

EVIDENTIARY HEARING
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:)
)
Application for Certification) Docket No.
for the GWF Tracy Peaker Plant) 01-AFC-16
Project in San Joaquin County)
_____)

HOLIDAY INN EXPRESS HOTEL & SUITES

LODI ROOM

3751 TRACY BOULEVARD

TRACY, CALIFORNIA 95304

THURSDAY, MARCH 7, 2002

5:15 P.M.

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

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

COMMITTEE MEMBERS PRESENT

Robert Pernell, Commissioner, Presiding Member

Robert Laurie, Commissioner, Associate Member

HEARING OFFICER AND ADVISORS PRESENT

Cheryl Tompkin, Hearing Officer

Ellie Townsend-Smith, Advisor to Commissioner
Pernell

STAFF AND CONSULTANTS PRESENT

Kerry A. Willis, Staff Counsel

Cheri Davis, Project Manager

William Walters, P.E., Senior Associate, Aspen
Environmental Group

Alvin J. Greenberg, Ph.D., REA, QEP, President
Risk Science Associates

Jim Swaney, Permit Services Manager, Northern
Region, San Joaquin Valley Air Pollution Control
District

PUBLIC ADVISER

Roberta Mendonca, Public Adviser

Grace Bos, Assistant Public Adviser

APPLICANT

John P. Grattan, Esq., Counsel for Applicant
Grattan and Galati

Irwin D. Karp, Esq., Counsel for Applicant
Grattan and Galati

David A. Stein, P.E., Senior Project Manager, URS

Gary Krieger, M.D.

APPLICANT (continued)

Douglas W. Wheeler, Vice President, GWF

INTERVENORS PRESENT

Robert Sarvey

Jim Hooper

Irene Sundberg

Nicholas Pinhey, City of Tracy

Charles Tusso

ALSO PRESENT

Lynn G. Bedford, Board of Supervisors, San Joaquin
County

Brad Williamson, Business Representative, Int'l
Brotherhood of Electrical Workers, Local 595

James Miner, Tracy Residents for a Healthy
Community

Susan Sarvey

Annette Elissagaray

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P R O C E E D I N G S

5:00 p.m.

PRESIDING COMMISSIONER PERNELL: Good evening. This is a continuation of the evidentiary hearing on the GWF Energy LLC application for certification for the GWF Tracy Peaker Project.

My name is Commissioner Pernell. I am the presiding member. My colleague, the associate member, is Commissioner Robert Laurie. To my left is my advisor, Ellie Townsend-Smith, and to my right is the hearing officer, Hearing Officer Cheryl Tompkin. Ms. Tompkin will be conducting the hearing this evening.

This evening we intend to cover the topics of air quality, public health, and hazardous material, or haz mat, and also waste management. Before we begin, before I turn it over to Ms. Tompkin, Commissioner Laurie, would you like to say a few words?

COMMISSIONER LAURIE: Not at this time, Commissioner Pernell, thank you.

PRESIDING COMMISSIONER PERNELL: And I understand that staff had a request.

STAFF COUNSEL WILLIS: Thank you. I'm

1 Kerry Willis, I represent the staff in these
2 proceedings. Yesterday we covered the areas of
3 project description, facility design, power plant
4 efficiency, reliability, project alternatives,
5 biological resources, soil and water resources,
6 and socioeconomics. I would like to have the
7 record closed, evidentiary record closed at this
8 time on those topics.

9 PRESIDING COMMISSIONER PERNELL:

10 Ms. Tompkin.

11 HEARING OFFICER TOMPKIN: Did you have
12 anyone -- anyone else wish to comment on that?

13 INTERVENOR SARVEY: I would like to --

14 HEARING OFFICER TOMPKIN: Mr. Sarvey?

15 Well, we're not accepting new information now,
16 we're simply --

17 INTERVENOR SARVEY: No, this is just a
18 request for the exact same topic listed.

19 PRESIDING COMMISSIONER PERNELL: Well,
20 wait a minute, I understand what the question is.
21 The topics we covered last night that we
22 concluded, the record needs to be closed on those
23 topics. The question is whether there's any
24 objection to closing the records on the topics
25 that we covered last night.

1 INTERVENOR SARVEY: And that's what I
2 wish to address.

3 PRESIDING COMMISSIONER PERNELL: Okay.
4 What is your objection?

5 INTERVENOR SARVEY: I have a request for
6 reconsideration of biological resources testimony
7 of Dr. Shawn Smallwood. At the March 6th, 2002
8 evidentiary hearing on biological resources,
9 intervenor requested that the prepared written
10 testimony of intervenor's biological resource
11 consultant expert, Dr. Shawn Smallwood, docketed
12 March 5th, 2002, be entered into evidence at the
13 evidentiary hearing on biological resources.

14 Intervenor provided staff and committee
15 members copies of photographic evidence of special
16 status species not reported in staff's and
17 applicant's analysis. Intervenor's request to
18 have Dr. Smallwood's testimony incorporated into
19 the evidentiary record was denied.

20 The hearing officer offered to make this
21 testimony hearsay public comment, which intervenor
22 declined. Intervenor's position is that this is
23 expert testimony. Dr. Smallwood is also qualified
24 as an expert because of his prior expert testimony
25 in the Metcalf Energy Center, 99-AFC-3; Contra

1 Costa Power Plant, 00-AFC-1; and the Blythe Energy
2 Project, 99-AFC-8.

3 Two of these projects are the subject of
4 two CEQA actions against the CEC regarding
5 biological resource impacts on special status
6 species. One is currently under appeal in the
7 appeals court, and the second with appeal in
8 preparation. Intervenor offered to stipulate to
9 staff's and applicant's rebuttal by the
10 evidentiary hearing scheduled for March 13th, 2000
11 (sic), but the hearing officer also declined this
12 offer.

13 The testimony was then made as an offer
14 of proof, which was also declined. Intervenor
15 advised the committee to ignore this testimony at
16 their own risk.

17 On March 7th, 2002, subsequent to the
18 hearing, the Tracy Press published the front page
19 article titled, "Peaker Hearing Takes on Animal
20 Impact." Headlining the evidence, intervenor
21 attempted to incorporate into your evidence.

22 Intervenor again provides the copy of
23 this article as an offer of proof of the
24 importance of Dr. Smallwood's testimony.

25 Intervenor further advises that you ignored this

1 evidence in your administrative record as well as
2 the public record, and these evidentiary hearings
3 at your own risk. As an offer of good faith to
4 provide a level playing field without surprise to
5 the applicant and staff, intervenor is willing to
6 make Dr. Smallwood available for cross examination
7 at March 13th, 2002.

8 Thank you for your consideration.

9 PRESIDING COMMISSIONER PERNELL: Do you
10 have any other objections to the topics, to any
11 other topic other than biological resources?
12 Mr. Sarvey?

13 INTERVENOR SARVEY: No, sir.

14 HEARING OFFICER TOMPKIN: Well, then why
15 don't we go ahead, we'll close the record on all
16 of the topics, project description, facility
17 design, power plant efficiency, power plant
18 reliability, project alternatives, soil and water
19 resources and socioeconomics at this time.

20 And now we'll address the motion made by
21 Mr. Sarvey for reconsideration, and I'd like to
22 give the other parties an opportunity to respond,
23 and we'll begin with staff.

24 STAFF COUNSEL WILLIS: Thank you. Just
25 for the record, I was the attorney that

1 represented staff during the Metcalf proceedings.
2 Dr. Smallwood did not supply any written testimony
3 nor did he testify orally in that case. He did
4 provide comments, written comments on our
5 preliminary staff assessment, but he did not
6 appear in the Metcalf proceedings at all.

7 Staff would oppose not closing the
8 record for biological resources. Dr. Smallwood
9 did not appear yesterday either, as part of the
10 testimony on biological resources. He was not
11 present and did not support his testimony that, or
12 provide any foundation to that. The testimony we
13 received was received long after the due date of
14 February 13th. It was received -- At least for
15 staff, we received it the morning of the hearing.

16 And we believe that that -- We
17 understand that the hearing officer and the
18 committee would like to provide latitude to lay
19 participants in this process, but it's difficult
20 for us to have one day or receive information the
21 day of the hearing and be able to respond in a
22 meaningful way.

23 We also find that we have a full
24 schedule on the 13th with land use, noise and
25 visual resources, and we cannot bring our

1 biological resource witness back on that day. She
2 has another hearing during that time.

3 HEARING OFFICER TOMPKIN: Mr. Grattan?

4 APPLICANT COUNSEL GRATTAN: The
5 applicant would second and agree with staff's
6 objection. For the record also, I was counsel to
7 the applicant on the Blythe project, and
8 Mr. Smallwood, as I recollect, or Dr. Smallwood,
9 excuse me, that his appearance in Blythe was
10 similar to his appearance in Metcalf. To the best
11 of my recollection he provided comments and
12 provided comments at the 23rd hour, and was never
13 there to subject himself to cross examination or
14 to testify under oath.

15 Further, we, the applicant, we were
16 lucky, we received the written submission of
17 Dr. Smallwood close of business the day before the
18 hearing. So we had an extra day. But this
19 purported testimony was submitted three weeks
20 after a well-known deadline; in fact, the second
21 deadline for the submission of testimony.

22 Finally, Dr. Smallwood didn't even
23 bother to submit a resume. So, anyway, those are
24 our objections.

25 INTERVENOR SUNDBERG: May I make a

1 comment?

2 PRESIDING COMMISSIONER PERNELL: Yes.

3 INTERVENOR SUNDBERG: I object to this.

4 I think this is totally ridiculous. This is not a
5 fair process at this point, you know?

6 PRESIDING COMMISSIONER PERNELL: Okay.

7 What are you objecting to?

8 INTERVENOR SUNDBERG: I'm objecting to
9 the fact that we're not going to let Dr. Smallwood
10 testify. If he's willing to come and testify in
11 front of this hearing, we should be able to hear
12 all the evidence from everyone.

13 GWF is requesting that they submit
14 evidence, you know, that has, you know, been
15 docketed after we've even started the hearings.
16 You know, this is ridiculous. This is not a fair
17 ground for people to play on.

18 UNIDENTIFIED SPEAKER: I received
19 information from GWF today.

20 HEARING OFFICER TOMPKIN: Okay, well,
21 we're not addressing GWF at this time. The motion
22 on the floor has to do with --

23 UNIDENTIFIED SPEAKER: Yeah, but I'm
24 talking about the level playing field here.

25 HEARING OFFICER TOMPKIN: Well, we'll

1 take that --

2 UNIDENTIFIED SPEAKER: And it does have
3 to do with --

4 PRESIDING COMMISSIONER PERNELL: Okay,
5 sir, sir, understand we have a lot to cover today.
6 And there has to be an orderly way in which we
7 conduct these hearings. And we can't respond nor
8 can the record reflect comments from the audience.
9 You have to be at the podium in order to do that.

10 The question before this committee is
11 whether to allow Mr. Smallwood's testimony in and
12 to testify. Mr. Smallwood had an opportunity to
13 do that yesterday when we covered the topic. That
14 is part of the objection of the applicant as well
15 as staff for the Commission.

16 At this point I would like to go off the
17 record.

18 (Thereupon, a recess was held
19 off the record.)

20 HEARING OFFICER TOMPKIN: We're back on
21 the record. The committee has discussed the
22 motion for reconsideration, and the motion is
23 rejected. There will be no reconsideration.

24 Mr. Sarvey has been a participant in
25 this proceeding since the beginning, an early

1 intervenor. He was aware of the deadlines and the
2 extension of the deadlines, and he had an
3 opportunity to supply information. Reasonable
4 compliance with the rules is an obligation of all
5 the parties, including intervenors, and Mr. Sarvey
6 has been a participant from the outset.

7 So at this time the committee has made a
8 determination to deny the motion for
9 reconsideration. The biological resource evidence
10 section will be closed at this time, and we will
11 proceed. Thank you, Mr. Sarvey.

12 INTERVENOR SARVEY: Can I respond for
13 the record?

14 HEARING OFFICER TOMPKIN: Well, the
15 ruling has been made.

16 INTERVENOR SARVEY: I understand, but
17 can I respond, please?

18 HEARING OFFICER TOMPKIN: Briefly.

19 INTERVENOR SARVEY: Well, the reason I
20 didn't produce Mr. Smallwood is because I was told
21 that he would not be allowed to testify, and with
22 my limited resources that would be fairly
23 unreasonable to have him here without an
24 opportunity to testify.

25 And I'd like to point out that yesterday

1 at the beginning of the hearing staff had provided
2 additional Wynn-Rose evidence and other items that
3 we had no chance to review, and I would also like
4 to point out that Mr. Stein has provided testimony
5 which I received the day before the hearing. And
6 I have filed a demand to correct or cure, under
7 the Bagley-Keene Act, the notification of, the
8 January 31st notification of a February 6th
9 deadline which did not allow us ten days, and I
10 know that it was docketed.

11 The applicant's attorney responded to
12 it, saying that I had had ample time, had filed
13 timely in all my filings -- I had requested more
14 time -- and I apologize for my ignorance of the
15 procedures and I just want to say under protest
16 that I would like to have Mr. Smallwood appear and
17 give you a chance and the applicant a chance to
18 rebut his testimony, and thank you.

19 HEARING OFFICER TOMPKIN: Thank you,
20 Mr. Sarvey. The ruling will stand.

21 At this time before we proceed I'm going
22 to once again have the parties identify themselves
23 for the record so we know who is present, and
24 we'll begin with the applicant.

25 APPLICANT COUNSEL GRATTAN: John

1 Grattan, counsel of the applicant. On my right is
2 David Stein, the technical manager from URS.
3 Sitting here also is Dr. Gary Krieger, who will be
4 a witness in public health, and my colleague,
5 Irwin Karp, who is assisting me as counsel.

6 In the audience are Doug Wheeler from
7 GWF, the vice president of project development,
8 and Hal Moore, who is the chief of engineering.

9 HEARING OFFICER TOMPKIN: Thank you,
10 Mr. Grattan. Staff?

11 STAFF COUNSEL WILLIS: Thank you. I'm
12 Kerry Willis and I'm counsel. To my left is Will
13 Walters, who will be providing our air quality
14 testimony today. To his left is Jim Swaney, with
15 the San Joaquin Valley Air Pollution Control
16 District. And we also have at our table Dr. Alvin
17 Greenberg, who will be providing testimony on
18 public health.

19 HEARING OFFICER TOMPKIN: Thank you,
20 Ms. Willis. And now we'll have the intervenors
21 identify themselves, and we'll begin at the table.

22 INTERVENOR PINHEY: Nicholas Pinhey,
23 City of Tracy.

24 INTERVENOR SUNDBERG: Irene Sundberg,
25 resident of Tracy.

1 INTERVENOR HOOPER: Jim Hooper, also a
2 resident of Tracy.

3 INTERVENOR SARVEY: Bob Sarvey.

4 INTERVENOR TUSO: Chuck Tusso,
5 intervenor. Normally, I would have my attorney,
6 Howard Seligman here. I don't want to reduce our
7 position by being an intervenor tonight; is that
8 okay? I mean, can I be here? I mean, I don't
9 jeopardize his position, do I? Okay.

10 HEARING OFFICER TOMPKIN: You are the
11 intervenor, you're certainly entitled to be here.

12 And we also have the public adviser
13 present.

14 PUBLIC ADVISER MENDONCA: Yes. I'm
15 Roberta Mendonca, the Energy Commission's public
16 adviser, and with me this evening is Grace Bos,
17 who is also on my staff.

18 And I wanted to just report for the
19 record that one of the intervenors, Ana Aguirre,
20 collapsed in her home in San Francisco and is very
21 ill, so she may be able to be here next week but
22 she was sending thoughts about the process. Thank
23 you.

