste material that could be up to
8 1000 pounds of aqueous ammonia?

9 MR. TYLER: Again, I would point out that
10 releases are seldom the entire contents of the tank
11 that's involved. It's very unlikely that that would
12 occur in this immediate area or on Clay Road because of
13 the speeds involved.

14 There could be an accident at high speed out
15 along the main highway, in which case there could be
16 more significant releases.

17 MS. PEASHA: You're talking 104?

18 MR. TYLER: Yeah, and where that --

19 MS. HOLMES: I'm sorry, did you hear her
20 question? She's asking if you're talking about 104 or
21 99 and 5.

22 MR. TYLER: Yes, 104 is what I'm talking
23 about. There could be a high speed collision on 104.
24 But again, that's closer to the Station 7. And again,
25 I would point out that the standard methods of

1 mitigating that type of release would be to dilute the
2 material with water, --

3 MS. PEASHA: And which there are --

4 MR. TYLER: -- which the existing
5 fire --

6 MS. PEASHA: -- no, which there are no fire
7 water supplies on that road. There is no shoulder and
8 there's a four-foot ditch on both sides of that road.
9 So you're expecting -- you're looking at it in a worst
10 case scenario, a hazardous waste of 1000 gallons of
11 aqueous ammonia blowing in any direction while in a
12 residential area.

13 MR. TYLER: First off, most times when the
14 fire department responds you're talking about having a
15 truck that has water on it.

16 MS. PEASHA: We're talking about a volunteer
17 fire department that has to go and get their trucks
18 first.

19 MR. TYLER: But they would still --

20 MS. PEASHA: So you --

21 MR. TYLER: -- they would still respond to
22 the --

23 PRESIDING MEMBER PERNELL: All right, I'm
24 going to have to stop this. First of all, we've got
25 the applicant witness --

1 MS. PEASHA: Yeah, I'm sorry, we got off
2 track there.

3 PRESIDING MEMBER PERNELL: -- and so
4 we --

5 MS. PEASHA: I apologize --

6 PRESIDING MEMBER PERNELL: -- I don't need
7 this. Do you have a question for the applicant's
8 witness?

9 MS. PEASHA: Are you aware of any gasline
10 explosions at any power plants?

11 HEARING OFFICER SHEAN: We're getting afield
12 here.

13 MS. PEASHA: Of hazard -- is that not of
14 hazardous waste? The hazardous material.

15 HEARING OFFICER SHEAN: It is, but, you
16 know, I think what we -- I'll let you ask that, but
17 fundamentally the question is about hazardous material
18 vehicles on 104 and Clay East Road and the response --

19 MS. PEASHA: Well, I'm sorry, I believe he
20 jumped in on my response.

21 So, okay, same scenario. Are there any
22 residences along those roads?

23 MR. HUDSON: Yes, there are.

24 MS. PEASHA: And have you modeled the
25 ammonia release from if there was an accident

1 of (inaudible) on any of those roads?

2 MR. HUDSON: Not on the road. An offset
3 consequence analysis was done for release at the plant.

4 MS. PEASHA: With wind factors and
5 everything subjected to it?

6 MR. HUDSON: That's correct, yes.

7 HEARING OFFICER SHEAN: Ms. Peasha, let's
8 get that microphone in front of you, because the
9 combination of your turning toward them and --

10 MS. PEASHA: Okay.

11 HEARING OFFICER SHEAN: You can look at
12 them, but just have the microphone basically kind of in
13 front of you.

14 MS. PEASHA: What is the planned route for
15 the aqueous ammonia transportation from 99 to the
16 plant?

17 MR. HUDSON: The planned route is state
18 highway 104 to Clay East Road, to the plant entrance.
19 That's the most direct route.

20 MS. PEASHA: And that would be Clay East
21 Road that you are prospecting for the entrance?

22 MR. HUDSON: Yes.

23 MS. PEASHA: How many residents along Clay
24 East Road?

25 MR. HUDSON: I haven't counted, but I would

1 estimate maybe 24 houses that front Clay East Road,
2 perhaps.

3 MS. PEASHA: Is the road from one, the size
4 of 104 to Clay East Road, significantly smaller?

5 MR. HUDSON: Smaller than what?

6 MS. PEASHA: From each other. 104 is a
7 highway; Clay East Road potentially was there for
8 just -- has different base and everything. Do you guys
9 know the difference in the measurements of
10 the -- with those roads?

11 MR. HUDSON: Highway 104 has a speed limit
12 of 55 miles an hour and is a state highway. Clay East
13 Road is a county road. So I would expect that the road
14 and base would be a little bit different.

15 MS. PEASHA: But do you know the width of
16 104?

17 MR. HUDSON: I don't know the width of 104,
18 no.

19 MR. COHN: I might point out that we are
20 going to be covering this specific issue tomorrow. So
21 we are prepared with the witness tomorrow on the use of
22 Clay East Road, in particular.

23 HEARING OFFICER SHEAN: Different from these
24 witnesses?

25 MR. COHN: Well, they'll be available --

1 HEARING OFFICER SHEAN: Okay.

2 MR. COHN: We also will have someone with
3 more specific knowledge on that.

4 MS. PEASHA: That's certainly fine. I have
5 some other potential questions regarding the use of
6 their entrance. But that can be covered tomorrow.

7 HEARING OFFICER SHEAN: Yes. I think at
8 least the Committee has in mind discussions of the use
9 of Clay East Road for whatever purpose is the subject
10 of tomorrow's hearing.

11 MS. PEASHA: Okay.

12 MS. HOLMES: Mr. Shean, --

13 HEARING OFFICER SHEAN: Do you have
14 any --

15 MS. PEASHA: Can I have -- I have one other question.

16 HEARING OFFICER SHEAN: Sure, go ahead.

17 MS. PEASHA: Are you aware of any natural
18 gas pipeline explosions at any other power plant?

19 MR. TAYLOR: I'm not aware of any natural
20 gas explosions. I understand that Calpine had an
21 incident at one of the LM6000 plants. It did not
22 involve a rupture of a pipeline. I don't know whether
23 that is what you're referring to. But I am aware that
24 that happened fairly recently.

25 MS. PEASHA: What did it entail? Can you --

1 what did it entail as far as you know, Mr. Taylor?

2 MR. TAYLOR: My understanding is that they
3 were in the testing phase and they allowed gas to
4 escape. They were actually blowing down some gas and
5 testing the pipeline. And the gas collected in one
6 area and there was an ignition source, so the gas
7 caught fire.

8 MS. PEASHA: How close does your gasline
9 pipe, which you are going to initially put it down Clay
10 East Road, come into the area of delivery of your
11 aqueous ammonia deliveries?

12 MR. TAYLOR: The gas pipeline is on the
13 north side of the road some distance from the road
14 along Clay East Road. And it's buried to a depth of at
15 least five feet. So we would not expect it to come in
16 contact with any ammonia delivery.

17 MS. PEASHA: Does the pipeline stop before
18 the entrance to the fuel -- to the entrance to the
19 site, itself?

20 MR. TAYLOR: There's a gas metering and
21 potentially compressor station immediately before the
22 entrance to the site.

23 MS. PEASHA: Immediately is in what -- in
24 what distance?

25 MR. TAYLOR: I don't have the drawing,

1 but --

2 MS. PEASHA: Approximately?

3 MR. HUDSON: It's about 100 feet from the
4 roadway.

5 MS. PEASHA: To the entrance?

6 MR. HUDSON: Approximately.

7 MS. PEASHA: Approximately. Okay, --

8 MR. TAYLOR: And the pipeline station,
9 itself, will be adequately guarded. Not guarded
10 physically, but guarded by having some guard rails in
11 front of it.

12 MS. PEASHA: Okay. I don't have any further
13 questions on that.

14 MR. GARCIA: My question is to the
15 applicant. And I guess my question really could be the
16 hazardous material area, or in the area of worker
17 safety, but if you would indulge me, I've read through
18 most of the material that has been submitted.

19 I had not seen -- maybe I missed it, but who
20 would respond at the plant, not on the road, but who
21 would respond at the plant for either a hazardous
22 material spill or to an incipient fire?

23 MR. HUDSON: The Herald Fire Department
24 would.

25 MR. GARCIA: So, as I understand, plant

1 personnel would not have initial responder training to
2 respond to a fire or hazardous material release, is
3 that correct?

4 MR. HUDSON: Well, if it was a small fire
5 perhaps something that could be extinguished by a fire
6 extinguisher, I would expect plant personnel could
7 handle the fire upon sending out for the fire
8 department.

9 But a larger spill or hazardous material
10 spill that would be of the size or nature that would
11 require the fire department to respond, I would not
12 expect plant personnel to try to handle that because of
13 personnel safety.

14 MR. GARCIA: Okay. One of the things that I
15 did not notice in the material that was submitted by
16 the applicant, you guys, was any kind of a plan for
17 training the plant personnel in response to these
18 hypothetical spills or fires.

19 Could you comment on that?

20 MR. HUDSON: In the AFC we've proposed on
21 page 8.7-13 there's some training that we have
22 outlined. And that training will include a hazardous
23 waste program which would include evaluation of the
24 hazard training, air monitoring, medical surveillance,
25 and it would include health and safety plan

1 preparation.

2 MR. GARCIA: Okay. My --

3 MS. PEASHA: Well, what is that reference
4 page?

5 HEARING OFFICER SHEAN: Ms. Peasha, he's
6 asking the -- I'm sorry.

7 MS. PEASHA: I just wanted the reference
8 page.

9 HEARING OFFICER SHEAN: 8.7-13.

10 MS. PEASHA: Sorry.

11 HEARING OFFICER SHEAN: No problem.

12 MR. GARCIA: Okay, again, not to be
13 argumentative but my understanding is that that does
14 not qualify the operators to respond to either an
15 incipient fire or a hazardous material release, and
16 that the regulatory requirement is a much higher level
17 of training.

18 I believe what you described in there only
19 qualifies them to report a fire or hazardous material
20 release. It does not qualify them to respond to it.

21 MR. HUDSON: Well, on page 8.7-21 we have an
22 operations training program outline that explains the
23 list of training courses, and the target employees. It
24 does not go into the depth of the amount of training or
25 the exact type of training that they would receive.

1 MR. GARCIA: Is that -- are you saying that
2 there are certain employees or classifications of
3 employees that are going to be trained in the 40-hour
4 OSHA-required responder training?

5 MR. HUDSON: I would expect so, but I'm not
6 certain of the exact requirement.

7 MR. COHN: If we may, since you're getting
8 into some details that go beyond the project manager's
9 experiences, the licensing project manager, we do have
10 our operations manager with us who actually did file
11 testimony in this area, hazmat, Bob Nelson.