24 HEARING OFFICER TOMPKIN: Thank you,
25 Ms. Mendonca.

1 Yesterday we did cover some pointers
2 regarding participation in the proceedings. I
3 believe that everybody that participated yesterday
4 was -- is also here today, so I'm not going to go
5 back over those pointers in the interest of time.

6 We'll simply go forward and proceed with
7 the evidentiary presentations. I believe the
8 first topic area is Air Quality.

9 STAFF COUNSEL WILLIS: Thank you. The
10 staff wishes to present our witnesses as a panel.
11 We would like to start with our air quality
12 witness then go to the Air District's witness, and
13 then public health. And then open up, have direct
14 on all three, and then open the whole panel up for
15 cross examination if the committee is okay with
16 that.

17 HEARING OFFICER TOMPKIN: Now, are you
18 proposing to combine your witnesses and
19 applicant's witnesses, or --

20 STAFF COUNSEL WILLIS: No, we would put
21 our witnesses on after the applicant's witnesses,
22 but just each one we would just go through the
23 direct and then have the whole panel field the
24 cross examination questions as they pertain to
25 whatever their expertise is.

1 HEARING OFFICER TOMPKIN: All right.

2 Why don't we go ahead.

3 Is that acceptable, Mr. Grattan?

4 APPLICANT COUNSEL GRATTAN: That's
5 acceptable.

6 HEARING OFFICER TOMPKIN: All right. So
7 we'll deal with that after we allow the applicant
8 to proceed.

9 APPLICANT COUNSEL GRATTAN: And, in
10 fact, just for purposes of symmetry, we're willing
11 to put on our air quality and public health
12 witnesses as a panel, if that helps the process.

13 HEARING OFFICER TOMPKIN: Is there any
14 objection to that from the parties?

15 INTERVENOR SARVEY: I would prefer to
16 have it separate.

17 HEARING OFFICER TOMPKIN: Well, why?
18 What is your objection? Why would you prefer them
19 separate?

20 INTERVENOR SARVEY: Because I'd like to
21 cross examine each one individually, and I don't
22 want to cross over with the topics. If that's
23 what the committee wants, I will stipulate to it.

24 HEARING OFFICER TOMPKIN: The purpose of
25 having a panel is to facilitate the discussion of

1 topics, since there is certain overlap, and it
2 makes the witnesses available who might handle the
3 particular area of the overlap. So at this time,
4 we are going to allow them to proceed with the
5 panel, but that does not preclude you from asking
6 any question within either topic area that you may
7 have.

8 INTERVENOR SARVEY: Thank you.

9 HEARING OFFICER TOMPKIN: All right.

10 Mr. Grattan?

11 APPLICANT COUNSEL GRATTAN: The first
12 witness is David Stein. Oh, you've already been
13 sworn. Maybe I could swear in -- so we don't
14 forget on --

15 HEARING OFFICER TOMPKIN: Well, why
16 don't we swear him in today. He was sworn
17 yesterday, and this is a different subject area,
18 so I'm going to ask the reporter to swear him in
19 again.

20 Whereupon,

21 DAVID A. STEIN

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

25 APPLICANT COUNSEL GRATTAN: And next,

1 Dr. Krieger.

2 Whereupon,

3 GARY KRIEGER, M.D.

4 Was called as a witness herein and, after first
5 being duly sworn, was examined and testified as
6 follows:

7 DIRECT EXAMINATION

8 BY MR. GRATTAN:

9 Q Mr. Stein, could you give us your name,
10 address and current employment, and your role in
11 this project.

12 A My name is David Stein. I'm a program
13 director in the environmental services department
14 within URS Corporation. I work in Oakland,
15 California. My role in the project was to manage
16 the preparation of the application for
17 certification for GWF and all of the supporting
18 documents.

19 In addition, my role as a program
20 director for the environmental services department
21 in Oakland, I also have a specific management
22 responsibility for the air quality practice in
23 Northern California, and manage the preparation of
24 all of the technical analysis for air quality.

25 Q And did you -- Maybe you said it. Did

1 you prepare testimony in this case on air quality?

2 A Yes, I did.

3 Q And are you sponsoring any exhibits in
4 this area?

5 A Yes.

6 Q Would you tell us what they are.

7 A In addition to my written testimony, I'm
8 sponsoring the application for certification
9 submitted August 2001, Sections 8.1 and Appendix
10 B. I'm also sponsoring the AFC supplement
11 submitted October 2001, Section 3.1; Data
12 Responses 1 through 13 submitted November 9th,
13 2001; supplement for first set of Data Responses
14 2(A), 2(D), 9, 10, 13 and 82 submitted
15 November 28th, 2001; the wet weather construction
16 contingency plan, Section 2.1; and Appendix A
17 submitted December 2001; and GWF comments on the
18 CEC staff report dated December 2001.

19 Q Could you please summarize your
20 previously submitted written testimony on air
21 quality.

22 A Yes. The GWF Tracy peaker project is
23 located within the San Joaquin Valley Air
24 Pollution Control District, an area which is
25 considered non-attainment with state and federal

1 ambient air quality standards for ozone and
2 particulate matter less than 10 microns. For all
3 other pollutants, the area is considered either
4 attainment with state standards or attainment
5 unclassified with respect to the federal
6 standards.

7 The air district, the local air district
8 has developed and is implementing a plan to
9 achieve and maintain compliance with all of the
10 previously mentioned standards. The plan
11 includes, among other things, existing prohibitory
12 rules to limit emissions from existing sources,
13 implementation of newer modified prohibitory rules
14 that further reduce emissions from existing
15 sources.

16 The district also implements a new
17 source review program that includes, among other
18 things, a requirement that new and modified
19 facilities utilize best available control
20 technology or BACT is the acronym for that term.
21 And to provide emission offsets or emission
22 reductions when proposed emissions exceed certain
23 prescribed thresholds in the regulation.

24 Now, the plan also considers the
25 implementation of improved vehicle emission

1 standards by the State Air Resources Board, and
2 rigorous vehicle inspection maintenance
3 requirements that generate improved vehicular
4 emissions in the valley. The plan on the whole is
5 designed to create enough emission reductions
6 through the combination of these programs to
7 achieve gradual reduction in regional emissions so
8 that there is consistent progress toward
9 attainment of the ambient air standards.

10 So with that background, I'd like to
11 talk a little bit about the Tracy peaker project
12 and its emission sources. The project will result
13 in emissions during the construction phase
14 associated with both diesel- and gasoline-fired
15 construction equipment. We've summarized that
16 equipment in a table, in the AFC table 8.1-11, and
17 that equipment is the source of NOx, CO, VOC, SO2
18 and PM10. In addition, there will be temporary
19 emissions of fugitive dust associated with site
20 grading and preparation of the site. These
21 emissions have been summarized in our AFC and the
22 staff assessment.

23 When the plant commences operation, it
24 will include the following components that are a
25 source of the same five criteria of pollutants

1 that I've mentioned: NOx, CO, VOC, SO2 and PM10.
2 There will be two General Electric frame 7EA
3 combustion turbine generators equipped to burn
4 natural gas, exclusively burn natural gas. There
5 will be one diesel-fired emergency generator.
6 These emissions have been summarized in the AFC,
7 the staff assessment and the district's
8 determination of compliance and supporting
9 analysis.

10 There will be a variety of emission
11 controls incorporated into the project to reduce
12 and mitigate its emissions impacts. During
13 construction the staff's proposed conditions of
14 certification will require that one or more of the
15 following measures be applied: use of ultra-low
16 sulfur diesel fuel, catalyzed diesel particulate
17 fuel filters; for the diesel-powered equipment,
18 California Air Resources Board or EPA-certified
19 1996 or newer equipment, off-road equipment; and
20 for gasoline-powered off-road vehicle carb, 1995
21 certified, 1995 or later equivalent off-road
22 equipment or if larger than 25 horsepower to use
23 catalytic converters.

24 For on-road equipment, that equipment
25 will be required to comply with the car vehicle

1 emission standards. In addition, GWF will be
2 required to prepare and implement a fugitive dust
3 mitigation plan that will include, among other
4 things, the application of water for suppression
5 of dust, the use of crushed gravel on construction
6 laydown areas and temporary site access, and also,
7 the covering of soil stockpiles to minimize
8 fugitive dust during the grading and site
9 preparation process.

10 The combustion turbine generators in the
11 plant will employ state-of-the-art air pollution
12 control systems that comply with both the
13 California Air Resources Board and the San Joaquin
14 Valley Air District guidelines for best available
15 control technology. These technologies include,
16 for oxides of nitrogen, dry low-NOx combustion and
17 selective catalytic reduction. For carbon
18 monoxide, the use of an oxidation catalyst. For
19 volatile organic compounds or VOC, the use of an
20 oxidation catalyst. For PM10, the use of PUC or
21 Public Utilities Commission quality natural gas,
22 and for SO2, the use of PUC-quality natural gas,
23 and complete combustion as well, for both of the
24 latter pollutants.

25 It is worth pointing out that the Tracy

1 peaker project will be the first turbine of its
2 type to employ post-combustion selective catalytic
3 reduction or SCR as a control technology for NOx.
4 It's a novel application because turbines of this
5 size have a high exhaust temperature and would
6 require special equipment to reduce the exhaust
7 temperature to a lower level that would allow the
8 ESER to properly operate.

9 The emergency diesel generator for the
10 project will also meet BACT and will include the
11 following controls. For NOx, there will be a
12 turbo charger, an inner-cooler/after-cooler. The
13 same technology will, coupled with effective
14 combustion, will minimize emissions of CO and VOC.
15 For VOC there would also be positive crankcase
16 ventilation, much as similar technology is used on
17 motor vehicles. And for SO2 and PM10, the engine
18 will use low-sulfur diesel fuel.

19 The Tracy peaker project will be subject
20 to a host of regulations, both local and federal,
21 that are administered by the San Joaquin Valley
22 Air District. And both the applicant, the San
23 Joaquin Valley Air Pollution Control District and
24 the CEC staff have all independently reviewed the
25 project and determined that the project will

1 comply with all these applicable rules and
2 regulations. These are all delineated in both the
3 application and the district's determination of
4 compliance, as summarized in the staff assessment.

5 With respect to air quality impacts,
6 during the construction phase, it's important to
7 note that these impacts are temporary in nature.
8 They only last for the several-month construction
9 period. Air quality modeling was performed by
10 both the applicant and the Energy Commission staff
11 using EPA-approved dispersion models that allow us
12 to predict what the impacts will be from the
13 emissions during the construction phase.

14 Using worst-case assumptions, we and
15 staff both completed modeling that we believe to
16 be conservative, and that modeling demonstrates
17 that the project would not cause a new violation
18 or significantly worsen current ambient air
19 quality. In addition, the project will or GWF
20 will accept conditions of certification that will
21 require emission reduction credits to be provided
22 for emissions of PM10 and ozone precursors during
23 the construction period and those would be
24 surrendered prior to commencement of construction.

25 During operation, we also completed

1 analysis as did staff independently of the air
2 quality impacts associated with the commissioning,
3 startup, shut-down and normal operation of the
4 Tracy peaker project. That modeling was also
5 employed using the same EPA-approved dispersion
6 models, and was based on worst-case assumptions
7 that we believe to be conservative. The modeling
8 showed that there will be no new violation or that
9 the project will not significantly worsen existing
10 ambient air as a result of operation of the
11 project.

12 In addition, the project will provide
13 substantial emission reduction credits to reduce
14 regional air emissions well in excess of the
15 proposed increases from the project. And, as
16 such, will generate a net improvement in regional
17 air quality. Those emission offsets have been
18 reviewed and approved by the San Joaquin Valley
19 Air District as part of its determination of
20 compliance process.

21 I have also provided some supplemental
22 air quality testimony with respect to
23 interpollutant emission offsets and cumulative
24 impacts, specifically to address some of the
25 concerns that have been raised during the

1 proceeding.

2 With respect to the use of
3 interpollutant emission offsets, GWF will be
4 providing SO2 emission reductions to offset a
5 portion of the PM10 emission increases from the
6 project. This is not a unique circumstance, this
7 is -- there is established precedent for the use
8 of SO2 emission reductions as air pollutant
9 offsets for PM10, and its precedent includes
10 recognition, both in the air quality regulations
11 of the district, as well as a fairly substantial
12 body of scientific literature that has established
13 irrefutably that SO2 is a precursor to the sulfate
14 fraction of PM10 in the atmosphere.

15 That relationship was studied and was
16 used as a basis for establishing interpollutant
17 ratios that were -- that analysis was reviewed,
18 again, by both the air district and the CEC staff.
19 And we believe that the interpollutant emission
20 offsets are valid and appropriate for this
21 project.

22 In addition, we have prepared a
23 cumulative air quality impact analysis to look at
24 the impacts of the project and other proposed or
25 reasonably foreseeable projects in the area, and

1 we've done that a couple of different ways. We
2 have looked at the relative change in regional
3 emissions associated with these approved projects
4 and calculated a percentage of the regional
5 emissions that would change as a result of the GWF
6 project, together with other projects that have
7 been approved. That analysis, incidentally, did
8 not include the emission reduction credits that
9 will be provided for the project.

10 Despite the fact that GWF will be
11 providing complete offsets and will, in fact,
12 create a net reduction in regional emissions,
13 there are other projects that will not be doing
14 the same thing, most notably some of the
15 residential projects that have been approved in
16 the area. As a result, there are projected to be
17 increases in regional emissions for non-attainment
18 pollutants that would be potentially significant;
19 however, the GWF project, because it will be fully
20 offset and will generate net emission reduction in
21 the region, will not contribute appreciably to
22 those cumulative impacts.

23 In addition, we've looked at the
24 specific impacts in the area and, using the same
25 EPA dispersion models, and have determined that

1 the project, together with other projects in the
2 area, reasonably foreseeable projects including
3 the Owens Brockway facility, the Tracy Biomass
4 plant, the proposed Tesla power plant, the Calpine
5 East Altamont project, the proposed South Schulte
6 residential development, the proposed Tracy Hills
7 development, and the proposed Mountain House
8 development, will not together cause a new
9 violation or significantly worsen an existing
10 violation of ambient air.

11 Q Just a few questions here. First, I
12 know, Mr. Stein, that you gave us your
13 qualifications last night. I wonder if you could
14 briefly run us through your qualifications again
15 tonight, and maybe also to mention your regulatory
16 experience.

17 A I'd be happy to. In fact, I think I may
18 have misstated last night that I had 23 years of
19 experience, because that's what it says on my
20 resume, which is unfortunately a little outdated.
21 I actually have a little over 25 years of
22 experience, including about three years of
23 experience working for both the Kern County Air
24 Pollution Control District and the South Coast Air
25 Quality Management District.

1 I have served as a consultant to
2 government and industry for over 20 years, and
3 with my technical practice sort of concentrating
4 in air quality matters and during the course of my
5 career have touched most aspects of air quality,
6 air quality sciences. I've been involved in well
7 over a dozen energy commission siting cases as an
8 expert witness, either as a representative to the
9 CEC staff or to applicants.

10 I hold two bachelor's degrees, one in
11 biological sciences, the other in environmental
12 engineering, and a master's degree in
13 environmental engineering with an emphasis in air
14 quality. I'm also a registered chemical engineer
15 of California.