12 So we can call him to the stand since you're
13 asking more detailed questions about operation.

14 MR. GARCIA: That's fine with me.

15 MR. COHN: All right. We'll then call Mr.
16 Nelson to the stand. Were you previously sworn?

17 MR. NELSON: I was.

18 MR. COHN: All right. Please have a seat.

19 Whereupon,

20 BOB NELSON

21 was called as a witness herein, and having been
22 previously duly sworn, was examined and testified as
23 follows:

24 DIRECT EXAMINATION

25 BY MR. COHN:

1 Q Please state your name for the record and
2 spell it.

3 MR. NELSON: My name is Bob Nelson; that's
4 B-o-b, forwards or backwards, and Nelson,
5 N-e-l-s-o-n.

6 MR. COHN: All right. And, Mr. Nelson, do
7 you have before you the testimony that you prefiled in
8 this case that was filed on March 3rd along with the
9 rest of the SMUD testimonies?

10 MR. NELSON: Yes, sir, I do.

11 MR. COHN: And that would include the
12 exhibits and the r, sum, that was attached thereto?

13 MR. NELSON: That's correct.

14 MR. COHN: And do you incorporate that as
15 your testimony under oath today?

16 MR. NELSON: I do.

17 MR. COHN: All right, do you have any
18 changes or corrections to that testimony?

19 MR. NELSON: I do not.

20 MR. COHN: Why don't you, for the Committee
21 and -- I was going to have --

22 HEARING OFFICER SHEAN: Let's see about his
23 objective qualifying the --

24 MR. COHN: Well, that's why I was going to
25 ask him just to summarize his qualifications, but if

1 you want to do --

2 HEARING OFFICER SHEAN: Well, don't they
3 appear in the material?

4 MR. COHN: -- it based on -- they do. They do.

5 HEARING OFFICER SHEAN: All right, well, we
6 can read them.

7 MR. COHN: All right.

8 HEARING OFFICER SHEAN: And we should have.

9

10 MR. COHN: Okay.

11 HEARING OFFICER SHEAN: Any objection to
12 qualifying the witness as an expert? No objection,
13 he's qualified.

14 Is there objection to the admission of the
15 testimony of the expert witness? Hearing none, it's
16 admitted.

17 MR. COHN: All right. If I may I'd like to
18 just have the witness briefly describe what his duties
19 are for the District. Go ahead.

20 MR. NELSON: Commissioner Pernell, Hearing
21 Officer Shean, Mr. Garcia, I'm currently employed by
22 the Sacramento Municipal Utility District as
23 Superintendent Project Development. That's an interim
24 position where I'm involved with the development and
25 construction of the Cosumnes Power Plant project.

1 My permanent position with SMUD is that of
2 Superintendent Thermal Generation Assets, where I'm
3 responsible for the operation and maintenance, ongoing
4 operation of all SMUD's thermal power plants.

5 MR. COHN: All right, the witness is
6 available for --

7 PRESIDING MEMBER PERNELL: Mr. Garcia has a
8 question.

9 MR. COHN: You might want to repeat your
10 question.

11 MR. GARCIA: Yeah. Could you explain to the
12 Committee who the classification of the employees that
13 would be expected to respond to either hazardous
14 materials spill and/or a fire? And also address the
15 issue of when these employees are on shift. In other
16 words, I'm guessing you're either going to have a two-
17 shift operation or three-shift operation. And are
18 these going to be only daylight operation employees?
19 Or are they going to be the classification is going to
20 be round-the-clock? And the kind of training that
21 these employees would be expected to have?

22 I know that's a multipart question, but if
23 you'd give it a whack I'd appreciate it.

24 MR. NELSON: You bet. I'll answer it with
25 several statements, the first of which is that there

1 would be trained personnel onsite at all times. We
2 would envision four operating shifts, two shifts per
3 day, 12 hours in length. And these shifts would be
4 comprised of two individuals that were trained.

5 That being said, it is not our intention to
6 staff the plant with first responders, either to fire
7 or hazardous material events.

8 In order to qualify as a first responder to
9 fire, you must achieve a brigade status at a plant.
10 And we don't intend to do that. We feel that
11 firefighting is best left to professionals.

12 And secondly, there's very little of the
13 plant proper that's actually combustible that is not
14 already protected by automatic fire detection and
15 suppression.

16 So the potential for a fire that would
17 require large scale intervention from a fire department
18 or other is limited, in my opinion.

19 Secondly, with regard to hazardous materials
20 spills, response in the plant would be governed by the
21 plant's emergency response plan, which will be
22 developed. And the emergency response plan is a
23 particular subject of training. And each individual on
24 the plant site, whether connected with operations or
25 maintenance, administration, management, et cetera,

1 would all receive training. It's primarily an
2 instrument designed to effect reporting and safe
3 evacuation of personnel in an orderly fashion.

4 MR. GARCIA: Okay. Let me poke at that
5 question a little bit more.

6 MR. NELSON: Okay.

7 MR. GARCIA: So, because I'm somewhat
8 familiar with this. So I think what you're saying is
9 if there is either an aqueous ammonia leak or oil leak
10 or something else like that, the level of response that
11 you're operating and/or maintenance people would have
12 is that basically to report and call in for help. They
13 will not be trained to patch that leak or put out that
14 fire?

15 MR. NELSON: Correct, with some
16 clarification. In the event of a hazardous material
17 release or fire that would be correct.

18 In the event of an oil leak, say the
19 personnel, to the extent that they would not encounter
20 undue hazard, would likely be most knowledgeable with
21 the systems and how to isolate the leaks. And they
22 would tackle that in order to prevent spread of the
23 spill.

24 They would also be equipped on an emergency
25 response plan with the prerequisite training and

1 equipment to handle an oil spill, dike it, if you will,
2 contain it.

3 MR. GARCIA: Okay, let's make that
4 morpholine, which is one of the chemicals you have on
5 your list. And let's say that your storage tank
6 develops a leak.

7 MR. NELSON: Um-hum, for morpholine, for
8 example, which is an amine, morpholine would be
9 contained; it's delivered in usually double-wall, but
10 could be single-wall stainless steel containers and
11 placed on a containment.

12 So the personnel would not attempt to
13 remediate a spill of that nature. They would call for
14 help. Although the plant is engineered in such a way
15 that that spill would contain itself.

16 MR. GARCIA: Okay. And have you made an
17 independent assessment of the capabilities of the
18 Herald Fire Department to respond to either a fire or a
19 hazardous material spill?

20 MR. NELSON: I have not, and I'm not the
21 best one to answer that question.

22 MR. GARCIA: Okay. And this is for the
23 applicant's attorney.

24 MR. COHN: Yes.

25 MR. GARCIA: Has anybody on the applicant's

1 side made that kind of an assessment?

2 MR. COHN: We have -- we're going to have
3 quite a team up here. We have Steve Redeker available,
4 who is the Rancho Seco Plant Manager, and who has been
5 dealing with all of the security issues, operational
6 issues at the Rancho Seco site.

7 So if I could bring him up. And he actually
8 had been envisioned as a witness in another area, the -
9 -

10 PRESIDING MEMBER PERNELL: I'm going to have
11 a question for you, Bob, so --

12 MR. COHN: Yeah, don't go. Not so fast.

13 Let me just indicate that Mr. Redeker also
14 has prefiled testimony. It was envisioned as testimony
15 on radiological conditions at the site. But we could
16 go ahead and introduce that at this time, at least for
17 the purpose of his r, sum, and his background at SMUD.

18 HEARING OFFICER SHEAN: Well, now, do we
19 believe he has the information that Mr. Garcia is
20 seeking, as to the assessment of the readiness and
21 qualifications and training of the Herald Fire
22 Department?

23 MR. COHN: I'll let him speak for himself,
24 but I know he does have experience, a lot of experience
25 working with the Herald Fire Department. So that's the

1 reason we brought him up.

2 But do you want to go ahead and ask him that

3 --

4 HEARING OFFICER SHEAN: Well, let's just
5 find out, first of all, whether he thinks he's the
6 witness to answer that.

7 MR. REDEKER: Probably not at this time. We
8 have removed so much of our hazardous material from
9 Rancho Seco that we haven't had to deal with the Herald
10 Fire Department relative to hazardous materials for
11 probably on the order of ten years now. So I couldn't
12 say I could really assess the Herald Fire Department
13 relative to hazardous materials.

14 Relative to fire protection, yes. But not
15 relative to hazardous materials at this time.

16 MR. COHN: What we will do, then, is
17 tomorrow have a witness available to answer your
18 question.

19 HEARING OFFICER SHEAN: And just so --

20 PRESIDING MEMBER PERNELL: You might want to
21 have -- I'm sorry. You might want to have somebody
22 from the Herald Fire Department here.

23 MR. COHN: I don't know if we'll be able to
24 do that. We'll certainly check.

25 HEARING OFFICER SHEAN: Just let me

1 indicate, because in some other proceedings, I hate to
2 make comparisons, where we're going into towns or
3 cities that may not necessarily have had experience in
4 this, one of the things we always want to insure is
5 that both a firefighting capability and a hazardous
6 material response. Not only for the protection of the
7 public and the workers, but also the protection of the
8 firefighting personnel, themselves; that they have
9 adequate training and know what they're doing, and are
10 not putting themselves in harm's way. And they're
11 actually able to do something beneficial with respect
12 either to the fire or the hazardous material.

13 So, I notice in the staff's final
14 assessment, so I'm going to turn over here, do you
15 think you've made an independent assessment of
16 the -- I read here on page 4.15-10 that you believe you
17 have confirmed with the Herald Fire Department that
18 they're adequately staffed and equipped to control
19 whatever fire would occur at the facility.

20 But do you have similar information with
21 respect to their hazardous material handling
22 capability?

23 MR. TYLER: We actually spoke with the
24 Herald Fire Department and they indicated that they
25 felt comfortable with responding to incidents at the

1 facility.

2 I would point out that typically what would
3 happen is they would act as first responders to a
4 hazmat event. If they felt that they were in a
5 position to deal with the event, they would start to
6 deal with the event. And I would expect that at the
7 moment that they arrived onsite and determined that
8 they had a significant hazmat event, they would notify
9 the City of Sacramento Hazardous Materials Response
10 Team.

11 This is really pretty common. Normally you
12 don't staff every fire department with that sort of
13 capability, because it's expensive. So what generally
14 is done is there will be scattered hazmat response
15 teams that are for full hazmat response.

16 I would point out again that the risk
17 profiles from this facility, the types of materials
18 being used, and the controls involved really make it
19 very unlikely that we would have a significant hazmat
20 event.