16 Q And, Mr. Stein, have you read the staff
17 report with respect to the air quality section?

18 A Yes, I have.

19 Q And do you agree with its conclusions
20 and conditions?

21 A Yes, I do.

22 Q All 77 of those conditions?

23 A All 77.

24 Q Next I would like, Mr. Stein, to see if,
25 in the interest of getting all the issues out,

1 whether, issues raised, whether through evidence
2 submitted by an intervenor or through perhaps
3 submissions that we might not agree with the
4 intervenor that they are evidence or that all the
5 procedures are met, I kind of -- in the interest
6 of maybe arriving at truth and widening the public
7 input in here, I'd like to take you through the
8 comments that had been received in this process,
9 solicit or elicit a response from you, and then,
10 of course, you would be open to cross examination
11 on those answers that you've given cross
12 examination from the intervenors.

13 Are you ready? Mr. Stein, let's start
14 off. Maybe we could do this submission by
15 submission. Have you read Mr. Sarvey's prehearing
16 conference statement of January 18th?

17 A Yes.

18 Q And, as my notes from that, Mr. Sarvey
19 raised the issue of PM10 construction mitigation.

20 A Yeah, I think that to summarize my
21 understanding of Mr. Sarvey's comments, I think a
22 concern has been expressed that there would be
23 significant unmitigated impacts during the
24 construction of the project, and I strongly
25 disagree with that assertion.

1 We have performed extensive modeling, as
2 well as the staff has performed extensive modeling
3 that has shown that there will not be significant
4 localized impacts caused by the construction of
5 the project. In addition, GWF will be subjected
6 to a large number of mitigation measures during
7 construction that will reduce emission impacts,
8 some of which have actually not been factored into
9 the air quality modeling that we've done. So the
10 impact analysis is conservative in that way.

11 I've previously described in my
12 testimony those measures, and I won't repeat them
13 again.

14 Q I believe that Mr. Sarvey also raised
15 the issue and this issue comes back from time to
16 time of cumulative impacts. I know you've
17 mentioned that in the summary of your testimony,
18 but if I can ask if what your cumulative impact
19 analysis has done is to count both the Tracy
20 peaker project, the nearby Biomass plant and the
21 nearby Owens Brockway plant, even though some
22 would say that that's part of background.

23 A That's correct.

24 Q And you've also counted both the
25 proposed power plants within six miles --

1 A Yes.

2 Q -- and the residential, the proposed
3 residential subdivisions or addition to
4 subdivisions, and that's Mountain House?

5 A That would be the Mountain House
6 development, the South Schulte development, and
7 the Tracy Hills development.

8 Q And your conclusions were there were no
9 significant impacts based on standard criteria and
10 standard methodology.

11 A That's correct.

12 Q Mr. Sarvey also raised the issue, and
13 this again has been an issue of local concern,
14 that the ERCs are not adequate to address local
15 concerns. Can you respond to that, in terms of
16 whether the magnitude of exceedences and the basis
17 of the problem, is it local or basin-wide?

18 A The response is sort of two --
19 PRESIDING COMMISSIONER PERNELL: Excuse
20 me. Mr. Grattan, can you, rather than give
21 acronyms, for the benefit of the public state what
22 those acronyms are?

23 APPLICANT COUNSEL GRATTAN: Certainly.
24 What acronym did I use?

25 PRESIDING COMMISSIONER PERNELL: I

1 thought I heard you say ERCs.

2 APPLICANT COUNSEL GRATTAN: Yeah. I'm
3 sorry, I'm sorry, Mr. Chairman, emission reduction
4 credits.

5 WITNESS STEIN: Yes, and with that
6 clarification, then, I basically have a two-
7 pronged response to your question, Mr. Grattan.
8 First of all, the modeling that we have done I
9 think very convincingly demonstrates that there
10 are no significant localized, quote, unquote, hot
11 spots, if you will, that would create a public
12 health concern or jeopardize public health in any
13 way.

14 Secondly, and perhaps more importantly,
15 the project will provide a large quantity of
16 emission reduction credits to more than reduce the
17 regional emission of air contaminants so that when
18 you look at the region as a whole, GWF will
19 actually be contributing to an improvement in the
20 regional air quality.

21 The concern has been expressed that
22 those emission reductions are not all coming from
23 the plant next door or the City of Tracy, and, in
24 fact, that it is true that there are emission
25 reductions that are coming from a variety of

1 locations, some that are relatively close to the
2 proposed facility, and some that are some distance
3 away.

4 The important thing to recognize is that
5 the district new source review program that
6 establishes the requirement for these emission
7 offsets is designed to function on a regional
8 basis. It is not the design of the system to
9 require that emission reductions be in close
10 proximity to a new source of emission. And there
11 are prescribed ratios in the district's new source
12 review rule to allow industry to modify or expand
13 its existing operations or for new industry to
14 come in and to create a vibrant economy in the
15 valley, and still be able to site or expand a
16 facility which not jeopardizing regional
17 emissions.

18 As an example of how bad the system
19 works effectively, I would point to the fact that
20 I'm aware of a project that was recently licensed
21 by this commission in Kern County that utilized
22 emission reduction credits from the Manteca area,
23 which is pretty darned close to the project site.
24 So obviously, that's some distance from Kern
25 County; at the same time, GWF, in fact, has

1 provided some emission reduction credits for its
2 project from Kern County to offset emissions here
3 in Tracy.

4 But, as can be seen, when one views the
5 functioning of the district's new source review
6 program on balance, it's functioning just as it
7 should. It's creating net reductions in regional
8 air quality, while allowing for a vibrant economy
9 to continue in the area.

10 Q The next issue raised in that
11 January 18th statement was the issue of the
12 efficiency of the selected simple-cycle
13 arrangement by GWF, and what, in fact, BACT was.
14 And I know you've covered this in your testimony,
15 so you can truncate your response here.

16 A Okay. Well, I think the assertion is
17 that the simple-cycle project is not efficient.
18 In fact, the General Electric frame 78 combustion
19 turbine is a very efficient combustion turbine for
20 the purpose that it has been designed for in this
21 application.

22 The best available control technology
23 guidelines for control of combustion turbines does
24 distinguish between simple-cycle and combined-
25 cycle projects for members of the public who don't

1 understand the distinction between those two. A
2 simple-cycle is simply a jet engine that operates
3 to generate electricity and discharges its exhaust
4 directly to atmosphere. Combined-cycle, the
5 exhaust from the combustion turbine is discharged
6 through a device called a heat recovery steam
7 generator to allow latent or sensible heat in the
8 exhaust to be recovered and to generate steam that
9 could be used to generate additional electricity.

10 Because those processes are different,
11 and the exhausts have different temperatures,
12 there are different air pollution control systems
13 that are applicable to those two very different
14 types of cycles. And the GWF simple-cycle project
15 will comply with the state and local air district
16 guidelines for simple-cycle projects, and, in
17 fact, we'll be demonstrating a new type of SCR for
18 this turbine.

19 Q Moving right along, we are now into
20 Mr. Sarvey's data request, I believe it's
21 February 3rd, which basically requested
22 information with respect to GWF's compliance
23 history. And, for the record, that compliance
24 history was compiled and was submitted in response
25 to that data request. There were also questions

1 with respect to the compliance history of the
2 Tracy Biomass plant. GWF has had operational
3 responsibilities for that Tracy Biomass plant,
4 beginning in July, I believe, of 2001.

5 Can you summarize -- Now, this is part
6 of the public record, the compliance history, but
7 can you summarize the compliance history of
8 basically seven plants which GWF has been
9 operating in the State of California and then
10 address the issue of the Tracy Biomass plant, the
11 eighth plant, after GWF has assumed some
12 operational responsibilities?

13 A I'd be happy to. First of all, for
14 the -- There are two facilities that are most
15 analogous to the proposed Tracy peaker project.
16 Both of those are located in the City of Hanford
17 and operated by GWF. Neither of those facilities
18 has had a violation of a permit condition in the
19 last five years. GWF also operates six solid-
20 fuel-fired projects. Those are very complex
21 facilities.

22 And, as is the case with most very
23 complex facilities, there are occasional upsets in
24 the process. That being said, the GWF facilities
25 have averaged approximately one violation per

1 plant per year. If you look at the six
2 facilities, I consider that, based on my
3 regulatory experience, to be an exceptional
4 operating record.

5 I'd also note that there has not been a
6 violation at the Tracy Biomass plant since GWF
7 took over the operation of that facility.

8 Q Just quickly on that, I believe in
9 another submission, one we're not -- one we don't
10 believe is evidence, but another submission that
11 there was an enclosure, indicating some process,
12 upset, or something with that Biomass plant, is
13 that a violation? Could you explain what that
14 piece of paper was?

15 A Well, all of the air districts in the
16 state have what are called breakdown regulations
17 which provide a mechanism for operating facilities
18 to report the anticipated and unintentional
19 breakdown of equipment that can -- that is not a
20 protection against a violation. The district has
21 retained the authority to write a violation, even
22 if equipment does break down, but they don't do it
23 in every circumstance.

24 So apparently, in this case there was a
25 breakdown, a notice filed. I don't know all the

1 particulars of what equipment was involved, but,
2 to my knowledge, there was no notice of violation
3 issued as a result of that breakdown.

4 Q Turning next to the February 6th
5 prehearing conference statement, the second
6 prehearing conference statement filed -- This
7 again is Mr. Sarvey -- he raised the issue of the
8 need for additional research in a variety of
9 areas. I think I can take you through those
10 areas.

11 One was the efficacy of emission
12 controls, to compare SCR, selective catalytic
13 reduction versus SCNOx, and SCNOx is a trade
14 name, and I can't give -- I can't spell out SCNOx
15 for you.

16 A There has been extensive investigation
17 done by both the district, the staff and GWF into
18 the efficacy of what is called the SCNOx
19 technology, which is a different way of
20 controlling oxides of nitrogen and carbon monoxide
21 emissions that does not involve the use of
22 ammonia. It's a fairly complicated process, and
23 it involves the use of a proprietary catalyst. It
24 involves a very complicated set of mechanical
25 valves to move the gas through the catalyst --

1 Some portions of the catalyst are controlling the
2 exhaust while other portions of the catalyst are
3 regenerating so that they can, again, be effective
4 for control.

5 That system is so very complicated that
6 it has only been applied on two facilities that
7 I'm aware of. One was basically the pilot or
8 demonstration of the original technology by the
9 process developer, Senlaw Energy, down at their
10 Vernon facility that's working on a 25-megawatt
11 power plant which is substantially smaller than
12 the proposed GWF facility. It's more than three
13 times smaller than GWF.

14 The other installation is on the east
15 coast and is a different formulation of catalysts
16 that is operating at a slightly higher
17 temperature. I think that the developer was
18 trying to demonstrate that their technology could
19 operate over a range, and so it operates a little
20 hotter temperature. Incidentally, not as hot as
21 the GWF exhaust, so that even at the hotter --
22 with the hotter catalyst design, it wouldn't work
23 on the Tracy peaker project without very
24 significant quenching of the exhaust.

25 The scale-up of technology, like this

1 demonstration technology like this, is not
2 trivial. There are tremendous issues to be
3 resolved in scaling up mechanical equipment,
4 particularly when things like dampers and valves
5 are involved that can cause leakage and cause
6 malfunction, that an operator just can't afford to
7 have fail when a plant, particularly one of this
8 type that's being built specifically for its
9 reliability. So, from a technical standpoint, the
10 applicability of the SCONox technology is
11 questionable at best.

12 In addition, it is very, very expensive
13 technology, and it's so expensive, in fact, that
14 when one evaluates the cost relative to the amount
15 of reduction that would be expected, it vastly
16 exceeds the cost effectiveness thresholds that
17 have been established by the Air Quality District.

18 Q Next, I believe the issue was raised of
19 the need for additional research for criteria
20 pollutant formation. I think that might be
21 precursor.

22 A Okay. Well, you know, I'm a little
23 confused by the comment in the filing, and I'm not
24 quite sure what Mr. Sarvey is trying to get at.

25 Q Maybe he can ask that on cross

1 examination.

2 A Yeah. You know, I would note that if
3 the question has to do with whether or not there
4 is sufficient monitoring of ambient air, I would
5 note that the district operates a fairly broad
6 network of ambient air quality monitors. Those
7 monitors are sited specifically to address
8 locations where air quality is anticipated to be
9 high, so monitors are generally placed to try to
10 find the worst air quality possible, with the idea
11 being that if you can monitor the air quality
12 where it's worst and control the air there, then
13 everywhere else it's going to be even better.

14 So if the concern is that there aren't
15 enough ambient air quality monitors, I'd just
16 offer that the operations of monitors are very
17 expensive and that the district does a pretty good
18 job of running a system that establishes the
19 ambient air quality in the basin, including the
20 northern zone in the City of Tracy. And, in fact,
21 there is a monitor right here in Tracy for NOx and
22 ozone.

23 Q And the next question is a crossover
24 question here, and that is the impact of startup
25 and shutdown on both criteria pollutants and toxic

1 air contaminants.

2 A You know, startup is something that does
3 impact emissions. For that reason we did provide
4 in the application an evaluation of sort of
5 transient emission impacts associated with not
6 only startup but the initial commissioning of the
7 plant. All of that evaluation is documented in
8 the application, as well as the staff assessment,
9 and concluded that there aren't going to be any
10 significant air quality impacts associated with
11 transient operations.

12 I'd also note for the record that the
13 plant goes through a startup in a very rapid
14 period of time, approximately ten minutes on these
15 machines, so the period of time during which you
16 have a transient operation is very short. It
17 represents less than one percent of the total
18 operating time of the unit. So it's almost
19 negligible in terms of the long-term impacts from
20 the facility.

21 Q Oh, and whether there is a need for
22 regional modeling for existing technologies, I'm
23 reading -- for inversion levels or ground level
24 pollutants.

25 A Well, we, the district, and the staff,

1 have all performed independent analyses of the
2 impacts of the project. We have used the best
3 meteorological data available. That
4 meteorological data characterizes local wind
5 conditions. It also looks at the frequency of
6 occurrence of inversions by looking at laps rate.

7 And so I think we have addressed, as
8 well as staff and the district, the concern there.
9 There has been modeling done that considers local
10 meteorological conditions.

11 Q And the issue of cumulative impacts, I
12 believe that we've addressed that already, so we
13 won't belabor that.

14 Next, can I refer you to the
15 February 13th submission of Mr. Sarvey.

16 A February 13?

17 Q Well, I can -- That was the date on
18 which testimony was supposed to be submitted, and
19 it's -- I believe it's in your booklet.

20 A Oh, okay.

21 Q Very good. In there is a published list
22 of the plant's ERCs, and the distances, the
23 percentage that it's -- Yeah, the percentage of
24 ERCs from various geographical locations, and the
25 distance -- and Mr. Sarvey concludes because of

1 their distance, they would not mitigate for the
2 emissions in the local area.

3 Could you respond to that? I believe
4 you partially responded to that elsewhere.

5 A Well, again, to reiterate what I
6 mentioned previously, it is not the objective of
7 the district, local and new source review program
8 to require that emission reductions be co-located
9 with a proposed increase in emissions. While that
10 certainly would be the ideal, it is nearly
11 impossible to do that in every circumstance.

12 And so, in order to allow for the
13 business community to continue to operate, the
14 regulations recognize that if you have a vibrant
15 industrial community that is constantly modifying,
16 expanding, that there will be applications coming
17 from throughout the region that will trigger
18 emission offset requirements and that those offset
19 requirements will be satisfied by reductions from
20 throughout the region. And the net result will be
21 a regional reduction in emissions.

22 I've cited too a specific example, the
23 La Paloma project, where emission reductions were
24 provided from Manteca. And so there's an example
25 where you have, you know, emission reductions

1 coming from a significant distance. But, again,
2 the GWF project providing, you know, corresponding
3 reductions in Kern County could be seen as
4 providing the -- you know, a local offset for the
5 La Paloma project while the reductions here in
6 Manteca are providing a local reduction for the
7 proposed Tracy peaker project.

8 So the system functions well.

9 Q So is it your opinion that the siting of
10 a plant such as the Tracy peaker plant, with the
11 requirement of the air district for securing
12 offsets and the requirement that those offsets be
13 more highly leveraged the further away they are
14 obtained from the source, would you basically say
15 that that system and the siting of projects under
16 that system helps or hinders the valley and its
17 quest for attainment?

18 A It absolutely helps the valley, creates
19 a net reduction in emissions, and improvement
20 towards attainment of the standard.

21 Q And would you say that PM10 and ozone is
22 a local or is it a regional issue?

23 A Well, it's sort of both, Mr. Grattan.

24 Q Fair enough.

25 Next, and we're getting there. Next,

1 Mr. Sarvey attached a policy paper from a very
2 respected organization, the Lung Association, and
3 I believe the assertion or at least the
4 implication was that the project conflicted with
5 those policies. I wonder -- Yeah, and it's in
6 there. I wonder if you could walk us through
7 those policies and how the project fits in with
8 those policies.

9 A You're referring to the Lung
10 Association?

11 Q Yes.

12 A Yes, the document that was provided is
13 from the American Lung Association and is a
14 position statement on air quality and electricity
15 generation, and identifies several policies and
16 goals of the Lung Association.

17 Frankly, I think the Tracy peaker
18 project fits right into these goals. The first of
19 them, the Lung Association urges compliance with
20 the local regulations and the state and federal
21 Clean Air Acts. This facility would certainly do
22 that.

23 The next of those suggests that sources
24 of electricity should be clean, that the facility
25 will utilize clean-burning natural gas, and, as we

1 heard from Dr. Weisenmuller's testimony yesterday,
2 would, in fact, displace dirtier generation when
3 it comes on line.

4 The next policy is supporting an
5 aggressive program to replace existing power
6 generation through a replacement of dirtier units
7 with cleaner units; again, a very similar comment,
8 that the plant is cleaner than comparable peak
9 load generation that is in the system now, and the
10 Tracy peaker project would displace that.

11 I guess the last policy has to do with
12 discouraging the use of diesel generation for
13 emergency power, and the presence of the Tracy
14 peaker project on the grid would certainly reduce
15 the necessity for operating diesel generation,
16 which is much dirtier than the proposed facility.

17 Q Turning next to the testimony submitted
18 by -- submitted on behalf of Intervenor
19 Ms. Sundberg by Supervisor Marengo, I wonder if
20 you could turn to that, there's just one statement
21 I'd like you to comment on. And that statement is
22 that GWF has paid for pollution points, which I
23 presume are emission reduction credits, and I
24 believe it says, "Needless to say, this will be
25 another blow to air quality in the basin."

1 Do you agree with that statement?

2 A No, I don't. I can't speak to the
3 amount of money that's been paid for those, I
4 haven't been privy to that information, so I'm not
5 aware of any point system per se, but, as you
6 point out, perhaps Mr. Marenco is referring to
7 emission reduction credits.

8 The use of emission reduction credits
9 generates a net improvement in regional air
10 because it -- each credit that is provided is
11 carried in the plan as emissions, and when those
12 emissions are retired at a greater rate than new
13 emissions come in, there is a net reduction in
14 regional air and improvement towards air quality.

15 Q And next, turning to the City of Tracy's
16 comments, have you read the comments of Mr. Pinhey
17 from the City of Tracy with respect to air
18 quality?

19 A Yes.

20 Q And can you summarize those comments and
21 can you, in turn, provide your view and analysis
22 and conclusions.

23 A Well, I think the gist of the comment is
24 that there needs to be more analysis of the
25 cumulative air quality impacts from the Tracy

1 peaker project, and that the assertion that is
2 being made is that those cumulative impacts are
3 significant and that the city might be forced to
4 make statements of overriding consideration on
5 other projects that -- I don't know if Mr. Pinhey
6 is implying that the GWF project would be using up
7 offsets that would be used by other, potentially
8 other projects.

9 He's also talking about emergency
10 facilities, so there's a little bit of, I guess,
11 interpretation involved in trying to understand
12 where Mr. Pinhey is going with these comments.
13 But with that being said, let me offer a couple of
14 observations.

15 First of all, as I pointed out, we have
16 completed a fairly extensive cumulative air
17 quality impact analysis which, as I've said,
18 demonstrates that there will not be significant
19 cumulative air quality impacts from the project.

20 Secondly, this project will be providing
21 substantial emission reductions above -- in excess
22 of the emission increases that are proposed. That
23 is very unlike some of the other projects that
24 have been approved by the city in the past, such
25 as the Tracy Hills project, the South Schulte

1 project, the Mountain House project, although I
2 think that may be in the county. But all of those
3 projects were approved on statements of overriding
4 considerations, and a finding was made that there
5 was no feasible way to reduce emissions when, in
6 fact, the district operates an emission reduction
7 bank that has been available to those projects to
8 generate the same air quality improvement that
9 this applicant is proposing.

10 So I'm puzzled by the statement that the
11 city would be forced into that position; there is
12 a functioning bank and there are credits available
13 as we speak.

14 And lastly, I'd just note that for
15 emergency projects, which, you know, things like
16 hospital emergency generators, the district does
17 operate an NSR rule that provides an exemption for
18 important emergency service equipment, and
19 provides for limited operation of that type of
20 equipment without the requirement for offsets.

21 So whether or not there were offsets
22 available, equipment of that type would always be
23 provided in the district.

24 Q And, just as a point of clarification on
25 that last one, the emergency generators, that did

1 come out of the City of Tracy's testimony, that
2 there would be offsets for emergency generators,
3 that was your reference for that?

4 A Yes.

5 Q One last submission, and I'd like you to
6 take a look at Mr. Boyd's submission on March 5th,
7 I believe. And again, this is a submission which
8 I don't know if we've objected to yet as evidence
9 or whether staff has, but we certainly would
10 because it wasn't timely. But we do want to
11 address the issues in there and allow the
12 intervenors to cross examine on our answers.

13 And you can summarize the issues in
14 there. I'm weary of walking you through this,
15 you're doing fine.

16 A Mr. Boyd's testimony is presented in
17 somewhat of a question-and-answer format, and I'm
18 not going to presume to understand each and every
19 issue that was on his mind as he was developing
20 this document, but what I took away from reading
21 the document is several issues, many of which I've
22 already addressed, but let me hit them one by one.

23 I think the assertion is made that there
24 is a compliance history issue with respect to GWF
25 that should be taken into consideration in this

1 proceeding. I think I've demonstrated or
2 responded to that comment as raised by other
3 intervenors. GWF has provided and I think at
4 least one intervenor has provided corroborating
5 compliance history information which, in my expert
6 opinion, demonstrates an exceptional compliance
7 record. So I don't believe that there is any
8 concern with GWF being able to operate the Tracy
9 peaker project in an environmentally sound and
10 responsible manner.

11 Mr. Boyd also spent some time talking
12 about the applicability of SCR and SCONox and
13 whether or not the project is proposing best
14 available control technology. As I've stated, the
15 SCONox technology is, in my expert opinion, still
16 a demonstration technology. It has not been
17 demonstrated on large combustion turbines, there
18 are significant scale-up issues, and it is
19 tremendously expensive.

20 SCR is also a challenge to apply to a
21 simple-cycle turbine because of its hot exhaust,
22 and I think GWF has done a yeoman's job in looking
23 to the marketplace for a solution that involves
24 both a high-temperature catalyst and a dilution-
25 air or quench-air system in order to allow it to

1 control the turbine exhaust to the best levels
2 possible. And the proposed system certainly
3 complies with the guidelines of the state and the
4 local air district.

5 Mr. Boyd has -- I'm a little confused by
6 the discussion, but I think suggested that somehow
7 the district has not followed regulations with
8 respect to CEQA and has cited some regulations. I
9 would just point Mr. Boyd back to the rule book
10 and to be sure that he's read the entire new
11 source review rule, because there's a specific
12 section in there that deals with how the district
13 should be processing power plants that are above
14 50 megawatts, and there's a special process that
15 the district follows where it completes a
16 determination of compliance review because
17 specifically, the California Energy Commission has
18 exclusive siting jurisdiction and is the lead
19 agency for projects of that type.

20 Mr. Boyd also talks about part load and
21 potential emission impacts during part load and
22 I've addressed those previously. Mr. Boyd has
23 talked about the lack of a cumulative impact, and
24 my testimony is that we have a very extensive
25 cumulative impact analysis and a conservative one

1 that shows that the project will not violate any
2 ambient air quality standards or make existing
3 ambient air quality significantly worse.

4 With respect to public health -- Well,
5 maybe I should --

6 Q Go ahead. My suggestion is go ahead.

7 PRESIDING COMMISSIONER PERNELL: Well,
8 we have a public health section, so --

9 WITNESS STEIN: Okay. Well, I'll leave
10 it there.

11 PRESIDING COMMISSIONER PERNELL: Thank
12 you.

13 APPLICANT COUNSEL GRATTAN: That
14 concludes our presentation of the witness, and the
15 witness is open for cross examination, or we can
16 swear in our public health witnesses, take -- I
17 guess that's the committee's preference, take the
18 public health testimony and then leave them
19 both --

20 HEARING OFFICER TOMPKIN: Right. I
21 thought we had agreed to it as a panel.

22 APPLICANT COUNSEL GRATTAN: Yes.

23 HEARING OFFICER TOMPKIN: And I believe
24 your public health person has already been sworn,
25 if I'm correct.

1 APPLICANT COUNSEL GRATTAN: Yes, right.

2 INTERVENOR PINHEY: If I might, could I
3 ask a question of the hearing officer before we
4 continue?

5 HEARING OFFICER TOMPKIN: Yes.

6 INTERVENOR PINHEY: As I understand, the
7 rule for prefiled testimony is to prevent
8 surprise. And it seems that we've heard a
9 significant amount of testimony from Mr. Stein who
10 was not prefiled; am I correct in my
11 interpretation? If that would be the case, I
12 would suggest that that was not appropriate.

13 HEARING OFFICER TOMPKIN: Well, if
14 that's your feeling, you can make an objection.
15 I'll give the other parties an opportunity to
16 respond, and the committee can rule on your
17 objection, if you have one.

18 INTERVENOR PINHEY: In that case, I'd
19 like to raise an objection.

20 HEARING OFFICER TOMPKIN: Okay, and can
21 you state the basis for your objection and
22 explain.

23 INTERVENOR PINHEY: I think earlier --
24 The basis for my objection is this: I understand
25 the rule of prefiled testimony is to prevent

1 surprise, and I think there was a significant
2 amount of testimony that we've heard earlier in
3 Mr. Stein's presentation that was not prefiled, as
4 we've just heard through the earlier part. Well,
5 anyway, at that rate, that's what I'm basing it
6 on.

7 HEARING OFFICER TOMPKIN: And can you
8 specify what area of the testimony you feel was a
9 surprise?

10 INTERVENOR PINHEY: There was
11 information introduced in the earlier portions,
12 and, you know, there was about a half-hour's worth
13 of testimony there, that I think -- you know, if
14 I'm understanding the rule correctly, I think was
15 not filed in a written format. We've been going
16 strictly by written testimony that we have
17 prefiled.

18 You know, I'm sorry I can't give you
19 specific information or specific instances, but
20 that's -- it just seems that there is something
21 out of order along those lines.

22 HEARING OFFICER TOMPKIN: Mr. Grattan?

23 APPLICANT COUNSEL GRATTAN: Yes. My
24 response to that is that, number one, I believe we
25 view that as -- well, I don't believe -- we view

1 that as expanding and clarifying the existing
2 prefiled testimony. Number two, the applicant has
3 the burden of proof here, and the applicant is
4 charged with maintaining that burden of
5 demonstrating that the project will not violate
6 any LORS and that the project will not cause a
7 significant impact to the environment. And that
8 responsibility extends, as I understand CEQA, to
9 not just evidence, but also to comments.

10 Thirdly, we were attempting to put -- No
11 good deed goes unpunished, I guess. We were
12 attempting to put issues that might not have been
13 accepted into evidence into the public forum here
14 so they can be discussed and subject to cross
15 examination. Also, it is standard commission
16 practice to ask the witness have they read the
17 testimony of others, have they read the comments
18 of others.

19 INTERVENOR PINHEY: Thank you. You have
20 to bear with me, I'm not an expert in the
21 protocol. I wanted to make sure that we were
22 following the proper protocol here throughout the
23 proceeding.

24 HEARING OFFICER TOMPKIN: So, if I
25 understand you correctly, your main concern was

1 the fact that the witness was responding to
2 concerns that had been put forth by the
3 intervenors?

4 INTERVENOR PINHEY: Correct.

5 HEARING OFFICER TOMPKIN: All right.
6 Then I will overrule your objection, because it is
7 appropriate to expand the testimony to include
8 those concerns. It's not really -- It's just
9 addressing concerns more than changing the
10 testimony. It's clarification.

11 INTERVENOR PINHEY: Understood.

12 INTERVENOR SARVEY: I don't object to
13 the answering of our questions that we prefiled on
14 the 5th, and I don't object to Mr. Stein referring
15 to his report which we received -- some of us
16 received today, some of us received yesterday.

17 In light of trying to provide a fair
18 hearing, I think it's totally appropriate. I'd
19 like to have everything out in the open, I'm not
20 surprised by anything, and I'm willing to deal
21 with anything the applicant is going to throw our
22 way, and I'm all for wide-open testimony and a
23 wide-open evidentiary hearing to get to the facts.

24 Thank you.

25 HEARING OFFICER TOMPKIN: Thank you,

1 Mr. Sarvey.

2 Mr. Grattan?

3 APPLICANT COUNSEL GRATTAN: Mr. Stein
4 and Dr. Krieger are our witnesses in public
5 health. They both have been sworn in. You've
6 heard Mr. Stein's qualifications.

7 DIRECT EXAMINATION

8 BY MR. GRATTAN:

9 Q I'd like Dr. Krieger to introduce
10 himself and tell us his address, occupation,
11 current employment and to walk us through his
12 qualifications.

13 A All right. Good evening, my name is
14 Gary Krieger. I live in Boulder, Colorado. I
15 work in Denver, Colorado. I'm a principal at a
16 consulting company called New Fields. I'm also an
17 associate professor of toxicology at the
18 University of Colorado.

19 In Denver I'm a practicing physician.
20 I'm board-certified in toxicology, occupational
21 medicine and internal medicine. I have a master's
22 in public health from Johns Hopkins. I've served
23 on the Peace Corps advisory panel for looking at
24 air pollution issues in different areas of the
25 world, particularly Eastern Europe and Russia, for

1 volunteers in terms of potential impacts to
2 volunteers.

3 I've also been on an advisory panel for
4 the National Research Council related to air
5 emissions from an incinerator near a naval base in
6 Japan. I've written multiple textbooks for the
7 National Safety Council and also, one of the more
8 widely used environmental toxicology textbooks
9 which I've been the co-editor on for a couple of
10 editions. So that's a bit of my background.

11 In terms of -- Do you want me to just --
12 Do you want to go ahead?

13 Q Yes, I'm sorry. Dr. Krieger, have you
14 prepared and previously submitted written
15 testimony in this proceeding?

16 A Yes.

17 Q And that testimony related to?

18 A Related to potential public health
19 impacts from this project.

20 Q And right now I'd like to switch over to
21 Mr. Stein to take us through his testimony, since
22 it lays a basis for yours, or at least it's what
23 yours builds on.

24 BY MR. GRATTAN:

25 Q Mr. Stein, you prepared testimony as

1 part of the applicant's package here?

2 A Yes.

3 Q And are you -- And that testimony
4 related to public health?

5 A Yes, it did. It related to public
6 health impacts from the proposed construction and
7 operation of the Tracy peaker project.