21 Aqueous ammonia is much less hazardous than
22 the anhydrous form. If anhydrous was present at this
23 facility that would be a much different circumstance.
24 And I would be somewhat concerned about response times.
25 Or probably very concerned about response times.

1 In the case of aqueous ammonia with
2 catchment basins and the type of equipment that we have
3 here, we've already put in place conditions where the
4 hazardous materials would, if they were released -- and
5 the most probably place for release is during loading,
6 transfer operations. That's by far the largest risk.

7 If a release occurs during loading the
8 material automatically drains from the catchment basin
9 into a covered area which suppresses virtually all
10 emissions from the facility.

11 I would also point out that every hazmat
12 delivery truck driver has to be trained extensively on
13 how to respond to an incident involving his truck. If
14 there were a tank failure, the tank would automatically
15 drain into the catchment basin.

16 So, I do not envision a circumstance where
17 there would be significant risk offsite, certainly. In
18 the very immediate area of the release there could be
19 high concentrations, dangerous concentrations. Again,
20 I would expect that anybody who would be observing
21 those deliveries, or the drivers, themselves, would be
22 well aware of those risks and would have access to
23 equipment needed to allow self rescue or whatever
24 action they wanted to take.

25 So, I guess what I'm saying is the response

1 times of 30 minutes may seem long. That's not at all
2 un-typical. I evaluated response times in areas such
3 as Concord and areas over there where we had
4 significant refineries. And response times are in this
5 same magnitude.

6 So, a 30-minute response time for a full
7 hazmat response is not unusual. Even in areas with
8 much greater, with much larger facilities and much
9 greater risk profiles.

10 PRESIDING MEMBER PERNELL: All right, I
11 think, if I may, Mr. Shean, I think that the Committee
12 is concerned because the intervenor has said that
13 there's a volunteer fire department. The only question
14 we're asking here is the level of training that that
15 volunteer fire department has.

16 And if you don't know it, then the Committee
17 would expect you to find out at some point.

18 The question I have for Bob is the level of
19 training -- you mentioned that your employees are
20 trained, and I'm interested in the level of training
21 that they have. I mean what is your definition of
22 training?

23 MR. NELSON: For example, each plant would
24 have, and Cosumnes will as well, have its own plant-
25 specific training. And in this case it would center

1 around the emergency response plan, unloading
2 procedures for hazardous materials and perhaps I could
3 elaborate with an example.

4 The case of ammonia unloading. And this is
5 very typical of facilities that, for the last 12 of the
6 17 years that I've been in this business, continuously
7 I've been around aqueous ammonia and/or anhydrous
8 ammonia that have been used in selective non catalytic
9 reduction and selective catalytic reduction systems.

10 In each and every case, each facility, and
11 our operating facilities in the Sacramento area, as
12 well as Cosumnes, employ ammonia unloading procedures
13 that involve standby plant personnel in addition to the
14 already highly trained driver.

15 So the practice is to employ and have
16 readily available at the site of delivery the self-
17 contained breathing apparatus, necessary emergency
18 response equipment to safely evacuate personnel and/or
19 allow those personnel to contain a leak or spill by
20 closing a valve or what-have-you.

21 I can attest to the fact that during that
22 12-year time I have not witnessed a release of ammonia
23 onsite or during transportation connected with the
24 facilities that I've operated. And I think it's
25 largely due to the excellent procedures. And I'd also

1 concur with Mr. Tyler, the excellent training and
2 quality of the drivers.

3 PRESIDING MEMBER PERNELL: And I guess the
4 question is not the safety of the facility, the
5 question is the training of the employees.

6 So let me ask you a different question. As
7 it relates to your hazmat evacuation plan or your
8 hazmat plan for the facility, is that training done
9 onsite with maybe you explaining what that procedure
10 is? Is that the extent of the training? Or is the
11 training done by some professional that comes in? Are
12 you sending employees out for the training?

13 We're trying to assess the level of training
14 for the employees, not the level of training for the
15 drivers or anybody else. It's the employees and the
16 volunteer fire department.

17 MR. NELSON: With regard to the employees,
18 there are, I would suppose, two levels of training with
19 regard to emergency response in the emergency response
20 plan.

21 The initial training would be conducted
22 perhaps by someone on SMUD's staff, a certified
23 industrial hygienist, someone familiar with these
24 materials. And we would also solicit vendor training.
25 And then there would be refreshers on a regular basis.

1 It might be conducted --

2 PRESIDING MEMBER PERNELL: And is that in
3 your plan?

4 MR. NELSON: Yes, sir.

5 PRESIDING MEMBER PERNELL: And do we have a
6 copy of the plan?

7 MR. NELSON: Of the emergency --

8 PRESIDING MEMBER PERNELL: Is the plan in
9 the documents that we have?

10 MR. COHN: We're checking to see if that's
11 been filed.

12 PRESIDING MEMBER PERNELL: Right. And if
13 not, you can certainly submit a copy of your plan.

14 MR. GARCIA: I have a couple more questions.
15 This has to do with regards to combustibles at the
16 plant site.

17 Could you, in addition to the lube oil that
18 I would expect that you would have at the facility, are
19 there any other combustibles that are held in any large
20 amount at the facility?

21 MR. NELSON: The only two that come to mind
22 would be transformer oil, principally in the generator
23 stepup transformers --

24 MR. GARCIA: And those are contained within
25 the transformer carcass?

1 MR. NELSON: They are contained within the
2 transformer, in the transformer tank. There is a
3 separate containment and an automatic fire suppression system.

4 Aside from that, natural gas, which is
5 obviously flammable.

6 MR. GARCIA: Let's go back to the lube oil.
7 I'm guessing that you have some kind of a lube oil
8 return tank where the hot oil comes back before being
9 pumped back into the bearings. But do you also have
10 like a clean oil tank onsite?

11 MR. NELSON: No. Typically there's a single
12 lube oil reservoir. You know, for example, if we're
13 talking about the steam turbine generator, for example,
14 --

15 MR. GARCIA: Yeah.

16 MR. NELSON: -- there would be a single lube
17 oil reservoir. And the lube oil pumps would take
18 suction on this reservoir --

19 MR. GARCIA: And you don't have any standby
20 spare oil storage onsite?

21 MR. NELSON: No.

22 MR. GARCIA: Okay. What is the size of that
23 lube oil reservoir? 1000 gallons?

24 MR. NELSON: It's a question I can't answer
25 off the top of my head.

1 MR. COHN: Let me ask if either Mr. Taylor
2 or Mr. Hudson know the answer to that question, or
3 whether you need to check on that.

4 PRESIDING MEMBER PERNELL: I mean if you
5 don't know, it's something that you can always get back
6 to the Committee on.

7 MR. NELSON: Yes.

8 PRESIDING MEMBER PERNELL: I mean I would
9 prefer you checking and give us the --

10 MR. HUDSON: Yeah, we can check to get you
11 the correct answer, the exact answer.

12 PRESIDING MEMBER PERNELL: Okay.

13 MR. GARCIA: And my last question and then
14 I'm going to shut up. In your discussions with the
15 Fire Chief, can you say that he is definitely aware of
16 the lube oil reservoir and the operating conditions?

17 MR. HUDSON: I can respond to that. The
18 meetings I've had --

19 HEARING OFFICER SHEAN: Let's make sure he
20 has a microphone. Okay, good.

21 MR. HUDSON: I've had several meetings with
22 the Fire Chief here in Herald; and in addition, I had a
23 joint meeting with the Fire Chief of the Herald Fire
24 Department and the Galt Fire Department.

25 At that time what I did is I provided a list

1 of the hazardous materials that we would have, both
2 during construction and operation, or I should say
3 plant startup and during operation of the plant.

4 And I provided that information to them. I
5 asked if there was -- if they had any problems with
6 either the materials or the quantities of the
7 materials. And both the Herald Chief and the Galt
8 Chief said no.

9 MR. GARCIA: But you didn't discuss
10 specifically with them the lube oil storage onsite or
11 the --

12 MR. HUDSON: No, sir.

13 MR. GARCIA: Okay. All right. I promised
14 that was my last question. That was it.

15 MR. COHN: If I may ask just a couple
16 followup questions?

17 HEARING OFFICER SHEAN: Um-hum, redirect.

18 MR. COHN: I guess I'll call it that, but
19 it's actually just a followup --

20 HEARING OFFICER SHEAN: Yeah, okay.

21 MR. COHN: -- on your questions.

22 REDIRECT EXAMINATION

23 BY MR. COHN:

24 Q Let me ask Mr. Nelson, there was some
25 testimony -- yeah, I guess this is redirect -- from Ms.

1 Peasha had asked about an incident that apparently
2 happened at a Calpine Power Plant involving some kind
3 of natural gas flammables.

4 Now, does SMUD use the same procedure as
5 that plant, that is where natural gas will be used to
6 blow into inplant piping?

7 MR. NELSON: No. I can comment both on the
8 experience from commissioning at, for example, the
9 Campbell Soup Cogeneration project, and our intentions
10 for Cosumnes.

11 SMUD uses compressed air to blow the inplant
12 natural gas piping. So there could be no accumulation
13 of natural gas from such a blow to clean the piping.

14 MR. COHN: All right. And, also there's
15 been some discussion about an ammonia incident or spill
16 at the plant. And I'm wondering if you could describe
17 a little bit about the fire suppression systems at the
18 plant to handle a problem when the ammonia, for
19 example, does the ammonia system shut off flow to SCR
20 if there's a leak?

21 MR. NELSON: Typically the ammonia system is
22 designed with what is sometimes referred to as runaway
23 logic. If there is a leak that would be on the
24 discharge side of the ammonia forwarding pumps, that
25 flow is metered and monitored immediately downstream of

1 the ammonia forwarding pumps.

2 And we preset limits into the system that
3 recognize flows that would be in great excess of what
4 would be expected for any given load or operating
5 condition. And the system regulates and also isolates
6 ammonia flows that are obviously excessive.

7 MR. COHN: And then finally, I believe
8 either Mr. Hudson or Mr. Taylor have an answer to your
9 question about the lube oil tank after checking the AFC
10 documents.

11 So whoever can answer that.

12 MR. TAYLOR: This is Mr. Taylor. There's
13 10,000 gallons of lube oil in the combustion turbine,
14 each combustion turbine, and in the steam turbine, same
15 amount.