8 Q And are you sponsoring any exhibits at
9 the hearing?

10 A I am. In addition to my testimony, I'm
11 sponsoring Section 8.6 of the original application
12 for certification, and Appendix F dated August
13 2001; Section 3.6 of the application supplement
14 dated October 2001.

15 Q And you previously submitted testimony
16 under oath and can you affirm that testimony here
17 today?

18 A Yes, I can and I do.

19 Q Do you have any corrections or
20 modifications to that testimony?

21 A Well, with the exception -- I guess
22 subject to expanding remarks with respect to
23 cumulative impacts, I have no corrections to the
24 written testimony as submitted.

25 Q Could you summarize your testimony.

1 A I supervised the preparation of and
2 analysis of potential public health impacts from
3 both construction and operation of the Tracy
4 peaker project. The way that is done is to
5 compare -- what we did was to compare project
6 emission impacts from both criteria and toxic air
7 pollutants to reference exposure levels for both
8 short-term or acute and long-term or chronic
9 effects by calculating hazard indices. We also
10 evaluated the potential cancer risk associated
11 with a 70-year continuous exposure to the
12 operation of the project.

13 The methods we used, and the same
14 methods were followed by the CEC staff, involve
15 standardized public health risk assessment
16 procedures that have been set forth by the
17 California Office of Environmental Health Hazard
18 Assessment and the California Air Pollution
19 Control Officers Association.

20 They include the use of EPA-approved
21 dispersion models in conjunction with a CAPCOA --
22 That's an acronym for the California Air Pollution
23 Control Officers Association -- approved risk
24 assessment model. The methodology requires the
25 use of a variety of health-protective conservative

1 assumptions that tend to overestimate public
2 health impacts.

3 With respect to the construction of the
4 Tracy peaker project, again, I want to note that
5 those are temporary impacts associated with the
6 use of construction equipment over a several-month
7 period. And because the impacts are temporary in
8 nature, the possibility of chronic or long-term
9 effects is virtually nil.

10 Short-term impacts from the construction
11 emissions involve both criteria pollutants for
12 which we have ambient air quality standards,
13 promulgated air quality standards, both at the
14 state and federal level, and those have been
15 addressed in my air quality analysis and
16 testimony, as well as that of staff. We've
17 determined that the project would not cause or
18 contribute to a new exceedence of any ambient air
19 quality standard, or to significantly impact
20 existing air quality.

21 In addition, the project would use
22 diesel particulate filters on large construction
23 equipment. Diesel particulate has been identified
24 as a potentially air contaminant. These controls
25 in particular ensure that the construction is

1 completed in a way that is safe and protective of
2 public health. The project would also include the
3 implementation of a fugitive dust mitigation plan
4 to further minimize emissions during construction.

5 With respect to operational impacts,
6 again we evaluated criteria pollutant emissions,
7 and those again have been addressed in my air
8 quality testimony. We also evaluated potential
9 toxic air contaminant emissions for both acute and
10 chronic effects as well as cancer risk.

11 The acute and chronic hazard indices are
12 compared with a significance guideline of one to
13 determine whether or not a project would be
14 considered to cause potentially significant acute
15 or chronic hazard indices. The calculated impacts
16 for the Tracy peaker project during operation are
17 substantially below one for both acute and chronic
18 hazard indices.

19 In addition, the cancer risk for --
20 projected cancer risk for the facility is
21 substantially less than the ten-in-a-million
22 probability that is set forth in the state
23 guidelines as a significance threshold for cancer
24 risk. Based on those results, I find that the
25 operation of the plant would not pose a

1 significant threat to public health.

2 We have also completed a cumulative
3 public health risk assessment, including the
4 operation of the proposed Tesla power plant, the
5 East Altamont -- the Calpine East Altamont
6 project, as well as the Tracy Biomass plant and
7 the Owens Brockway facility located in close
8 proximity to the proposed project. The results of
9 that cumulative impact analysis also show that the
10 acute and chronic hazard indices would be less
11 than one, and the projected cancer risk with all
12 those facilities operating together would be less
13 than the ten-in-a-million significance threshold.

14 Finally, we also looked at the public
15 health impacts of electromagnetic field or EMF
16 exposure as well as staff did an independent
17 analysis of EMF. Although there are no
18 established regulations for EMF exposure, the EMF
19 impacts are well below levels that have been
20 identified as potential levels of concern. So
21 again, we find that there are no significant
22 public health risks associated with exposure to
23 EMF.

24 Finally, I've reviewed staff's analysis
25 and findings and proposed conditions of

1 certification, and I'm in agreement with the
2 staff's findings and conclusions and proposed
3 conditions of certification.

4 APPLICANT COUNSEL GRATTAN: I have no
5 more direct of this witness, and if we can proceed
6 with Dr. Krieger --

7 BY MR. GRATTAN:

8 Q Dr. Krieger, I believe I've asked you,
9 but I'll ask you again, have you prepared
10 testimony as part of the applicant's testimony
11 package?

12 A Yes.

13 Q And can you affirm that testimony under
14 oath today?

15 A Yes.

16 Q Do you have any corrections or
17 modifications to the testimony?

18 A No, I do not.

19 Q Could you please summarize your
20 testimony.

21 A Well, simply, I looked at what the
22 applicant did, in terms of risk assessment and
23 public health analysis, and I also looked at what
24 staff did. They followed standard set procedures
25 using standard well-accepted methodology.

1 And I agree with both of their conclusions.
2 They were appropriately reached and based on well-
3 recognized risk assessment techniques that have
4 been around for quite a while, and accepted
5 virtually everywhere.

6 I also looked separately, because of
7 continuing changes in the science and the
8 scientific basis for making predictions about
9 particulate matter, whether it was 10-micron size
10 or 2.5. I looked at whether there would be
11 changes in mortality rate, both acutely or
12 chronically, changes in what we call morbidity or
13 disease at points, looking at upper/lower
14 respiratory disease, changes in asthma rates in
15 children or the individuals over age 65.

16 I also looked at changes in hospital
17 admission rates for lung disease, again for
18 asthma, for pneumonia. I looked at the potential
19 lost work days, I looked at restricted activity
20 days. I did those all assuming things were either
21 particulate matter 10 or particulate matter 2.5,
22 or I just simply took the 10 number and assumed
23 that it was all 2.5.

24 And I did all those analyses for the
25 concentrations that would be attributable to this

1 particular project, and I don't find any changes
2 in any of those disease points of any sort of
3 public health significance. They're all extremely
4 small and they would not be seen in the
5 population. Even assuming a population I assumed
6 of about 62,000 people you simply would not see
7 them. They would be below any sort of level of
8 public health significance.

9 Q Just one question: The conclusions that
10 you've made with respect to public health and the
11 plant, is this even when the plant is added to
12 ambient?

13 A Yes, that's correct.

14 APPLICANT COUNSEL GRATTAN: That's all
15 we have of these witnesses in public health and
16 air, and they're all of yours to cross examine.

17 PRESIDING COMMISSIONER PERNELL:
18 Commissioner Laurie.

19 COMMISSIONER LAURIE: Yes, thank you,
20 Commissioner Pernell.

21 And, Ms. Willis, I'm going to be asking
22 your witnesses if they concur with the responses I
23 received from Mr. Stein.

24 Not being an air quality scientist, the
25 numbers relating to emissions are more meaningful

1 to me if they're put in a context of other types
2 of uses. Does your professional experience
3 include air quality analysis for other kinds of
4 development projects, such as residential,
5 industrial or commercial?

6 WITNESS STEIN: Commissioner, I have --
7 my experience has frankly focused largely on the
8 industrial side of development. I do have some
9 very limited experience with residential
10 development, mostly in the context of reviewing
11 environmental impact reports that have been
12 prepared by other consultants and validating those
13 emission estimates.

14 COMMISSIONER LAURIE: All right. Thank
15 you, Mr. Stein. If you are unable to respond to
16 my question, then just so indicate.

17 Given the numbers of the emissions
18 relating to this project, can you relate the
19 numbers of the emissions of this project to the
20 number of vehicle emissions or the number of
21 emissions emanating from the creation of certain
22 households? Do you understand the question and
23 are you able to respond to that?

24 WITNESS STEIN: Yes, I do. Let me see
25 if I can take a stab at that, if you'll bear with

1 me and allow me to refer to some papers here.

2 Commissioner Laurie, I prefiled
3 supplemental air quality testimony which I
4 referenced earlier on January 31st, Mr. Grattan
5 tells me. And one of the things that I tried to
6 do in addressing cumulative impacts was to compare
7 the project's emissions with other reasonably
8 foreseeable projects in the vicinity of the Tracy
9 peaker project.

10 COMMISSIONER LAURIE: Other foreseeable
11 energy projects or other foreseeable development
12 projects?

13 WITNESS STEIN: Other foreseeable
14 development projects. And I included in that
15 analysis three proposed residential development
16 projects: the Tracy Hills project, the South
17 Schulte project, and the Mountain House project.

18 Let me just refer to one of those as an
19 example. The proposed Mountain House project,
20 which I believe involves, and I apologize for not
21 having an exact number, but I believe it involves
22 something on the order of 14- or 15,000 units --

23 COMMISSIONER LAURIE: Fourteen or 15
24 thousand units?

25 WITNESS STEIN: Yes. Yes, it's a fairly

1 large proposed development. That development,
2 including both residential and vehicular emissions
3 attributable to that development, would result in
4 NOx emissions, according to the EIR, of 1,618 tons
5 per year. The Tracy peaker project would emit
6 approximately 154 tons per year, if it were, in
7 fact, to operate for the entire 8,000 hours per
8 year for which GWF has sought a license.

9 As you may know, in fact, the contract
10 with the California Department of Water Resources
11 is for 4,000 hours of operation. According to
12 Dr. Weisenmuller's testimony yesterday, if the
13 facility had, in fact, been around in 1999, it was
14 his estimate that it would, in fact, have been
15 dispatched for approximately 3,000 hours. So the
16 154 is obviously an outside or conservative
17 estimate. It is the maximum emission rate that
18 would occur if, in fact, the facility were
19 permitted to operate the full 8,000 hours.

20 So, with that comparison, and I have not
21 validated the Mountain House EIR emission rates,
22 but assuming that they are valid emissions, the
23 GWF peaker project would represent approximately
24 one-tenth of the emissions from the Mountain House
25 development.

1 I'd also note that the Tracy peaker
2 project will provide full and complete offsets; in
3 fact, more emissions reductions than the proposed
4 emission increases for that proposed 154 tons,
5 whereas the Mountain House development was
6 approved on a statement of overriding
7 considerations with no offsets.

8 COMMISSIONER LAURIE: Okay. I
9 understand that, but I'm not trying to get to the
10 question of whether there is full mitigation or
11 not. What I'm trying to understand is what is the
12 residential equivalency of the emissions in this
13 project. And I think I'm hearing it's
14 approximately 1,500 residential units.

15 WITNESS STEIN: With that particular
16 comparison, that sounds like it's about a right
17 number.

18 COMMISSIONER LAURIE: And, in your
19 experience, is that number consistent with your
20 experience?

21 WITNESS STEIN: Again, I have very
22 limited experience in that area, so I was just
23 trying to draw upon information I've prepared here
24 in the record. So I apologize. I'm not sure I'm
25 able to answer that question.

1 COMMISSIONER LAURIE: Now, again, if you
2 can't answer this question, just let me know.
3 When environmental analysis of residential
4 projects is conducted, the analysis is -- is the
5 analysis solely from the residential use, or does
6 it result also from the vehicular use, relating to
7 the residential use?

8 WITNESS STEIN: I believe that the
9 number that I provided for you includes both
10 components.

11 COMMISSIONER LAURIE: Okay. Thank you,
12 sir. That's all.

13 PRESIDING COMMISSIONER PERNELL:
14 Mr. Stein, in your cumulative analysis, did you
15 look at the number of vehicles traveled daily
16 through -- on 680? I think it's 680, is that
17 the --

18 WITNESS STEIN: 580.

19 PRESIDING COMMISSIONER PERNELL: 580, on
20 580?

21 WITNESS STEIN: Yes. We included
22 calculations for both stationary and mobile
23 sources in the application.

24 PRESIDING COMMISSIONER PERNELL: Do you
25 know about approximately how many vehicles travel

1 on 580 per day? Is that in your documentation?

2 WITNESS STEIN: There is a number,
3 Commissioner Pernell, in the application for
4 certification. It would be found in the traffic
5 and transportation section. I believe that there
6 is a table in that section that will list the
7 average daily traffic volume on roadways in the
8 project area including, I believe, 580, Interstate
9 580. I don't know what the number is.

10 PRESIDING COMMISSIONER PERNELL: But
11 your analysis included that number, in terms of
12 air pollution and health risk.

13 WITNESS STEIN: Well, it included it,
14 Commissioner, in the sense that what we do when we
15 evaluate a project is we looked at the projected
16 impacts from the facility, and we add those
17 projected to background air quality as measured by
18 local air quality stations. The local air quality
19 monitoring stations include influence from mobile
20 sources, such as Interstate 580.

21 The traffic, the additional traffic
22 generated by this project is virtually nil during
23 operation, and during construction it's a
24 relatively small number compared to the existing
25 traffic volume. So we believe that looking at the

1 existing background, air quality is properly
2 characterized as mobile source emissions.

3 PRESIDING COMMISSIONER PERNELL: And
4 finally, do you know the number of monitors that
5 are stationed around the vicinity of the project?
6 Let's say within a six-mile radius?

7 WITNESS STEIN: Within a six-mile
8 radius, I'm only aware of a single ambient air
9 quality monitoring station. That's in the City of
10 Tracy. It's on Patterson Pass Road, which is, I
11 don't know the exact distance, but it's a mile or
12 two from the site. And that station does not
13 monitor for all pollutants, it monitors for
14 oxides -- it monitors for NO2, excuse me, and it
15 monitors for ozone.

16 There is also meteorological data I
17 believe collected at that station.

18 PRESIDING COMMISSIONER PERNELL: Thank
19 you.

20 HEARING OFFICER TOMPKIN: All right.
21 Would staff like to question these witnesses?

22 STAFF COUNSEL WILLIS: Thank you. The
23 questions we have involve air quality, so this
24 would be directed to Mr. Stein.

25 HEARING OFFICER TOMPKIN: Go ahead.

1 CROSS EXAMINATION

2 BY STAFF COUNSEL WILLIS:

3 Q Although staff has not required as part
4 of our conditions of certification that the
5 applicant obtain local emission reduction credits,
6 we have listened to the public comment following
7 the release of our staff assessment, and we have
8 supplied the applicant with a list of local
9 emission reduction credits that might be
10 available.

11 Staff has also encouraged the applicant
12 to participate in a community benefit program that
13 might reduce PM10 in the area, programs such as
14 fireplace retrofit, or there have been discussions
15 of reductions in schedules.

16 Could please at this time provide us
17 with the progress on those two areas, as far as
18 the local ERCs and the community benefit programs?

19 A Ms. Willis, I have not been directly
20 involved in those discussions, but perhaps
21 Mr. Wheeler would care to comment for the record.

22 STAFF COUNSEL WILLIS: That would be
23 fine, thank you.

24 MR. WHEELER: I've already been sworn.

25 HEARING OFFICER TOMPKIN: I think if

1 this is going to be testimony, then he would have
2 to be sworn. Is there any objection from any
3 other party? All right, then we will permit it.

4 Go ahead.

5 Whereupon,

6 DOUGLAS WHEELER

7 Was called as a witness herein and, after first
8 being duly sworn, was examined and testified as
9 follows:

10 WITNESS WHEELER: Doug Wheeler, address
11 4300 Railroad Avenue, Pittsburg, California. I'm
12 employed by GWF and I'm the packing project
13 manager for the proposed project.

14 To address the question that's been
15 raised, we have -- are in receipt of the list of
16 emission reduction credits that are located in the
17 northern zone of the San Joaquin Valley Air
18 Pollution Control District. We have gone through
19 that list, and we have identified some
20 certificates that we are currently in discussions
21 to acquire those emission reduction certificates
22 as replacement for the emission reduction
23 certificates that are currently listed as
24 mitigation emission reduction credits in the
25 application.

1 BY STAFF COUNSEL WILLIS:

2 Q And, sir, the community benefits
3 program?

4 A The community benefits program, we
5 initiated that effort, along with the City of
6 Tracy, and concerned and interested members of the
7 community. The City of Tracy established a task
8 force. The first meeting of that task force was
9 held last week. There were a number of both
10 community benefits and what I would characterize
11 as air quality mitigation items that were
12 discussed.

13 Included in that discussion were
14 reductions in emissions from mail delivery trucks
15 would be one example. A program to convert or
16 surrender gasoline engines, lawnmowers, leaf
17 blowers. There was an extensive discussion
18 regarding emission reductions that could be
19 achieved at the Tracy Biomass plant.

20 And what I can report at this time, we
21 will go back to the meeting that is currently
22 scheduled for the 18th of this month, and make
23 proposals which could include -- Now, this would
24 be subject to a discussion and approval or buy-in
25 of the members of that task force, but could

1 include emission reductions from the Tracy Biomass
2 facility, emission reductions from a fireplace
3 retrofit program, from a program to replace
4 gasoline engine, lawnmowers, leaf blowers.

5 And there are some other things that
6 we're currently considering but we haven't
7 concluded at this point whether we think that we
8 would be prepared to offer those up.

9 Q Thank you. I have a few followup
10 questions for you. Did the applicant attempt to
11 contact the Owens Brockway plant?

12 A We have had a discussion with Owens
13 Brockway, and, in fact, we will be meeting with
14 Owens Brockway in the very near future. At the
15 task force meeting, there was a suggestion that
16 GWF reduce emissions at the Owens Brockway
17 facility. I'm not sure to what extent we have the
18 ability to do that, and what I offered to the task
19 force is that they should not be optimistic about
20 emission reductions from that facility that would
21 be undertaken by GWF.

22 Q And finally, are you aware of any recent
23 improvements to the Tracy Biomass plant emission
24 controls, and, if so, could you explain what those
25 improvements are.

1 A We have been actively involved in
2 improving the operations from the existing Tracy
3 Biomass facility since we took the operation and
4 management responsibilities over approximately ten
5 months ago. Those improvements that have been
6 addressed and are currently being implemented go
7 to the improvement in the operating efficiency of
8 the electrostatic precipitator which controls the
9 PM10 or particulate matter emissions from the
10 facility.

11 We have purchased and will be installing
12 during the current turnaround a new emission,
13 continuous emission monitoring system on the
14 stack. Those are the things that are currently
15 under way.

16 I can state that as part of the task
17 force discussion, the things that we indicated
18 that we are looking at which could potentially
19 result in emission reductions from the Tracy
20 Biomass facility would include fugitive dust
21 emissions from the plant, primarily from the fuel
22 handling and storage portion of the facility, and
23 looking at reducing emissions from the diesel-
24 engine-operated equipment in the plant.

25 Q I'm sorry, did you address the reduction

1 schedule issue, or could you?

2 A Excuse me, could you repeat the
3 question?

4 Q Could you address the issue of a
5 reduction schedule, schedule of the operation of
6 the plant?

7 A Oh, yes. We have indicated that we are
8 prepared to discuss the operating hours of the
9 plant, and our suggestion has been that we will
10 submit a plan that will address reducing the hours
11 of operation.

12 STAFF COUNSEL WILLIS: That's all I
13 have. Thank you.

14 PRESIDING COMMISSIONER PERNELL:
15 Mr. Wheeler, a followup.

16 WITNESS WHEELER: Yes.

17 PRESIDING COMMISSIONER PERNELL: On the
18 task force that you were talking about, did you
19 mention is all of the -- well, scratch that. The
20 members of the task force is made up of the
21 community, the City of Tracy. Is anyone from the
22 county on it, on the task force?

23 WITNESS WHEELER: You mean from county
24 government or residents of the county?

25 PRESIDING COMMISSIONER PERNELL: No,

1 from -- that represent the county from a public
2 policy perspective.

3 WITNESS WHEELER: Not that I'm aware of,
4 no.

5 PRESIDING COMMISSIONER PERNELL: Thank
6 you.

7 HEARING OFFICER TOMPKIN: All right.
8 Does any intervenor have questions for these
9 witnesses?

10 INTERVENOR PINHEY: Yes. Nicholas
11 Pinhey, City of Tracy. A question for
12 Mr. Wheeler.

13 CROSS EXAMINATION

14 BY INTERVENOR PINHEY:

15 Q In your presentation, you referenced the
16 task force. Was it your understanding that the
17 task force has been formed for purposes of
18 contingency only and does not imply an endorsement
19 by the City of Tracy for the plant?

20 A Yes, and thank you for pointing that
21 out. The purpose of the task force is to discuss
22 mitigation, but in no way does the task force
23 signify an endorsement of the project; does that
24 answer the question?

25 INTERVENOR PINHEY: Thank you. Yes, it

1 does.

2 INTERVENOR SARVEY: Are we just crossing
3 Mr. Wheeler now, or is it open for --

4 HEARING OFFICER TOMPKIN: It's for any
5 of the three witnesses: Mr. Wheeler, Mr. Stein
6 and Mr. Krieger.

7 INTERVENOR SARVEY: Okay. Well, the
8 first thing I wanted to say, I wanted to tell
9 Mr. Pernel that I took the garbage out last
10 night, so we can stop worrying about that.

11 (Laughter.)

12 CROSS EXAMINATION

13 BY INTERVENOR SARVEY:

14 Q Mr. Wheeler, you mentioned new
15 monitoring devices that were putting on the
16 Biomass plant. Can you tell me what those devices
17 are monitoring, what pollutants?

18 A It would be a monitor to continuously
19 monitor the oxides and nitrogen, CO and I believe
20 there's also an O2 analyzer included in that
21 package.

22 Q Is there any sulfur oxide monitoring
23 there?

24 A There is an existing SO2 monitor that we
25 haven't had any difficulty operating and

1 maintaining.

2 Q Mr. Stein, what are the NOx levels that
3 are emitted at the Owens Brockway glass plant, in
4 tons per year?

5 A Mr. Sarvey, I apologize. I have a table
6 that only reports the emission rate in grams per
7 second. With your indulgence, I'll give you the
8 value and then I can calculate it out for you,
9 assuming the facility were to operate continuously
10 for a year.

11 The emission rate in grams per second
12 that we modeled is 20.19. If you'll bear with me,
13 I'll get that number for you.

14 If I punched the calculator correctly
15 here, Mr. Sarvey, it works out to 701.2 tons per
16 year.

17 Q 701.2, okay. How does that compare to
18 the NOx emissions from the three proposed
19 facilities: Tesla, East Altamont and GWF
20 combined?

21 A Well, again, I haven't done that
22 specific comparison. If you'd like for me to take
23 the time to do that, I may have enough information
24 here. It will require a few minutes to perform
25 that calculation.

1 PRESIDING COMMISSIONER PERNELL: Why
2 don't we have you do that -- Do you have other
3 questions and we could come back to that one?

4

5 INTERVENOR SARVEY: Yeah, I have other
6 questions, or we could take a short break if you
7 would prefer, Mr. Pernell.

8 PRESIDING COMMISSIONER PERNELL: Not at
9 this time, I'll let you know.

10 INTERVENOR SARVEY: Okay. I'm standing
11 on one leg.

12 (Laughter.)

13 INTERVENOR SARVEY: Would you like me to
14 go to another question?

15 PRESIDING COMMISSIONER PERNELL: Yes,
16 please continue.

17 INTERVENOR SARVEY: Okay.

18 BY INTERVENOR SARVEY:

19 Q In your analysis, did you take into
20 account the 1996 Biomass fire which involved 17
21 fire districts, several days, and what effect does
22 this have on air quality and public health?

23 A My analysis did not take into account
24 the Biomass fire, and I have not studied the
25 potential impacts of that fire.

1 Q Thank you.

2 A To the extent that its impacts are
3 captured by existing ambient air quality monitors,
4 of course, our considering background air quality
5 would have accounted for that fire.

6 Q This is a question for your health
7 expert. Do you agree with this statement:

8 "Fine particulate and sulfur-oxide-
9 related pollution were associated with all-cause
10 lung cancer and cardiopulmonary mortality. Each
11 ten micrograms per cubic meter elevation in fine
12 particulate air pollution was associated with
13 approximately four-percent, six-percent, and
14 eight-percent increased risk of all-cause
15 cardiopulmonary and lung cancer mortality,
16 respectively. Measures of coarse particle
17 fraction and total suspended particles were not
18 consistently associated with mortality."

19 A Yes. That's basically from a paper that
20 was published yesterday by Pope in the Journal of
21 the American Medical Association reconfirming some
22 other work that had been done in 2000 from an
23 original study from 1995 by the American Cancer
24 Society. And I used that type of information,
25 which you can only do for particulate matter

1 because that's the only substance that those type
2 of predictive equations exist for. You can't do
3 it for the other priority pollutants.

4 Fundamentally, yes, I believe that those
5 are basically true statements and I use that
6 information for the -- when I told you I did three
7 things -- I looked at what each site did, and then
8 I did some additional things -- it was based on
9 that type of information.

10 INTERVENOR SARVEY: Would the applicant
11 object to submitting this into the record, the
12 report that we've referenced?

13 APPLICANT COUNSEL GRATTAN: No, not as
14 part of the project.

15 HEARING OFFICER TOMPKIN: It would be
16 part of the public comment.

17 APPLICANT COUNSEL GRATTAN: Not as
18 evidence.

19 INTERVENOR SARVEY: Not as evidence,
20 okay.

21 HEARING OFFICER TOMPKIN: So it could be
22 docketed and we could accept it that way.

23 INTERVENOR SARVEY: Yeah, we wanted it
24 in evidence, thank you.

25 Do we have our calculations yet on the

1 comparison?

2 WITNESS WHEELER: No.

3 WITNESS KRIEGER: Is that all you had
4 for me?

5 INTERVENOR SARVEY: No, I had more, but
6 I wanted to get back to that, if I could.

7 HEARING OFFICER TOMPKIN: I don't think
8 he has the calculations. Why don't you continue
9 with Mr. Krieger.

10 INTERVENOR SARVEY: Okay, I'll continue.

11 BY INTERVENOR SARVEY:

12 Q I'm referring to your Tracy peaker
13 project cumulative analysis that most of us
14 received yesterday or today, and on table two --
15 tables three and four list ammonia emissions in
16 pounds per year, but table two does not. What are
17 the ammonia emissions for the Tracy peaker plant
18 in pounds per year?

19 A I'm sorry, Mr. Sarvey, could you please
20 refer me again to that table that you're
21 interested in.

22 Q Table two, Tracy Peaker Project, Toxic
23 Air Contaminant Emission Rates.

24 A Okay.

25 PRESIDING COMMISSIONER PERNELL: Repeat

1 the question, please.

2 BY INTERVENOR SARVEY:

3 Q Oh, tables three and four list ammonia
4 emissions in pounds per year, but table two does
5 not. What are the ammonia emissions for the Tracy
6 peaker plant in pounds per year?

7 WITNESS STEIN: Mr. Sarvey, that
8 information has been provided in the application
9 for certification. I don't mean to be
10 argumentative, but I'd be happy to look up that
11 value.

12 INTERVENOR SARVEY: That's fine,
13 Mr. Stein.

14 PRESIDING COMMISSIONER PERNELL: If you
15 don't know it, you can --

16 WITNESS STEIN: I don't know the answer
17 off the top of my head.

18 INTERVENOR SARVEY: Okay.

19 WITNESS STEIN: The emissions are
20 presented here in grams per second, and you could
21 calculate that answer by --

22 INTERVENOR SARVEY: No, that's not
23 necessary.

24 WITNESS STEIN: -- by simple unit
25 conversions.

1 BY INTERVENOR SARVEY:

2 Q Is the combined total of ammonia
3 emissions from the three plants -- the Tracy
4 peaker, the Owens Brockway and the Tracy Biomass
5 plant -- are 156,940 pounds per year, have you
6 analyzed secondary formation of PM2.5 from the
7 pounds per year of ammonia slip from these three
8 stacks?

9 A No.

10 Q Are you also the air quality expert for
11 the Tesla project?

12 A My firm has been retained to perform the
13 air quality analysis for the Tesla project, and I
14 am overseeing that activity.

15 Q And are you familiar with the cumulative
16 analysis of the three projects and their purported
17 health -- their purported effects?

18 A I am generally familiar with that
19 analysis, yes.

20 Q So you did not actually prepare that
21 report.

22 A Again, I supervised its preparation, I
23 did not perform the analysis myself.

24 Q Okay. In the Tracy peaker project AFC,
25 page 8.1-51, you list your background for NO2 as

1 224 micrograms per cubic meter, and in your recent
2 analysis that we are just looking at that we just
3 received, you list your NO2 as 148.5. Can you
4 explain that difference?

5 A I'd be happy to, Mr. Sarvey. The way
6 that we typically do air quality impact analyses
7 is to be as conservative as possible. We start
8 there and then, to the extent that it's
9 appropriate to do so, if the analysis indicates
10 that impact levels are high, we go back and
11 evaluate the underlying assumptions and the
12 analysis.

13 In the case of ambient air quality, we
14 looked at the three closest ambient air quality
15 monitoring stations that procure data for NO2, and
16 we selected the highest recorded value for each
17 averaging time from the station, at which that
18 value was recorded, irrespective of whether or not
19 that station was the station that was closest to
20 the project and was just to be able to demonstrate
21 a very, very conservative level of analysis.

22 It turns out that that analysis is too
23 conservative, and as a result, we went back and
24 reevaluated the ambient air quality information.
25 Fortunately, we have a good NO2 station right here

1 in the City of Tracy that we believe to be very
2 representative of the ambient air quality at the
3 site. And so in the subsequent analyses, the
4 background air quality value was corrected to
5 reflect or revise, to reflect a more accurate and
6 representative depiction of the site, as measured
7 by the Tracy Patterson Pass monitoring station.

8 That's the reason why those values
9 differ.

10 Q So these are values from different
11 stations?

12 A Correct.

13 Q Okay. On the Tesla power project AFC,
14 you have also submitted a cumulative impact
15 analysis of the three plants individually, and in
16 this analysis you list the NOx emissions from East
17 Altamont turbines as 59.57. In reality, from the
18 East Altamont Energy Center AFC, page 8.1-27, the
19 NOx emissions are 240 pounds per hour. Would this
20 affect your conclusions in this analysis and would
21 you like to have a copy of it so you can reference
22 what I'm talking about?

23 A I'm not sure I understand what you're
24 referring to without seeing it, Mr. Sarvey.

25 And what is the -- Can you please repeat

1 your question?

2 Q Yeah. Under table 5.2-35, under
3 emissions for the East Altamont turbines, you list
4 the value of 59.57 nitrous oxides pounds per hour
5 emissions. And then in the accompanying table
6 that I've attached from the East Altamont Energy
7 Center AFC, it says that the NOx emissions from
8 this facility is 240 pounds per hour. And I would
9 like to know how that would impact your analysis
10 on the impact of ambient air quality or NO2 in
11 this particular analysis.