16 MR. GARCIA: I didn't hear the last part.

17 MR. TAYLOR: For each of the gas turbine and
18 the steam turbine, 10,000 gallons each.

19 MR. GARCIA: Okay. So there is a total of?

20 MR. TAYLOR: 65,000 total buildout for 1000
21 megawatts.

22 MR. GARCIA: Okay.

23 MR. TAYLOR: And these are fire-protected
24 tanks.

25 MR. COHN: Those are all my questions on

1 redirect.

2 HEARING OFFICER SHEAN: Does the staff have
3 anything of these witnesses?

4 MS. HOLMES: No.

5 HEARING OFFICER SHEAN: Ms. Peasha, do you
6 have any additional questions on recross? They're
7 relatively limited here.

8 MS. PEASHA: Not to that. But their site
9 assessment project for their basis, which I think we
10 clarified that, we're clarifying that under this
11 category. The site assessment of the basins.

12 HEARING OFFICER SHEAN: The retention basin?

13 MS. PEASHA: Yes.

14 HEARING OFFICER SHEAN: We haven't quite got
15 to that yet.

16 MS. PEASHA: Oh, we aren't there?

17 HEARING OFFICER SHEAN: We will slip into
18 that in a second.

19 MS. PEASHA: Okay, I thought we were on that
20 same topic there. Thank you.

21 HEARING OFFICER SHEAN: Okay.

22 MR. COHN: All right, then I just wanted to
23 clarify number one, that when we introduced the
24 testimony that included all the exhibits referenced in
25 their testimony?

1 HEARING OFFICER SHEAN: That's right.

2 MR. COHN: And secondly, we will either
3 contact -- well, we will definitely contact the Herald
4 Fire and/or Galt Fire Department, and either have a --

5 HEARING OFFICER SHEAN: Not or. Not or.

6 MR. COHN: You want Herald?

7 HEARING OFFICER SHEAN: We want Herald.

8 MR. COHN: Okay. And either have a witness
9 from Herald or we will have someone from SMUD that can
10 answer the questions that the Committee asked today.

11 HEARING OFFICER SHEAN: Okay.

12 MR. GARCIA: Mr. Shean.

13 HEARING OFFICER SHEAN: Yes.

14 MR. GARCIA: I actually don't think that
15 having somebody from SMUD answer the state of readiness
16 of the Herald Fire Department would be adequate. I
17 think we need the direct testimony of the Herald Fire
18 Department.

19 HEARING OFFICER SHEAN: Let's attempt to get
20 that. And we have several opportunities to get this
21 witness, so let's --

22 MR. COHN: All right, we'll try to get that
23 tomorrow.

24 HEARING OFFICER SHEAN: All right, let's not
25 make a big deal. If we can't do it tomorrow, we can do

1 it at some future time.

2 MS. PEASHA: Is it possible to get an
3 outside assessment regarding our volunteer fire
4 department and their response time to a hazardous
5 spill?

6 HEARING OFFICER SHEAN: Well, let's start
7 with what the Chief says. He's one of your neighbors.

8 MS. PEASHA: They don't even have this
9 information today and they want to start this project
10 this summer? I'm --

11 HEARING OFFICER SHEAN: And that's why
12 they're here. And that's why we review this stuff.
13 And that's why we're asking for the Chief to come
14 forward. Okay.

15 MS. PEASHA: I've tried to call our Chief a
16 couple times regarding this, and got no response. So,
17 good luck, gentlemen.

18 HEARING OFFICER SHEAN: Well, I think
19 everyone understands what's at stake, so we'll get the
20 information. Okay.

21 Let's move on now to what some people call a
22 detention basin, and other people I guess call a
23 retention basin. I know all about detention, but that
24 has to do with grade school and --

25 (Laughter.)

1 HEARING OFFICER SHEAN: -- and junior high.
2 So, let's go to the applicant and get a witness on
3 this, please.

4 MS. HOLMES: Excuse me, could --

5 MR. COHN: We have -- yes.

6 MS. HOLMES: Before we move on I just want
7 to clarify. You have asked that our hazardous
8 materials witness return tomorrow to discuss
9 transportation of hazardous materials?

10 HEARING OFFICER SHEAN: No. It sounded as
11 if Mr. Tyler, if he were to return tomorrow to testify
12 on transportation would largely be confined to
13 transportation of hazardous materials.

14 MS. HOLMES: That's correct.

15 HEARING OFFICER SHEAN: We indicated our
16 interest had to do with basically the presence of
17 transportation of school children on state route 104
18 and Clay East Road.

19 MS. HOLMES: Okay, then I would ask that Mr.
20 Tyler be dismissed, thank you. The staff witness on
21 traffic and transportation is not available tomorrow,
22 at least not without a great deal of difficulty.

23 My suggestion would be that we see whether
24 or not the Committee's questions can be answered by the
25 SMUD witnesses, which are available tomorrow. And if

1 you still need to ask additional questions of the staff
2 witness, we can answer those with respect to traffic
3 and transportation at the subsequent hearings.

4 HEARING OFFICER SHEAN: Okay. All right,
5 now we're going to do the retention basin.

6 MR. COHN: Yes, Mr. Shean, Mr. Pernell, we
7 have three witnesses that we've already sworn in and
8 their testimony available, Mr. Taylor, Mr. Hudson and
9 Mr. Nelson.

10 Depending on the types of questions asked,
11 we could also swear in our Project Engineer, Mr. Flake,
12 who has filed a declaration with the SMUD testimony.
13 If you'd like we can go ahead and do that now, so he's
14 available to answer questions as needed.

15 HEARING OFFICER SHEAN: All right, just a
16 moment.

17 MR. COHN: His testimony, I believe, was
18 under facility design. Yes.

19 HEARING OFFICER SHEAN: All right, just to
20 sort of cover that in the event it may be included, --

21 MR. COHN: All right.

22 HEARING OFFICER SHEAN: -- why don't you go
23 ahead and introduce that.

24 Whereupon,

25 COLIN TAYLOR, KEVIN HUDSON, BOB NELSON

1 were called as witnesses herein, and having been
2 previously duly sworn, were examined and testified as
3 follows:

4 DIRECT EXAMINATION

5 BY MR. COHN:

6 Q Mr. Flake, could you please state your name
7 and spell it.

8 PRESIDING MEMBER PERNELL: Has he been sworn
9 in?

10 HEARING OFFICER SHEAN: Were you here this
11 morning?

12 MR. COHN: Have you been sworn in?

13 MR. FLAKE: No.

14 HEARING OFFICER SHEAN: No. All right,
15 let's do that.

16 MR. COHN: Okay, let's swear in the witness.
17 Whereupon,

18 SCOTT FLAKE

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

21 DIRECT EXAMINATION

22 BY MR. COHN:

23 Q Would you please state your name and spell
24 it for the record.

25 MR. FLAKE: Scott Flake, S-c-o-t-t

1 F-l-a-k-e.

2 MR. COHN: And please state your job title
3 and duties.

4 MR. FLAKE: Superintendent of Project
5 Development Engineering, and I supervise the
6 engineering for this project.

7 MR. COHN: And do you have before you your
8 testimony on facility design which was filed as part of
9 SMUD's group on testimonies on March 3, 2003?

10 MR. FLAKE: Yes, I do.

11 MR. COHN: And was this document prepared by
12 you or under your direction?

13 MR. FLAKE: Yes, it was.

14 MR. COHN: Do you have any changes or
15 additions to your testimony?

16 MR. FLAKE: I do not.

17 MR. COHN: And is this testimony true and
18 correct to the best of your knowledge?

19 MR. FLAKE: Yes, it is.

20 MR. COHN: And do you adopt this testimony
21 as your testimony under oath today?

22 MR. FLAKE: Yes, I do.

23 MR. COHN: I will move introduction of Mr
24 Flake's testimony.

25 HEARING OFFICER SHEAN: Okay, objections to

1 the qualification of the witness as an expert? Hearing
2 none, he's qualified.

3 Is there objection to admission of his
4 testimony?

5 MS. PEASHA: Can I have a page where we're
6 looking at, please?

7 MR. COHN: We have facility design; it's in
8 alphabetical order, our different testimonies, so it's
9 about 30 or 40 pages into our testimony. We can
10 provide you with --

11 MS. PEASHA: That would be great.

12 MR. COHN: -- the specific testimony
13 if --

14 (Pause.)

15 HEARING OFFICER SHEAN: Okay, do you have an
16 objection to its admission?

17 MS. PEASHA: I just would like him to
18 elaborate on the basin, itself, how if they are saying
19 that the --

20 HEARING OFFICER SHEAN: Okay. We'll admit
21 it so that he can do that.

22 Would you have him summarize or your team
23 summarize --

24 MR. COHN: I was going to say, actually I'm
25 not even sure whether we'll need to have Mr. Flake

1 testify or not. He's the Project Engineer. What I
2 would prefer would be to have Mr. Hudson describe the
3 basin that would be part of the site design. And then
4 we'll see where the questions go. You'll have all
5 four, our operations guy, our project engineer, the
6 project manager, and then the overall project director
7 at the management level.

8 HEARING OFFICER SHEAN: Okay. Let's hand
9 them a mike and away they go.

10 MR. HUDSON: The purpose of the stormwater
11 detention basin is for the collection of stormwater on
12 the site. The way the facility is designed is that
13 rainwater sheetflow would be directed into the
14 stormwater detention basin.

15 The basin would be a suitable size so that
16 it would guard against the 100-year flood, design
17 flood.

18 Stormwater that would -- equipment
19 containing either hazardous materials or oily
20 substances would be contained within other structures.
21 So the general stormwater would not migrate or would
22 not mix with the stormwater contained in those basins.

23 So, basically that's the purpose of the
24 stormwater detention basin, would be to collect the
25 sheetflow.

1 MS. PEASHA: The lining that you've chosen
2 for the basin is still bentonite, is that correct? Is
3 that what --

4 MR. HUDSON: There's no specific lining for
5 the basin because it's just designed to collect
6 stormwater.

7 MS. PEASHA: Okay, for the ZLD tank, is that
8 the bentonite? Is that bentonite?

9 MR. HUDSON: No, the ZLD system is the zero
10 liquid discharge system.

11 MS. PEASHA: Yes. And that -- well, I'm
12 sorry, I mean to coordinate those together because one
13 is on one side of the field and one is on the other
14 side of the field.

15 But they -- one --

16 HEARING OFFICER SHEAN: Ask him a question,
17 all right?

18 MS. PEASHA: Does your stormwater eventually
19 go over to your ZLD basin?

20 MR. HUDSON: We have a --

21 MS. PEASHA: After filtration.

22 MR. HUDSON: I don't quite understand the
23 question. The zero liquid discharge system, after any
24 stormwater that would be collected in the containment
25 basins for either hazardous materials containment or,

1 for instance, oily equipment, --

2 MS. PEASHA: Um-hum.

3 MR. HUDSON: -- the water would be pumped to
4 the oil/water separator. And then from the oil/water
5 separator it would go to either the cooling tower or
6 the zero liquid discharge system.

7 And there would be no mix between general
8 stormwater drainage that goes to the stormwater
9 detention basin on the north side of the site, or
10 anything containing either hazardous materials or oily
11 water, because that would go to the ZLD system.

12 MS. PEASHA: Okay.

13 MR. HUDSON: There wouldn't be a mix between
14 the two streams.

15 MS. PEASHA: Then I'm concerned with just
16 the design of the ZLD basin, then, because this is
17 where the stormwater ends up, is that correct? After
18 it goes through your filtration that you've just
19 proposed, is that correct?

20 MR. HUDSON: Okay, what I'm going to do is -
21 - what I'd like to do is to have our engineering
22 superintendent ask those questions, because those are
23 getting very specific into the actual design of the
24 plant.

25 MS. PEASHA: Okay.

1 MR. HUDSON: If I may.

2 MR. COHN: That would be Mr. Flake.

3 MS. PEASHA: Hi, Mr Flake.

4 MR. FLAKE: Hi.

5 MS. PEASHA: The lining of your ZLD tank is
6 primarily the, correct me if I'm wrong, bentonite, is
7 that the --

8 MR. FLAKE: The ZLD system has two brine
9 holding tanks, and those are made out of -- they're
10 aboveground tanks and they're made out of carbon steel.
11 And they do not have a lining. They're not earthen
12 tanks.

13 The stormwater detention basin is an earthen
14 basin that has an earthen floor and six-inch rip-wrap
15 rock linings on the sides of it to prevent erosion.

16 MS. PEASHA: Okay, so the basin that shows
17 on the northwest corner of the site is your ZLD tank?
18 Thank you very much.

19 MR. COHN: It may help for the witness to
20 refer to a figure, so --

21 MS. PEASHA: Yeah, that's --

22 MR. COHN: -- I don't know if this is, I
23 don't believe it's been identified, the figure that he
24 is now using. It's foamboard, and I believe this was
25 actually prepared by CEC Staff based on an FSA diagram.

1 So we might try to identify that. And I
2 don't have --

3 MR. FLAKE: Soil and water resources figure
4 1.

5 MR. COHN: Here, hold the microphone with
6 you. If you could go ahead and read the --

7 HEARING OFFICER SHEAN: Before we do that,
8 let's --

9 MR. COHN: -- read the label on there.

10 HEARING OFFICER SHEAN: -- is there a
11 reference?

12 MR. FLAKE: Soil and water resources figure
13 1.

14 HEARING OFFICER SHEAN: Standby before you
15 move on.

16 (Pause.)

17 MR. COHN: So that's on -- following page
18 4.14-39 in the staff FSA.

19 HEARING OFFICER SHEAN: That's correct. Let
20 me just indicate for the record the document that --
21 the foamboard enlarged diagram is basically an
22 enlargement of water and soil resources figure 1 of the
23 staff's assessment, and it follows page 4.14-39. And
24 we can go from there.

25 PRESIDING MEMBER PERNELL: Okay.

1 MR. FLAKE: Okay, let me first start with
2 the stormwater collection system. This is the
3 stormwater detention basin here. This is the earthen
4 basin; has an earthen floor and rip-wrap on the sides.

5 MR. COHN: Excuse me, Mr. Flake, I think
6 where you're standing it's hard for the Committee --

7 MR. FLAKE: Oh, I'm sorry.

8 MR. COHN: Perhaps you could --

9 PRESIDING MEMBER PERNELL: Just a little bit
10 to the side.

11 MR. COHN: It might help for you to stand
12 towards our table so you're not blocking anyone's view.
13 So that's --

14 MS. HOLMES: Could I also request that he
15 identify where on the chart he's pointing to so that
16 the transcript has a reference that can be correlated
17 to the table by somebody who's just reading the
18 transcript.

19 MR. COHN: Okay.

20 MR. FLAKE: The northwest corner has the
21 detention basin, and that collects the stormwater from
22 the site, and a small portion of the laydown area.

23 The large tanks here in the northeast corner
24 are the brine tanks that supply water to the ZLD
25 system, or zero liquid discharge. Those tanks receive

1 water from the cooling tower blowdown and the effluent
2 from the oil/water separator.

3 MS. PEASHA: So the detention basin on the
4 northwest corner is aboveground?

5 MR. FLAKE: Actually the bottom elevation is
6 at 142 feet; the rough grade elevation of the site is
7 152 feet --

8 MS. PEASHA: I'm talking about the detention
9 basin on -- yeah.

10 MR. FLAKE: This detention basin --

11 MS. PEASHA: Yes.

12 MR. FLAKE: -- is an earthen basin, yes.

13 MS. PEASHA: It's belowground or at ground -
14 - I'm confused. Earthen basin, is it aboveground or
15 belowground? It's dug into the ground, correct?

16 MR. FLAKE: Yes, it's dug into the ground.

17 MS. PEASHA: Would you by any chance have
18 the longitude and latitude of that area that that
19 detention basin is located?

20 HEARING OFFICER SHEAN: Before he spends a
21 lot of time digging for that, is there a relevance to
22 that?

23 MS. PEASHA: Yes, there is, Mr. Shean. I
24 was looking at some Vista reports and that quarter
25 section of the area where the laydown area is going to

1 be on Rancho Seco's property happens to be where there
2 supposedly is an underground gasoline tank.

3 And because of the coordinates that were
4 taken back in the late '80s, the GPS is not so specific
5 as it is, as we stand with the GPS today. They give it
6 as a GPS, using landmarks. I know for a -- and I have
7 it on a plot map from, you know, with just corner
8 streets and everything.

9 I know it's, you know, it's on 150-04-10 on
10 a surveyor's map. But in that general area, according
11 to this, there used to be, and still exists according
12 to this Vista report, an underground storage tank that
13 leaked.

14 HEARING OFFICER SHEAN: Okay, why don't we
15 just ask him, are you aware of the potentiality that on
16 the site of the retention basin there may have been --

17 MS. PEASHA: Well, --

18 HEARING OFFICER SHEAN: -- a gasoline
19 storage tank --

20 MS. PEASHA: -- that's what I want to find
21 out if it was above- or belowground to begin with, sir.

22 HEARING OFFICER SHEAN: Well, --

23 MS. PEASHA: Because --

24 MR. COHN: What might be helpful would be a
25 reference to the report you're talking about.

1 MS. PEASHA: The reference --

2 MR. COHN: We're having a hard time
3 following you.

4 MS. PEASHA: Okay. The reference is in
5 volume two of the appendices for the application for
6 certification. And it's under appendix 8 -- let's see,
7 after page -- appendix 8-13A. It was a site assessment
8 report put out by Vista.

9 MR. COHN: The witnesses are checking to see
10 if they can find the document she's referencing.

11 (Pause.)

12 MR. COHN: Perhaps it would expedite it if
13 she would show us what she's looking at, and then we'll
14 know exactly what it is she's talking about.

15 HEARING OFFICER SHEAN: Sure, Ms. Peasha,
16 can you show them?

17 MS. PEASHA: Certainly.

18 HEARING OFFICER SHEAN: We'll go briefly off
19 the record to do this.

20 (Off the record.)

21 MR. COHN: Mr. Shean, before the break Ms.
22 Peasha was asking about an underground tank and had
23 referenced some documents that our witnesses have now
24 had a chance to review and can now answer the question
25 as to whether there's an underground tank on the

1 Cosumnes plant site.

2 So if I may have Mr. Hudson respond to that
3 question.

4 MR. HUDSON: Very good. We believe that the
5 tanks that are referenced in the Vista report are
6 contained in the industrial area of the Rancho Seco
7 Nuclear Facility.

8 Those tanks have since been removed. In
9 addition, at the request of the Department of Toxic
10 Substances Control, there is a request also from staff
11 to perform a phase one site assessment of the CPP site.

12

13 Such assessment was done, and we reported in
14 data response set 3A.

15 MS. PEASHA: Which states --

16 MR. HUDSON: What I'd like to do is to read
17 the conclusions and recommendations of that phase one
18 assessment.

19 MS. PEASHA: Who's the report --

20 MR. COHN: Can the witness complete his
21 statement, please.

22 HEARING OFFICER SHEAN: Excuse me?

23 MR. COHN: Can we allow the witness
24 to --

25 MS. PEASHA: I just want to know where what

1 report he is referring to.

2 MR. COHN: All right. Refer to the report.

3 MR. HUDSON: Right. This is attachment WM-
4 183R, revised April 12, 2002. And it was prepared by
5 B. Demarr Hooper, Esq., State of California Registered
6 Environmental Assessor, and he's with Taylor, Hooper
7 and Wylie, a California corporation.

8 And in the conclusions and recommendations
9 it says: This phase one ESA identified no areas of
10 environmental concern warranting further investigation.
11 There's no evidence of past or present contamination
12 either above- or belowground."

13 "Personal interview results covered an
14 extensive historical period and provided cumulatively
15 consistent accounts. Based on these conclusions the
16 preparer recommends no further testing or analysis."

17 MS. HOLMES: Can I just ask just a
18 clarifying question in terms of trying to keep track of
19 everything? Our copy of data response 2A indicates
20 that SMUD had objected to data request 183. And that's
21 contained in data response set 2A. But it's my
22 understanding that there was something subsequently
23 provided, and I believe it's 3 --

24 MR. COHN: That's correct, we did initially
25 object. But then we had a workshop after clarifying

1 the scope. And you'll recall that was last year. And
2 then the study was performed and docketed.

3 MS. HOLMES: But what was provided to us, I
4 believe, was data response 2C, which includes the site
5 assessment reports. And I just want to know what page
6 you're reading from in that so we can follow along.

7 MR. HUDSON: This is 3A. There was a data
8 response set that was prepared and staff was concerned
9 that there was no final conclusion, although the
10 conclusions could be drawn from the information
11 contained in the report. What we did was subsequently
12 submit this report, a revised report, on April -- dated
13 April 12, 2002, submitted on April 15, 2002. And that
14 document did contain the conclusions and
15 recommendations that I just read.

16 MS. HOLMES: Thank you.

17 MR. HUDSON: You're welcome.

18 MS. PEASHA: For the whole site area, is
19 that what --

20 MR. HUDSON: Yes.

21 MS. PEASHA: And so this site assessment on
22 March 13, 2002 that said that none of these tanks had
23 been removed is not -- is irrelevant here?