12 A Mr. Sarvey, without referring to both of
13 these documents, unless you have them both in your
14 possession, it's difficult for me to respond to
15 your question. Because these are excerpts of
16 complete documents.

17 I would, however, offer a possible
18 explanation, and I point out that I did not
19 prepare either of these emission estimates. I did
20 supervise the preparation and the analysis for the
21 Tesla project. But I would note that the Calpine
22 AFC line item lists turbines, plural, and duct
23 burners, plural. And I believe there are four of
24 those units.

25 The stack parameters are listed in table

1 5.2-35, per-unit emission rates. And so if you
2 multiply the number of units by the hourly
3 emission rate there, I think you'll come up with a
4 number that's pretty darned close. That is, if
5 you multiply 59.57 times four, that number is
6 pretty darned close to 240.

7 Q Okay. Well, then continuing, the
8 Calpine states that there are three units, not
9 four.

10 But continuing that analysis, the CO
11 hourly emissions are 2,706 pounds per hour, and
12 you list the East Altamont turbines as 209.1
13 pounds per hour, which does not quite correspond
14 with the multiplication of three or four times.
15 Would you explain that discrepancy in this
16 analysis?

17 A Mr. Sarvey, I can't respond. I didn't
18 prepare the East Altamont application, so I don't
19 know why there would be a discrepancy.

20 Q Okay, thank you. Originally, when you
21 modeled your -- you estimated your construction
22 emissions, I guess table 8.11, you originally
23 planned for a seven-month construction period.
24 How will this accelerated construction schedule
25 affect PM10 levels reported in table 8.1-11?

1 A Mr. Sarvey, which project are you
2 talking about? You've had three in front of us --

3 Q GWF peaker plant.

4 A Mr. Sarvey, we prepared a construction
5 impact analysis that was based on a worst-case.
6 We assumed 20 hours a day of operation of
7 equipment, even though the originally intended
8 construction schedule was 12 hours a day. When we
9 looked at the impacts of the minor change in
10 construction schedule, it was our considered
11 opinion that the analysis was already
12 conservative.

13 Q Your ammonia slip level is listed at ten
14 parts per million while CARB and EPA guidelines
15 are five parts per million. How will this affect
16 air quality?

17 A The valley is generalized recognized as
18 being ammonia-rich, so we don't believe that there
19 will be any significant impact to valley air as a
20 result of the ammonia slip levels associated with
21 the Tracy peaker project. Furthermore, I'd note
22 that the ten-part-per-million ammonia slip level
23 is consistent with the ammonia slip level that's
24 been approved by every other project in the valley
25 that I'm aware of.

1 Q Do you know any other air district in
2 the State of California that has permitted
3 interpollutant trading of SOx or PM10 where the air
4 basin is in federal non-attainment for PM10?

5 A I don't know that answer. The district
6 may have a response.

7 Q There are three emergency diesel
8 generators located at Tracy peaker plant, Owens
9 Brockway, and the Tracy Biomass plant. What
10 effect will this have on local air quality when
11 all three generators come on in a blackout, and
12 what kind of modeling have you done in response to
13 this?

14 A I don't believe that we have modeled the
15 operation of each one of those generators
16 operating together. Beyond that, I can't venture
17 a response without performing that analysis. I'd
18 say that it's speculative to assume that all three
19 would, in fact, operate simultaneously.

20 Q What percentage of your VOCs are within
21 200 miles of the project site?

22 A Could you please clarify your question?
23 I'm not sure I understand it.

24 Q It's a reference to the location of your
25 volatile organic compound emission reduction

1 credits. What percentage of those are located
2 within 200 miles of the project site?

3 A There are no VOC emission reduction
4 credits located within that distance.

5 Q What percentage of your NOx emission
6 reduction credits are located within 200 miles of
7 the project site?

8 A I haven't performed that calculation,
9 Mr. Sarvey. But the emission reduction credits
10 that have been provided by the project are a
11 matter of public record and are included in both
12 the application and the staff assessment and the
13 district's determination of compliance.

14 Q How does the startup and shutdown affect
15 the dispersion of pollutants, and how would short-
16 term rises in PM10 levels affect local asthmatics?

17 A I can answer or I'll try to answer the
18 first part of that, and I'll let my colleague,
19 Dr. Krieger, answer the question about asthmatics.

20 There is a difference between steady-
21 state operation and transient operation. I've
22 covered that in my testimony. We performed a
23 fairly detailed analysis of transient operation,
24 including commissioning, startup and shutdown.
25 All of that analysis has been documented in the

1 application supporting documents and the staff
2 assessment. And the conclusions of that analysis
3 are that there are no significant impacts to
4 ambient air quality.

5 Perhaps Dr. Krieger can answer the
6 question on asthmatics, if you could repeat it for
7 him, please.

8 INTERVENOR SARVEY: Yes, Doctor.

9 BY INTERVENOR SARVEY:

10 Q How does the startup and shutdown affect
11 the dispersion of pollutants, and would there be
12 any effects from the short-term rise in PM10, and
13 how would they affect local asthmatics?

14 A Well, the -- what you'd have to do to
15 analyze that, I haven't specifically done that
16 myself, but I can tell you how you would do it,
17 it's very straightforward. Changes in certain
18 pollutants like particulate matter 2.5 or 10,
19 depending upon the magnitude of the change, can
20 make asthma worse, so it causes what we call an
21 exacerbation. But it depends on what the relative
22 change is.

23 So what you have to do to -- if you want
24 to analyze that from a public health perspective
25 is you have to have what that delta is, and then

1 you have to figure out who your -- by age group,
2 who your asthmatics are. You can make some
3 guesses in the general population, and you do
4 those types of calculations that I've done.

5 To see changes, exacerbations in
6 preexisting asthmatics on sort of a community
7 level, what you usually have to have are sudden,
8 dramatic spikes, large numbers. And probably over
9 a change in I would guess ten micrograms per cubic
10 meter. And then you would have to have those
11 people who had preexisting asthma in that location
12 for some length of time.

13 The length of time parameter is not
14 specifically known, although conventionally for
15 calculating, it's assumed that it was a 24-hour
16 period of time, but that's how you would do it.
17 But medically, certainly if the concentration is
18 high enough and the group on the receiving end is
19 sensitive enough, you can see some changes. I try
20 to look at that when I look at the mean
21 concentrations, to look at both short-term and
22 long-term.

23 But, you know, a sudden focused upset,
24 that has to be handled a little differently, and I
25 haven't done that, but that's how you would do it.

1 Q So the analysis is possible, but it
2 hasn't been done?

3 A I haven't done it. I mean, you could
4 not do that easily with the standard
5 methodology -- risk assessment methodology, you
6 would have to use, as I alluded to, this other
7 methodology. It's possible that you might be able
8 to do it with a hazard index approach, but it
9 would not be so easy to do as it would with using
10 some of the more contemporary published studies.

11 But you can only do that for particulate
12 matter. You could not do that for ozone, you
13 couldn't do it for NOx or any of the other
14 priority pollutants.

15 Q Are you familiar with the Fresno
16 project?

17 A No.

18 Q Okay.

19 BY INTERVENOR SARVEY:

20 Q In the BACT analysis, attachment D8 from
21 the San Joaquin Valley Air Pollution Control
22 District, you have a NOx control alternative,
23 Capital Costs, per GE PG 7241FA SCCT unit with SCR
24 reduction to 2.5 parts per million VD. Is that a
25 feasible technology?

1 A I'm sorry, Mr. Sarvey, could you refer
2 me to the material you're --

3 Q On the FDOC from the San Joaquin Valley
4 Air Pollution Control District, attachment D8,
5 table F2?

6 A Do you have a copy of that?

7 Q Just the one that I have in my hand,
8 actually.

9 UNIDENTIFIED SPEAKER: Why don't you ask
10 the question and give it to him.

11 HEARING OFFICER TOMPKIN: Please refrain
12 from issuing comments from the public. Thank you.

13 WITNESS STEIN: Mr. Sarvey, if it's a
14 question on the determination of compliance,
15 perhaps the air district -- well, there's an air
16 district witness here. Perhaps they would --
17 BY INTERVENOR SARVEY:

18 Q It's more of a question is that a
19 feasible technology.

20 A It's feasible to control a combustion
21 turbine to five ppm with this type of combustion
22 turbine. The calculation that was done here is
23 one that was done for -- I consider it kind of a
24 belt-and-suspenders approach, and I don't believe
25 we consider this technology to be demonstrated on

1 a simple-cycle turbine. And even if it were
2 demonstrated, it certainly is not cost-effective,
3 and that's what that calculation is demonstrating.

4 Q Doesn't the FDOC require analysis of all
5 feasible alternative technologies?

6 A Yes.

7 Q Okay. So this is a feasible alternative
8 technology, correct?

9 A Yeah, the feasibility takes into account
10 economics, Mr. Sarvey, and this technology, as I
11 mentioned, would be a technology demonstration at
12 that level on this type of combustion turbine.
13 And it has not demonstrated that it's been cost-
14 effective. Again, that's what those calculations
15 show.

16 Q So essentially, it was rejected because
17 of cost.

18 A Yes.

19 Q Thank you. You mentioned earlier that
20 you had had no violations at the Hanford plant for
21 five years. How long has the Hanford plant been
22 running?

23 A I believe -- Well, I may need to defer
24 to Mr. Mueller. I believe it's since 1990, either
25 1989 or 1990.

1 Q In its current form?

2 WITNESS WHEELER: Are you referring to
3 the solid fuel facility?

4 INTERVENOR SARVEY: Yes.

5 WITNESS WHEELER: It's been operating
6 continuously since August of 1991, in its present
7 configuration.

8 BY INTERVENOR SARVEY:

9 Q And in its current form, how long has it
10 been in operation?

11 A That is its current form. There was a
12 brief period of operation when the unit was
13 operated on cold. It was switched to petroleum
14 coke, and it's been operating on petroleum coke
15 since August of 1991.

16 INTERVENOR SARVEY: I think I'm getting
17 close to where I'd like to talk about the original
18 question I had that we're still calculating on.

19 PRESIDING COMMISSIONER PERNELL: During
20 the break, he can do the calculation and come
21 back. Do you have any other questions for the
22 applicant's witnesses?

23 BY INTERVENOR SARVEY:

24 Q Can you tell me why you did not do the
25 secondary particulate formation analysis?

1 A As I mentioned, the -- There are two
2 reasons. One is that the ammonia emissions from
3 the project are into an ammonia-rich environment.
4 The second reason is that the secondary formation
5 of particulate is a regional process and we've
6 provided regional offsets. The decreases more
7 than offset any potential increases associated
8 with secondary pollutant formation on a regional
9 basis.

10 Q In table eight of your Tracy peaker
11 project cumulative analysis, you list the model
12 concentration as 140.21 for NO2, and then in table
13 8.1-19 Tracy peaker project AFC, page 8.1-51, you
14 list the NO2 maximum impact as 212 for the Tracy
15 peaker project alone. How can you explain that
16 difference when there's so much more emissions
17 coming from the cumulative project analysis than
18 just TPP itself?

19 A One is, Mr. Sarvey, is based on normal
20 operation of the plant. The other is based on
21 emissions during startup. So the application, the
22 higher value is based on operation of plant alone
23 during a startup event, during a very conservative
24 startup event where you have higher emissions.

25 Q So your cumulative analysis does not

1 provide the worst-case scenario that we could
2 expect.

3 A No, I believe it does.

4 Q I'm having trouble understanding. Maybe
5 I should ask the question again. You said the
6 model concentration for all these projects
7 together is 140.21, and then you say the worst-
8 case for the Tracy peaker plant is 212 micrograms
9 per cubic meter. I'm having a problem
10 understanding how all these projects together can
11 be less than the impact of the one, the Tracy
12 peaker project.

13 A Again, that's a conservative analysis
14 based on a transient operation. It's not
15 reflective of normal operation of facility, which
16 we don't consider to be representative of
17 cumulative impacts.

18 Q So in your Tracy peaker project
19 cumulative analysis, there would be no analysis of
20 out-of-compliance conditions at Biomass plant or
21 Owens Brockway?

22 A We did not evaluate out-of-compliance
23 conditions, no. That would be speculative in
24 nature.

25 Q Have you had any breakdowns at the

1 Biomass plant since January 31st?

2 A I don't know.

3 Q Have you had any notices of violations
4 since January 31st?

5 A I don't know. I don't operate that
6 facility.

7 Q Thank you.

8 INTERVENOR SARVEY: I think I'm ready
9 for the break, Mr. Pernell, only because I can't
10 stand here much longer.

11 (Laughter.)

12 INTERVENOR SARVEY: I would like to ask
13 some more questions after the break, but I'll
14 stipulate to what you wish. Oh, and is it
15 possible that the people who did prepare the Tesla
16 project come and answer these questions at a later
17 date, the Tesla peaker project cumulative report?

18 HEARING OFFICER TOMPKIN: Actually, this
19 is the Tracy peaker project, and a lot of this
20 information on the Tesla, while we've permitted
21 wide latitude, hasn't really been shown to be
22 relevant. So I don't think that's going to be
23 permitted at this point.

24 INTERVENOR SARVEY: Okay. Well, I was
25 just referring to the fact that the Tesla project

1 has the only bona fide and accurate modeling of
2 all three plants, and I think that's essential to
3 this analysis since there is no other analysis
4 that's been provided by East Altamont or the Tracy
5 peaker plant in this area. That's why I'd ask
6 that.

7 HEARING OFFICER TOMPKIN: Your comment
8 is noted.

9 So what we're going to do at this time
10 is we'll take a 20-minute break. When we come
11 back we'll permit Mr. Sarvey to get the answer to
12 the calculation. That will be the final and sole
13 question that will be permitted to this witness
14 before we move on.

15 APPLICANT COUNSEL GRATTAN: Two quick
16 redirect?

17 HEARING OFFICER TOMPKIN: Okay.

18 APPLICANT COUNSEL GRATTAN: Before I
19 forget them, please?

20 HEARING OFFICER TOMPKIN: Yes.

21 REDIRECT EXAMINATION

22 BY MR. GRATTAN:

23 Q First is with respect to a question
24 Mr. Sarvey asked. He asked Dr. Krieger about the
25 effect of startup and shutdown PM10 emissions on

1 asthmatics. Dr. Krieger said the analysis hadn't
2 been done in this specific case, but that he
3 suspected it would take a ten-microgram-per-cubic-
4 meter increase in ambient levels in order to show
5 an impact on existing asthmatics.

6 In your experience and in your
7 professional judgment, would the additional
8 emissions of PM10 from a startup/shutdown
9 incident, would that cause a ten-microgram
10 increase in ambient levels?

11 A No.

12 Q Thank you. And secondly, with respect
13 to the cumulative analysis that has been done that
14 you performed here, in your experience, has
15 there -- have you ever been involved in or become
16 aware of a cumulative impact analysis which, in
17 addition to the ambient conditions, added into
18 ambient three -- excuse me, to existing projects,
19 and which took into account not just future
20 stationary sources, but also future residential
21 subdivisions and the vehicular emissions contained
22 therein?

23 A I'm not aware of any in my experience.

24 Q Okay.

25 APPLICANT COUNSEL GRATTAN: Thank you.

1 PRESIDING COMMISSIONER PERNELL: Okay.

2 At this time we'll take a 20-minute break and
3 we'll be back at 25 after.

4 (Thereupon, a recess was held
5 off the record.)

6 PRESIDING COMMISSIONER PERNELL: Okay.

7 We are back on the record.

8 Ms. Tompkin?

9 HEARING OFFICER TOMPKIN: At this time
10 we'll give Mr. Stein an opportunity to respond to
11 that final question that was posed by Mr. Sarvey.