24 In 13 days, or in 30 days --

25 HEARING OFFICER SHEAN: Just one question at

1 a time. Let him answer one question at a time.

2 MR. HUDSON: Ask your first question,
3 please.

4 MS. PEASHA: This report is dated March 13,
5 2002. It states that all of the 11 underground storage
6 tanks on Rancho Seco's property have -- are still --
7 have not been removed.

8 (Pause.)

9 MR. HUDSON: My understanding of this report
10 is that it refers to the Vista report; however the
11 conclusions are still the same, in that the actual CPP
12 site does not contain, nor did it ever contain any
13 underground storage tanks.

14 MS. PEASHA: According to the coordinates
15 that I have, it is one mile from Kirkwood Street to the
16 property site. Storage number 14, which was a gasoline
17 tank, and was a leaking underground storage tank, is on
18 your property -- is on your plotted site.

19 Now, I can't be sure of that without --

20 MR. COHN: Can I just clarify. Are you
21 talking about on the Rancho Seco site, or on the
22 Cosumnes Power Plant designated site?

23 MS. PEASHA: That's what I cannot entail
24 only because I have one that gives me long and lats and
25 one that gives me an assessor's map.

1 So I think that should be further
2 investigated. I mean they're so close, and they're on
3 the plot that Colin Taylor had filled out as the
4 assessor's map. It does refer back to this.

5 And the gentleman I talked to regarding the
6 GPS sites, or longs and lats, said they could be a
7 little off because at that time they did not have
8 those, you know, the accuracy of satellites that we do
9 now.

10 So I'm just questioning, is there a
11 possibility that you're sitting on top of the gasoline
12 tank on that property, because it's so darn close and
13 you're right at the border. To look at this, it looks
14 like it.

15 MR. COHN: That was a rather lengthy
16 soliloquy.

17 HEARING OFFICER SHEAN: Okay, --

18 MR. COHN: The question --

19 MS. PEASHA: Mr. Cohn, --

20 HEARING OFFICER SHEAN: Wait, wait, wait,
21 wait --

22 MS. PEASHA: -- if you don't -- if you don't
23 mind, I'm just trying to help you out. I think it's
24 relevant to --

25 MR. COHN: If I may, I'm just trying to

1 understand the question.

2 HEARING OFFICER SHEAN: Okay, yes.

3 MR. COHN: The question, I believe, is
4 whether our witnesses, any of the witnesses here
5 believe there's any possibility of a gasoline tank on
6 the Cosumnes site, is that the question?

7 MS. PEASHA: Yes, sir.

8 MR. COHN: Okay.

9 MR. HUDSON: Again, referring back to the
10 report and the conclusions in this report for the CPP
11 site, there's no reason to believe that there is or has
12 been an underground storage tank on this CPP property.

13 MS. PEASHA: Gentlemen, may I ask Mr.
14 Redeker a few questions about the CPP, or about the
15 Rancho Seco site, since he is manager out there, and
16 he's sitting up at the table with these gentlemen,
17 regarding the underground storage?

18 HEARING OFFICER SHEAN: You may.

19 MR. COHN: We'd be happy to have Mr. Redeker
20 testify. He's -- did you get sworn in yet?

21 MR. REDEKER: Yeah.

22 HEARING OFFICER SHEAN: He was previously
23 sworn.

24 MR. COHN: He was sworn in, but --

25 PRESIDING MEMBER PERNELL: I think everybody

1 on that side of the room is sworn in.

2 MR. COHN: Right, I don't --

3 HEARING OFFICER SHEAN: But his testimony
4 with regard to radiology --

5 MR. COHN: I don't believe we --

6 HEARING OFFICER SHEAN: -- was not admitted.

7 MR. COHN: That's correct, and I don't
8 believe we actually admitted his r, sum, or any of that,
9 yet, if I recall correctly. So we probably ought to at
10 least --

11 MS. PEASHA: I believe it is.

12 MR. COHN: -- go through that.

13 HEARING OFFICER SHEAN: Okay, we'll just go
14 through a little housekeeping thing, and then you can
15 ask him your question.

16 Whereupon,

17 STEVE REDEKER

18 was called as a witness herein, and having been
19 previously duly sworn, was examined and testified as
20 follows:

21 MS. PEASHA: I think he submitted it, to
22 tell you the truth, earlier on.

23 HEARING OFFICER SHEAN: Pardon me?

24 MS. PEASHA: I think his r, sum, was
25 submitted.

1 HEARING OFFICER SHEAN: It's in the
2 documentation; we just haven't gone through this little
3 ceremony here.

4 MR. COHN: All right, correct. For the
5 record, the witness was sworn in this morning.

6 DIRECT EXAMINATION

7 BY MR. COHN:

8 Q Could you please state your name and spell
9 it for the record.

10 MR. REDEKER: Steve Redeker, S-t-e-v-e
11 R-e-d-e-k-e-r.

12 MR. COHN: And what is your job position and
13 duties at the District?

14 MR. REDEKER: I'm the Manager at the Rancho
15 Seco Nuclear Plant site. I'm responsible for
16 decommissioning of the facility as well as safe storage
17 of the nuclear fuel. Responsible for all onsite
18 activities.

19 MR. COHN: And do you have in front of you
20 the testimony that was prepared with your name on it as
21 part of the SMUD testimonies filed on March 3, 2003?

22 MR. REDEKER: Yes.

23 MR. COHN: And was this document prepared by
24 you or under your direction?

25 MR. REDEKER: Yes.

1 MR. COHN: And do you have any changes or
2 additions to that testimony?

3 MR. REDEKER: Yes, there's one minor
4 revision under the prior filings that refers to data
5 response set 3D number 229, and it should refer to data
6 response set 3D 229, items H and J.

7 As well as response set 3B, items 230 and 231. And
8 response set 3C, item 229H.

9 Other than that, no changes.

10 MR. COHN: And do you adopt the testimony,
11 as you have just revised it, as your testimony under
12 oath today?

13 MR. REDEKER: Yes.

14 MR. COHN: And that includes the r, sum, that
15 was attached to the testimony?

16 MR. REDEKER: Yes.

17 MR. COHN: Then I move introduction of Mr.
18 Redeker's testimony.

19 HEARING OFFICER SHEAN: Objection to
20 qualifying the witness as an expert? Hearing none,
21 he's qualified.

22 Objection to the admission of his testimony?
23 Hearing none, it is admitted.

24 Okay, Ms. Peasha, why don't you go ahead and
25 ask --

1 MR. COHN: Okay, the witness is available.

2 HEARING OFFICER SHEAN: -- your question.

3 CROSS-EXAMINATION

4 BY MS. PEASHA:

5 Q Mr. Redeker, are you aware of the
6 underground storage tanks that are on the Rancho Seco
7 plant?

8 MR. REDEKER: I am aware of where the
9 underground storage tanks used to be at the Rancho Seco
10 plant site.

11 MS. PEASHA: Do you have knowledge and proof
12 that they've been all removed?

13 MR. REDEKER: Yes, I do. Let me refer,
14 specifically that refers to those underground storage
15 tanks that were at the nuclear power plant site inside
16 our restricted area.

17 I can't speak specifically to tanks that may
18 have been years ago outside that area. But any of the
19 tanks associated with the nuclear power plant, because
20 I'm familiar with those, and that they have been
21 removed.

22 MS. PEASHA: Well, let me rephrase this
23 then. This is on Rancho Seco property. And it sits on
24 the parcel 150-04-10. Is that correct, let me rephrase
25 that one.

1 So it may not be part of your facility,
2 but --

3 MR. REDEKER: If I may, I believe you're
4 speaking to the portion where the Cosumnes Power Plant
5 would be located. And what I can speak to there is
6 that I have been employed at the Ranch since 1979. And
7 in my personal observations during that time there has
8 not been an operational underground storage tank at the
9 location of the Cosumnes Power Plant.

10 I cannot state unequivocally that there may
11 not have been a storage tank there prior to 1979. But
12 I'm not aware of any evidence that there has been.
13 I've been out to the site, haven't walked the whole
14 site down, but certainly since 1979 there has not been
15 an operational underground storage tank at that
16 location that I'm aware of.

17 I might be able to shed a little more
18 information. There is an old aboveground pump located
19 west of the power plant, Cosumnes Plant site, one of
20 these old crank pump-it-up drainage type --

21 PRESIDING MEMBER PERNELL: Is it a water
22 pump?

23 MR. REDEKER: No, it's a gasoline pump,
24 sitting right next to highway 104. There was probably
25 some kind of storage tank associated with that. And

1 that may be what is involved here. Due to the
2 uncertainties -- that would be conjecture on my part.

3 But as far as the power plant site, itself,
4 for the Cosumnes Power Plant, I'm not aware of any tank
5 there.

6 MS. PEASHA: So the one that you're aware of
7 --

8 HEARING OFFICER SHEAN: Okay, excuse me, Ms.
9 Peasha, before you ask that question, using the figure
10 that's on the poster, can you identify the general
11 location of what you're speaking about?

12 MR. REDEKER: I'll have to use the map on
13 the back because it's further --

14 HEARING OFFICER SHEAN: All right.

15 MR. COHN: Yeah, Mr. Shean, we probably want
16 to go ahead at this time and identify the aerial photos
17 which are behind the head table. There are actually
18 two aerial photos. One at the Rancho Seco and Cosumnes
19 Plant sites, which is to the right.

20 And on the left is an aerial photo that
21 actually would be to the east of the other photo. And
22 that's on the left. And that shows Rancho Seco Lake in
23 the middle.

24 I'm not sure how much foundation you'd like
25 us to provide here in terms of when these were taken.

1 I could do that, if you will, but if the parties will
2 stipulate that this is an accurate aerial photo of the
3 general vicinity of the plant, then we could dispense
4 with that.

5 HEARING OFFICER SHEAN: Well, we could
6 either add this now as exhibits, but given the fact
7 that they're --

8 MR. COHN: That's why we'd like to go ahead
9 and do, so we could refer to these for the rest of the
10 hearing today and tomorrow, if necessary.

11 HEARING OFFICER SHEAN: Okay, and this would
12 be -- exhibit 1 will be the aerial photograph of the
13 Rancho Seco site on the right-hand portion of the
14 aerial photograph, along with, goes to essentially the
15 intersection of highway 104 and Clay East Road to its
16 left. That's exhibit 1.

17 And exhibit 2 will be the aerial photograph
18 which has in the center the Lake at Rancho Seco Park.

19 MR. COHN: Very well. And let me just ask
20 the witness, when you point at something if you could
21 verbally describe what you're pointing at it will help
22 those who are reading the record.

23 MR. REDEKER: And what I will point out is
24 where I'm aware that there is the possibility of an old
25 tank that may be the ones being referred to.

1 This is down here at the intersection of
2 highway 104 and Clay East Road. There's a residence
3 located here. And right directly in front of that
4 residence is one of these old gravity-type gasoline
5 dispensers, which would need some kind of a storage
6 tank.

7 It may be that that is referring to this
8 tank, or whether there may be a tank here. But
9 relative to this location where the plant is, since
10 I've been there since 1979, I'm not aware that there's
11 been any operational gasoline dispensing or storage
12 tank in this location, pointing at the power plant
13 site.

14 MS. PEASHA: You're aware of all
15 the --

16 PRESIDING MEMBER PERNELL: Which is in the -
17 -

18 MS. PEASHA: -- ones that have been removed
19 from Rancho Seco's property in that corner area there?

20 MR. REDEKER: Which corner area are
21 you --

22 MS. PEASHA: I'm speaking of a mile from
23 Kirkwood Street, which you could point out for me,
24 approximately a mile from there is where Rancho Seco's
25 property starts to the north, yes. Am I correct on

1 that?

2 MR. REDEKER: I'm not sure of the exact
3 distance --

4 MS. PEASHA: Okay, well, I'm --

5 MR. REDEKER: -- but it's probably
6 approximately --

7 MS. PEASHA: -- saying approximately --

8 MR. REDEKER: -- a mile from --

9 MS. PEASHA: In that corner --

10 MR. REDEKER: What I'm aware of is that we
11 did a survey and identified the leaking -- the
12 underground storage tanks associated with the Rancho
13 Seco property a number of years ago. And that involved
14 all of the storage tanks here, as well as the
15 underground storage tanks up at Rancho Seco Park --

16 MR. COHN: Please describe where you're
17 pointing --

18 MR. REDEKER: I was just pointing at the
19 industrial area of the Rancho Seco Nuclear Plant. It
20 also included the survey up at Rancho Seco Park, which
21 is on the other drawing.

22 I'm pointing to the south side of Rancho
23 Seco Lake. There was an underground storage tank there
24 which was remediated, as well.

25 And I believe, to the best of my knowledge,

1 the survey was done for underground storage tanks
2 included the 2400 acres of the Rancho Seco facility.

3 MS. PEASHA: Well, I have to disagree with
4 you on that one. This gives me a
5 coordinate --

6 HEARING OFFICER SHEAN: This being what?

7 MS. PEASHA: This Vista report ordered by
8 CH2MHILL shows this property and this tank --

9 MS. HOLMES: Could we ask for a page number
10 reference?

11 MS. PEASHA: I'll give it to you again, 8-
12 13-8, it's in volume 28.13, Vista (inaudible)
13 assessment report.

14 MR. COHN: Which page?

15 MS. PEASHA: Well, the page on this, page
16 number -- let's go to page number 19 to verify the map,
17 or the well, or the tank, I should say, I'm sorry.

18 MR. COHN: And which reference on that page?

19 MS. PEASHA: Well, I gave --

20 PRESIDING MEMBER PERNELL: Why don't
21 somebody go over and take a look what they're --

22 (Parties speaking simultaneously.)

23 MS. PEASHA: It gives you a longitude and
24 latitude, sir. That's the only thing. But on the map
25 it detailed it, it's map number 9, which is page number

1 4I.

2 UNIDENTIFIED SPEAKER: Do you mind if I look
3 over your shoulder?

4 MS. PEASHA: Certainly not. Right there.

5 MS. HOLMES: Is it possible for staff to
6 offer some --

7 HEARING OFFICER SHEAN: Yes, see if you
8 can --

9 MS. HOLMES: -- clarifying comment at this
10 point?

11 HEARING OFFICER SHEAN: Right.

12 MS. HOLMES: We have --

13 MS. PEASHA: Yes, and there it is on Rancho
14 Seco's property right there.

15 HEARING OFFICER SHEAN: All right, --

16 MS. HOLMES: We had asked in data request --

17 HEARING OFFICER SHEAN: Is there -- why
18 don't you go to the microphone, Ms. Holmes, and let's
19 see if we can get some clarification on this. We have
20 been on this topic and that initial discussion almost
21 for 45 minutes --

22 MS. HOLMES: Thank you.

23 HEARING OFFICER SHEAN: -- and --

24 MS. HOLMES: Again, Mr. Ringer is a member
25 of the staff who has worked on both hazardous materials

1 and waste management issues before. He has reviewed
2 the data responses that were filed by SMUD and he
3 believes he has an explanation as to why there is some
4 confusion.

5 So, --

6 HEARING OFFICER SHEAN: First of all, does
7 he have this Vista report in front of him? And can
8 he --

9 MS. HOLMES: He has both --

10 HEARING OFFICER SHEAN: -- will it be
11 directed toward that?

12 MS. HOLMES: Yes, he does.

13 HEARING OFFICER SHEAN: Okay. Mr. Ringer,
14 were you previously sworn?

15 MR. RINGER: Yes.

16 HEARING OFFICER SHEAN: All right.

17 Whereupon,

18 MIKE RINGER

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

22 DIRECT TESTIMONY

23 MR. RINGER: There are two Vista reports.
24 One was in the application for certification as an
25 appendix. It was part of the environmental site

1 assessment. The staff subsequently asked for another
2 one, so it was part of data response set 2C, another
3 Vista report was filed.

4 The same area of interest that we're talking
5 about right now appears in both. It is at the Rancho
6 Seco site. It was a leaking -- it's in the state
7 leaking underground storage tank database as a gasoline
8 release that affected the soil. So it's listed as soil
9 contamination only.

10 It's reported as case closed by the local
11 implementing agency. And it was closed November 11,
12 1986. It lists a latitude and longitude which differs
13 slightly from the latitude and longitude of the
14 proposed Cosumnes property.

15 And it's listed as the address as at Rancho
16 Seco.

17 And then the original Vista report, I
18 believe, listed as the Rancho Seco Nuclear Generating
19 Station.

20 So I believe that this -- so that's the same
21 one, and I believe it is, is that it was actually at
22 the Rancho Seco site, and not the Cosumnes Power Plant
23 site.

24 MS. PEASHA: Well, it's on Rancho Seco
25 property, that's what this shows.

1 MR. RINGER: Correct.

2 MS. PEASHA: But the gentleman I talked to
3 told me these longitudes and latitudes, because they
4 were not taken with satellite GPS system, they were
5 just taken off of, you know, surveying ways, could
6 differ up to 10,000 feet.

7 So I'm questioning the fact is there a tank
8 under there that we -- they say that none are unknown
9 to be dug up on this Vista report.

10 PRESIDING MEMBER PERNELL: Let me just ask a
11 question of clarification from staff. You're
12 suggesting that the tank in question is on the Nuclear
13 Power Plant site?

14 MR. RINGER: Yes.

15 PRESIDING MEMBER PERNELL: Okay.

16 MS. HOLMES: I just have one more question.
17 Mr. Ringer, can you explain what it means to say that
18 the case is closed?

19 MR. RINGER: From a regulatory standpoint
20 that the local agency, which in this case is the Water
21 Resources Control Board, as administrative leaking
22 underground storage tank regulatory system, believed
23 that no further action was necessary than what was
24 taken.

25 MS. PEASHA: I contest this because it sits

1 on the corner of Clay East and the parcel number where
2 they are building CPP.

3 HEARING OFFICER SHEAN: That's in the report
4 that you're talking about?

5 MS. PEASHA: And this is -- this shows on
6 here. So I'm -- and it shows on two maps.

7 HEARING OFFICER SHEAN: Is it identified on
8 the maps where they are?

9 MS. PEASHA: Yes, sir.

10 HEARING OFFICER SHEAN: All right, just a
11 second. Let's take a brief recess.

12 (Brief recess.)

13 HEARING OFFICER SHEAN: We have that
14 material in our records so we can refer to it and draw
15 whatever conclusions we can from it. But I do have a
16 couple of questions. The Committee is interested, now
17 that Ms. Peasha has raised the issue.

18 With regard to the second environmental
19 assessments that were performed by SMUD in response to
20 the staff request, were any of the samplings that you
21 did in the area of the retention basin? Does anyone
22 know that?

23 MR. HUDSON: No, no samplings were taken.

24 HEARING OFFICER SHEAN: All right. Is the
25 retention basin for -- let me say this. Will the

1 excavation of the retention basin and its floor be
2 below current grade? And if so, by how much?

3 MR. COHN: We'll refer that to Mr. Flake.

4 HEARING OFFICER SHEAN: All right.

5 Approximately.

6 MR. FLAKE: The current, the proposed floor
7 of the basin is approximately two -- it varies, but
8 about two to three feet below current grade.

9 HEARING OFFICER SHEAN: So that -- all
10 right. Under those circumstances, unless there were a
11 tank under -- if I understand -- let me say, the
12 potential concern here is that perhaps there was an
13 underground storage tank, Ms. Peasha is at least
14 asserting, and that if there were, and it had leaked,
15 there would be materials in the ground, which, if the
16 retention basin is used to collect stormwater, and then
17 that stormwater percolates into the ground, will add to
18 the transport of contaminants in the soil. Is that
19 your concern?

20 MS. PEASHA: My concern is that is the tank
21 still there, number one. Is it within the distance of
22 the site? And has it been removed? And is there any
23 contaminants? Because at that --

24 HEARING OFFICER SHEAN: Okay, so is there
25 any way to discover that in terms of the construction

1 of the facility and its use?

2 MR. TAYLOR: We have specific requirements
3 in the construction contracts that if they find signs
4 of hazardous material they have specific ways of
5 accommodating that. So if they found --

6 HEARING OFFICER SHEAN: Yes, and that's in
7 the waste conditions, as well. But will excavation for
8 a floor that's approximately two to three feet below
9 grade disclose that?

10 MR. TAYLOR: If you are excavating in that
11 area and you discover some discoloration or some other
12 indication of hazardous material, there are
13 requirements in the construction contract to deal with
14 exactly that.

15 MS. PEASHA: But there's been no bore sites
16 done in that, where the retention basin is going to be,
17 is that correct, Mr. Taylor?

18 MR. TAYLOR: That's correct.

19 HEARING OFFICER SHEAN: All right.

20 PRESIDING MEMBER PERNELL: All right.

21 (Pause.)

22 HEARING OFFICER SHEAN: The Committee just
23 has a question. Are there not underground survey
24 methods, either magnetometer or other things that could
25 be done to essentially disclose or confirm that there

1 is no underground storage in that area, and therefore
2 any possibility of transport of contaminants in the
3 soil could not happen from the percolation from the
4 retention basin?

5 MR. COHN: Give us one moment.

6 (Pause.)

7 MR. TAYLOR: In answer to your question,
8 yes, there are means of, in effect, looking below the
9 surface of the soil with magnetometers or other means,
10 just like we did on the pipeline looking for artifacts.

11 HEARING OFFICER SHEAN: Okay. Is it
12 particularly burdensome or economically unfeasible to
13 do a brief survey of the retention basin area?

14 MR. TAYLOR: Yeah, we'd accept a condition
15 that said that we would look into some specific area.
16 We don't want to look around the whole place, but
17 specifically we can look in this area, itself, where we
18 propose to lower the area there, lower that surface
19 there for this retention pond. We can look in that
20 area specifically, yes.

21 MS. PEASHA: Excuse me, Garret, the polygons
22 end on page, on the map, number 9. They do not give
23 you map number 10. It does not show that this is a
24 possible risk site. On page 10 it doesn't conclude
25 that, which could be part of the CPP site area.

1 So I preclude that they get site map 10; see
2 if the polygon where there is a risk site possible
3 there. And figure what the coordinates that they had
4 to see if, in fact, if there's any contamination there,
5 using methods they use to test for MTBEs.

6 Only because that thing wasn't reported
7 until 13 months after it was discovered. And I know
8 that's just the way logistically it went back then we
9 didn't have computers, you know, the technology we have
10 now.

11 But, you know, they're giving me a half side
12 of a map of a corner of the property, of the corner
13 where they're going to build a big site. And they're
14 going to do more than just a detention. They are going
15 to excavate the dirt. They are going to lay down
16 concrete.

17 And I want to know if any of that dirt that
18 they're hauling out of there and moving around is
19 contaminated. And I don't think that is too much to
20 ask for.

21 HEARING OFFICER SHEAN: No, and that, in
22 terms of the area that's being graded for the site,
23 which is also subject to the conditions in the waste
24 management portion of this, would disclose, at least
25 based upon what we're

1 talking --

2 MS. PEASHA: That they did no bore sites
3 there.

4 HEARING OFFICER SHEAN: You need to not
5 interrupt me. When I'm through talking --

6 MS. PEASHA: I'm sorry.

7 HEARING OFFICER SHEAN: -- I will give you
8 the opportunity to speak.

9 MS. PEASHA: I'm sorry.

10 HEARING OFFICER SHEAN: Waste condition
11 deals with the detection and removal of potentially
12 contaminated soils in site preparation. All right, so
13 at least we have attempted to do that.

14 If you think it's inadequate in some --

15 MS. PEASHA: Well, they obviously didn't
16 know about it.

17 HEARING OFFICER SHEAN: Okay, --

18 MR. COHN: Can we -- can we --

19 HEARING OFFICER SHEAN: That's all --

20 MR. COHN: -- have the witness, Mr. Nelson,
21 respond to this --

22 HEARING OFFICER SHEAN: If you wish. We're
23 going to leave here at 6:00.

24 PRESIDING MEMBER PERNELL: Right, you know,
25 I think what --

1 MR. COHN: Okay, --

2 MS. PEASHA: I'm ready --

3 MR. COHN: -- we'd -- just briefly --

4 PRESIDING MEMBER PERNELL: -- what -- hold
5 on, hold on, I think what we've decided, and evidently
6 SMUD's agreed to, is to test it to see whether or not
7 there's a tank in that vicinity.

8 Mr. Taylor has said that when you're doing
9 the excavation and there's some discoloration of the
10 soil, then they'll stop and test it.

11 So I don't know what else needs to be done
12 here in terms of your concerns on whether or not
13 there's a tank under the detention basin.

14 MS. PEASHA: Commissioner Parnell, I don't
15 know if that tank exists. I'm reading the maps --

16 PRESIDING MEMBER PERNELL: Well, they're
17 going to test to see if a tank is under there.

18 MS. PEASHA: If they see discoloration how
19 do they know it's not just sandy soil or a difference
20 between heavy clay soils?

21 PRESIDING MEMBER PERNELL: They've agreed to
22 test to see if there's a tank under the area in which
23 the detention basin is going to be located. So that's
24 one.

25 The second one is when they're excavating,

1 if there's some evidence of contamination then that
2 stops and it has to be cleaned up.

3 And I'm just saying, I don't know what
4 else --

5 MS. PEASHA: I understand that.

6 PRESIDING MEMBER PERNELL: -- the applicant
7 or anyone could do to satisfy that.

8 MS. PEASHA: But I believe that -- I mean I,
9 because of the coordinates, because I do not have the
10 longs and lats for that area, I can't compare them,
11 myself. I might be totally wrong. I might be missing
12 the whole corner, but I believe that they should at
13 least check out that area and provide map 10 of that
14 Vista report to show if there's any other areas that
15 might be risk areas. That's all I'm asking.

16 HEARING OFFICER SHEAN: Okay, well, we'll
17 consider that to have been a request and proposal of
18 yours submitted to the Committee for its consideration
19 and possible adoption.

20 Do we have anything further on this topic?

21 MR. COHN: No.

22 HEARING OFFICER SHEAN: All right. Do we
23 have anything further that was scheduled for today that
24 somebody thinks we haven't adequately completed or
25 wants to discuss before we adjourn until tomorrow?

1 MS. HOLMES: Staff brought two witnesses to
2 deal with, I believe it's a related issue. We brought
3 the person who did the drainage and civil engineering
4 for our waters and soils FSA to talk about the
5 detention basin.

6 We also brought Mr. Ringer, who was prepared
7 to talk about Ms. Peasha's concerns about possible
8 radiological contamination. However, if her questions
9 have been answered by the SMUD witnesses, then there's
10 no need to put them on.

11 HEARING OFFICER SHEAN: I do recall during
12 the prehearing conference, Ms. Peasha, that you had
13 asked about possible radioactive contamination of some
14 of the soils at the site.

15 MS. PEASHA: I'd rather not continue
16 tonight.

17 HEARING OFFICER SHEAN: We're done? Okay.
18 We're done.

19 MS. HOLMES: Can I move, and I want to be
20 very specific about identifying them because it's
21 somewhat confusing. I'd like to move those portions of
22 testimony into evidence at this time.

23 HEARING OFFICER SHEAN: All right, since
24 they would otherwise have been covered, go ahead and do
25 that.

1 MS. HOLMES: There is the changes to the
2 waste testimony that were provided in yesterday's
3 filing. Those are sponsored by Mr. Ringer. That
4 filing does not include a statement of his
5 qualifications, nor did the original FSA. So if anyone
6 wishes us to establish his qualifications as an expert
7 we can do that now, or if they don't object, then I
8 will assume that he is qualified as an expert.

9 HEARING OFFICER SHEAN: Okay, absent an
10 objection, he's qualified.

11 MS. HOLMES: And the testimony that he
12 sponsored in yesterday's supplement would be admitted.

13 HEARING OFFICER SHEAN: Just as long as I
14 understand what that is.

15 MS. HOLMES: That was additional text to
16 address Ms. Peasha's concerns on radiological hazards
17 that was filed as part of yesterday's submittal.

18 HEARING OFFICER SHEAN: The March 12th
19 submittal?

20 MS. HOLMES: Yes.

21 HEARING OFFICER SHEAN: Do you have a page
22 reference or some way we can identify --

23 MS. HOLMES: I believe it's at the very end.
24 Just before the declarations. Page 56, waste
25 management supplemental testimony of Alvin J.

1 Greenberg, page D, and Michael Ringer.

2 HEARING OFFICER SHEAN: All right, page 56.

3 All right.

4 MS. HOLMES: In addition, since I don't
5 believe -- I believe that Mr. Lowe had the only
6 sections of the water and soil testimony that were
7 subject to cross-examination, so at this point I would
8 move all of it into evidence.

9 HEARING OFFICER SHEAN: All of?

10 MS. HOLMES: Water and soils.

11 HEARING OFFICER SHEAN: Okay. So if I
12 understand what we're doing, the waste management
13 section, the waste management errata, and water and
14 soils, is that correct?

15 MS. HOLMES: It's actually not the waste
16 management section of the FSA. That was supposed to
17 come in by declaration.

18 HEARING OFFICER SHEAN: All right. The
19 waste management errata page and water and soils?

20 MS. HOLMES: FSA, yes.

21 HEARING OFFICER SHEAN: In the FSA. Is
22 there objection to admission of those? Hearing none,
23 they're admitted.

24 MS. HOLMES: Thank you.

25 HEARING OFFICER SHEAN: All right, does that

1 complete the record as far as you think in terms of
2 today?

3 MS. HOLMES: I believe it does.

4 HEARING OFFICER SHEAN: All right. And is
5 the applicant satisfied with the state of the record
6 for today?

7 MR. COHN: Yes.

8 HEARING OFFICER SHEAN: All right.

9 PRESIDING MEMBER PERNELL: I've got one
10 thing. If there is additional documents, we spent a
11 lot of time on documents and some people had them, some
12 people didn't have them. If you're going to present
13 any new documents for tomorrow, any of these subjects,
14 make sure you got enough copies for everybody. All
15 right? That will be the order of the Committee.
16 Everybody understand that? So don't show up with one
17 copy and expect that everybody understands.

18 And that goes for the staff, applicant,
19 intervenor, anyone. All right. Any questions?

20 MS. HOLMES: I have one question. Are these
21 two witnesses dismissed?

22 HEARING OFFICER SHEAN: Yes, they're
23 excused.

24 MS. HOLMES: Thank you.

25 HEARING OFFICER SHEAN: All right. We come

1 now to our public comment period. I do have a blue
2 card from a Mr. Jim Murphy. If he's present?

3 PRESIDING MEMBER PERNELL: He's the
4 gentleman --

5 HEARING OFFICER SHEAN: He's already done?

6 PRESIDING MEMBER PERNELL: -- over there who
7 --

8 HEARING OFFICER SHEAN: Okay, he did his
9 thing. Well, he said self, and he had listed -- was
10 representing some additional folks.

11 Is there any member of the audience who
12 would like to make a public comment before we conclude
13 today's hearing?

14 All right, hearing none, we have actually
15 finished ahead of time. We will see everybody tomorrow
16 morning at 9:30. Thank you very much.

17 (Whereupon, at 5:45 p.m., the hearing was
18 adjourned, to reconvene at 9:30 a.m.,
19 Friday, March 14, 2003, at this same
20 location.)

21 --o0o--

22

23

24

25

CERTIFICATE OF REPORTER

I, VALORIE PHILLIPS, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Hearing; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said hearing, nor in any way interested in outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this 7th day of April, 2003.

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345