12 THE WITNESS: Yes. I would refer
13 Mr. Sarvey to a table that was included in my
14 prefiled testimony on January 31, I believe.
15 There's a table entitled comparison of regional
16 emissions --

17 PRESIDING COMMISSIONER PERNELL:

18 Mr. Sarvey --

19 THE WITNESS: -- with known or
20 reasonably foreseeable projects.

21 PRESIDING COMMISSIONER PERNELL: He's
22 responding to your question on the numbers?

23 THE WITNESS: Yeah, and that table shows
24 the TPP or the Tracy peaker project, the NOx
25 emissions would be 153.9 tons per year.

1 The East Altamont project, according to
2 the CDC preliminary staff assessment, is 443 tons
3 per year. The Tesla power project, according to
4 the application for certification, is 246 tons per
5 year.

6 REXCROSS EXAMINATION

7 BY INTERVENOR SARVEY:

8 Q And I forgot the original number that
9 you gave me. If you could supply that to me for
10 the NOx emissions for Owens Brockway Glass,
11 please.

12 A Yeah, I believe it was 701.

13 Q So the emissions, the total emissions
14 from Owens Brockway Glass outweighs the combined
15 emissions of all three of these plants; is that
16 correct?

17 A I would say that it's close to; doesn't
18 outweigh, but it's comparable.

19 INTERVENOR SARVEY: Thank you.

20 HEARING OFFICER TOMPKIN: Okay.

21 Mr. Grattan?

22 APPLICANT COUNSEL GRATTAN: I'd move
23 Mr. Stein's testimony and the following exhibits
24 into evidence.

25 INTERVENOR HOOPER: I still have some

1 questions here.

2 APPLICANT COUNSEL GRATTAN: Okay.

3 PRESIDING COMMISSIONER PERNELL: Where
4 are we going?

5 INTERVENOR HOOPER: Hi, my name is Jim
6 Hooper.

7 RECROSS EXAMINATION

8 BY INTERVENOR HOOPER:

9 Q I believe, Mr. Stein, you testified that
10 you did the cumulative impact on proposed plants
11 and emission sources within a six-mile radius of
12 the proposed plant?

13 A Yes.

14 Q All right. Are you aware of any plants
15 that are proposed in a radius between a six- and
16 20-mile radius? If you take an equal circle and
17 make a 20-mile radius?

18 A No.

19 Q And I'm wondering about that because the
20 issue is that other plants may compound with their
21 impact, so I'm guessing that there are other
22 plants.

23 COMMISSIONER LAURIE: Well --

24 BY INTERVENOR HOOPER:

25 Q I heard you testify --

1 COMMISSIONER LAURIE: -- sir?

2 INTERVENOR HOOPER: Yeah?

3 COMMISSIONER LAURIE: Let me interrupt.

4 I think I understand your question, do you mind if
5 I clarify your question?

6 INTERVENOR HOOPER: No, I appreciate
7 that, Mr. Laurie.

8 COMMISSIONER LAURIE: Can you explain
9 the rationale for using the six-mile as opposed to
10 some larger distance, and what is the standard in
11 the industry?

12 THE WITNESS: I'm sorry, is that the
13 question?

14 INTERVENOR HOOPER: That's correct.

15 THE WITNESS: Because they used to pay
16 me big bucks to be able to figure it out.

17 (Laughter.)

18 THE WITNESS: Commissioner Laurie, the
19 six-mile radius is the prescribed distance for
20 evaluating cumulative impact, cumulative air
21 quality impacts in licensing cases, consistent
22 with Appendix B of the siting regulations that
23 stipulate the informational requirements for
24 AFC's. That's a distance that has been
25 established over the Commission's long history as

1 being an inappropriate distance for looking at the
2 potential for sources to have a significant
3 cumulative impact.

4 COMMISSIONER LAURIE: Thank you.

5 Was that responsive to your question?

6 INTERVENOR HOOPER: That's good.

7 BY INTERVENOR HOOPER:

8 Q Do you yourself feel that the six-mile
9 radius is a sufficient radius for cumulative
10 impact?

11 A Yes, I do.

12 Q All right. I heard you talk about also
13 some plants that were built which have bought
14 emission credits in the Manteca area?

15 A Yes.

16 Q All right. Where were those plants
17 located?

18 A I was referring to the La Paloma
19 project, which is an approximately 1,000-megawatt
20 power plant that is nearing completion and
21 operation in western Kern County and licensed by
22 this Commission.

23 Q Now, that's funny, it just strikes me
24 funny that they're way the hell down there and
25 buying credits up here.

1 A That's the way the market works,
2 Mr. Hooper.

3 Q Would it be at all possible to buy
4 emission credits closer to, say, Tracy, say,
5 within a 100-mile radius? Have maybe a more local
6 impact on reducing pollution closer to home?

7 A I haven't done an evaluation to
8 determine what credits are available and where.
9 That is a function of the marketplace and it
10 changes all the time.

11 Q So the credits cost money and you figure
12 out which are the cheapest credits you can buy?

13 A Well, it's a dynamic marketplace and it
14 depends both on availability and on price.

15 Q Okay. I'm looking at a CEC workshop
16 worksheet here from 11/01. I'm not sure what it's
17 called, but it shows several developer plants and
18 their NOx emissions. And this one in -- the top
19 one -- number one in I guess it's called the
20 Antelope Valley in Lancaster, 140-megawatt; are
21 you familiar with this, what I'm talking about
22 here?

23 A I'm familiar with that sheet, yes.

24 Q And it shows that the parts per million
25 of NOx emissions from the Antelope Valley plant

1 are 2.5 parts per million. And I recall -- I just
2 want to check my recollection here -- is the
3 proposed peaker plant here going to produce NOx
4 emissions at five parts per million?

5 A That's correct.

6 Q Now, that really confounds me, because
7 under the details here it says that they use a GE
8 frame 7, which is like the same turbine that
9 you're proposing to use?

10 A To my knowledge, Mr. Hooper, none of
11 those projects on that list are currently under
12 development. They are projects that are either,
13 have not been applied for or applications have
14 been withdrawn. Furthermore, I would submit that
15 anybody can propose a project; it's another matter
16 to construct one and operate it and demonstrate
17 performance levels. There is no operating
18 facility of this size that has demonstrated
19 simple-cycle NOx emissions at 2.5 ppm.

20 Q Yeah, everybody on this list is showing
21 this 2.5. This Antelope Valley --

22 A Those are proposed projects, Mr. Hooper.
23 They're not operating facilities.

24 Q So you could actually yourself propose
25 the operation of this facility at 2.5 and then

1 produce emissions at five?

2 A I could propose this project at zero
3 NOx, Mr. Hooper. It doesn't mean that I would be
4 able to construct it and operate it at that level.
5 Anybody can make a proposal.

6 Q Yeah, so the proposals don't really make
7 a difference?

8 A That's right. It doesn't constitute a
9 demonstration that a NOx level is achievable.

10 Q Okay. I wonder why the proposals are
11 here in the first place, then.

12 Let me see, I recall from yesterday's
13 testimony that the developer of this project
14 proposed to the Energy Commission that they use a
15 combined-cycle turbine rather than a single-stage
16 turbine, and the -- I want to make sure I got it
17 right -- that the Energy Commission declined the
18 combined-stage turbine proposal; is that correct?

19 APPLICANT COUNSEL GRATTAN: As a matter
20 of clarification, it was the Department of Water
21 Resources --

22 INTERVENOR HOOPER: All right, the
23 Department of Water Resources.

24 APPLICANT COUNSEL GRATTAN: -- the
25 applicant. Is it this project that the applicant

1 had an option which -- to build a combined-cycle,
2 the option was the Department of Water Resources'
3 to exercise and the Department of Water Resources
4 did not exercise that option?

5 INTERVENOR HOOPER: They didn't include
6 what?

7 APPLICANT COUNSEL GRATTAN: I didn't
8 mean to testify here.

9 BY INTERVENOR HOOPER:

10 Q Is there -- can we speculate what --

11 A Mr. Hooper, I don't think I covered that
12 as part of my testimony.

13 Q Okay, so that --

14 A I can't respond to that question.

15 Q Is there somebody that I could ask about
16 that at a different time and place, or did I miss
17 the boat on that one?

18 HEARING OFFICER TOMPKIN: You missed the
19 boat; that was yesterday. The witnesses were
20 available then, they aren't now. But anything to
21 do with air quality or public health you can ask
22 of these witnesses.

23 INTERVENOR HOOPER: Right, okay.

24 BY INTERVENOR HOOPER:

25 Q I'm wondering if you can give me a broad

1 idea of the difference in the cost between a
2 single-cycle plant and the combined -- I think I
3 still have the turbines screwed up -- the
4 combined-cycle plant?

5 A I don't know.

6 Q Okay.

7 INTERVENOR HOOPER: Is there going to be
8 a witness here that might know at some time? Do
9 you guys know?

10 HEARING OFFICER TOMPKIN: Well, see, the
11 problem is that you're asking something that's not
12 within the scope of this witness's testimony, and
13 I don't know exactly what you're getting at, but
14 if you --

15 INTERVENOR HOOPER: Well, the difference
16 in cost of these two. What I'm getting at is that
17 the combined-cycle would be less, have fewer
18 effluents than the single-cycle. And I'm
19 wondering if it's a function of cost that we're --

20 HEARING OFFICER TOMPKIN: Well, I think
21 maybe that would have been more appropriate for
22 project description or facility design, and those
23 witnesses were available yesterday. Today we're
24 dealing with air quality, so if you have a
25 question that relates to --

1 INTERVENOR HOOPER: Yeah, this is
2 related to air quality.

3 HEARING OFFICER TOMPKIN: Well, no, this
4 is related to the cost. Today is air quality,
5 pollution, emissions --

6 INTERVENOR HOOPER: Well, I'm wondering
7 if the increased effluents are a function of cost.

8 PRESIDING COMMISSIONER PERNELL: I think
9 that the question was answered, in terms of they
10 had an allocation for a combined-cycle, but the
11 Department of Water Resources suggested that they
12 do a simple-cycle. I think the question has been
13 answered.

14 In terms of how much they cost, I don't
15 think anyone here -- and it would depend upon the
16 size, so there's a lot of variables there. So I
17 don't think the question can be answered, at least
18 by this witness.

19 INTERVENOR HOOPER: Okay. Just still,
20 to let you know what's on my mind, I'm wondering
21 if the increased costs for a combined-cycle, which
22 would produce fewer effluents, would be a
23 consideration. But I'll move on.

24 HEARING OFFICER TOMPKIN: Yeah. Next
25 question, please.

1 BY INTERVENOR HOOPER:

2 Q Why did the -- You cited some, I think
3 two plants, and they seem to be on the East Coast
4 that use the SCONOx process; is that correct? Two
5 plants that you cited?

6 A There are two SCONOx installations that
7 I'm aware of. One is in Southern California, in
8 the City of Vernon, on a 25-megawatt, 2500
9 combustion turbine. The other is on the East
10 Coast. I believe -- Well, I'm not sure of the
11 location, but it's a smaller turbine, I believe
12 it's a five-megawatt turbine. I want to say
13 Massachusetts, but I may be wrong.

14 Q Yes. I recall that's what stuck in my
15 mind was the East Coast plant.

16 Do you have any idea why they were using
17 those SCONOx -- what is that, a scrubber?

18 APPLICANT COUNSEL GRATTAN: I'm going to
19 object to that. That requires the witness to
20 speculate on something that's beyond the witness's
21 ken.

22 HEARING OFFICER TOMPKIN: I'll sustain
23 the objection. Ask another question.

24 INTERVENOR HOOPER: Okay. We have no
25 idea whether we're using SCONOx.

1 BY INTERVENOR HOOPER:

2 Q You testified, I believe, that there are
3 several air stations or several stations at which
4 the ambient air quality was measured, one of them
5 being in Tracy?

6 A Yes.

7 Q How far away do you think the farthest
8 air station is from Tracy that was used to measure
9 ambient air quality?

10 A Well, I know that for PM10 we used
11 background data from a station in Stockton. I
12 believe that the Stockton station was also the
13 location for carbon monoxide data.

14 The SO2 background data may have come
15 from an even further location. I'd have to check
16 the application to give you that answer,
17 Mr. Hooper.

18 Q Okay. So perhaps farther than Stockton?

19 A Yeah, and I should just offer the
20 observation that SO2 is a pollutant for which
21 there are a very limited number of sources and
22 very limited number of monitoring stations,
23 because it has not been established to be a
24 significant ambient air quality issue in the
25 state. The standards are very high, relative to

1 background levels.

2 And so the state generally and the
3 districts have generally not invested a tremendous
4 effort in monitoring for that pollutant because
5 it's not considered to be a pervasive ambient air
6 quality problem.

7 Q And speaking of SO₂, correct?

8 A That's for SO₂, correct.

9 Q Yeah, okay. What strikes me about that
10 is it seems that using Stockton as a --

11 APPLICANT COUNSEL GRATTAN: Objection;
12 the witness shouldn't be testifying.

13 INTERVENOR HOOPER: -- one of the
14 outlying stations --

15 HEARING OFFICER TOMPKIN: I'll sustain
16 the objection.

17 INTERVENOR HOOPER: Okay.

18 HEARING OFFICER TOMPKIN: This is your
19 opportunity

20 APPLICANT COUNSEL GRATTAN: This is your
21 opportunity to ask questions of this witness.

22 INTERVENOR HOOPER: All right. I'm
23 trying to develop a question, and I guess you
24 don't want to know what's going into the question.

25 HEARING OFFICER TOMPKIN: No.

1 INTERVENOR HOOPER: Got it.

2 BY INTERVENOR HOOPER:

3 Q All right. What's the expected annual
4 operating time for the proposed unit?

5 A The license application is for 8,000
6 hours of operation. The project has a contract
7 with the Department of Water Resources for up to
8 4,000 hours.

9 Q Okay.

10 A And, as we heard from Dr. Weisenmuller
11 yesterday, based on 1999 market conditions, the
12 facility would have been -- if it had been in
13 operation, would have been expected to operate
14 approximately 3,000 hours.

15 Q Yeah, a much different time was 1999.

16 Are you aware of how many hours there
17 are in a year?

18 A 8,760.

19 Q Okay. So it seems like the proposed
20 time is a large portion of the total annual time
21 available, that 8,000 -- as a proportion of 8,700-
22 some-odd is a large amount, a large proportion?

23 A Yes.

24 Q Is that kind of like all the time for a
25 power plant? Any power plant that was running 24

1 hours a day, seven days a week -- I guess it would
2 have some down time?

3 A Well, most facilities do have scheduled
4 down time for operation and maintenance. There
5 are also unplanned outages --

6 Q Sure. So I'm wondering if 8,000 hours
7 is essentially company talk for saying that a
8 plant is running all the time.

9 A Mr. Hooper, you can do the math. You
10 put it out there. I mean, you're kind of
11 belaboring this point. Eight thousand hours over
12 8,760, it's --

13 Q That's all the time.

14 A It's a lot.

15 Q Essentially, all the time.

16 A No, it's a fraction and, you know, we
17 could calculate it for you, but it's not 100
18 percent.

19 Q Sure. Are there other plants that would
20 run typically more than 8,000 hours?

21 A Sure. A baseloaded facility, and there
22 are many of them that are under application or
23 have been licensed recently by this Commission
24 have been permitted to operate up to 8,760 hours.

25 Q Okay.

1 INTERVENOR HOOPER: That's it, thanks.

2 HEARING OFFICER TOMPKIN: Thank you.

3 PRESIDING COMMISSIONER PERNELL: Thank
4 you.

5 INTERVENOR SUNDBERG: Can I go next?

6 HEARING OFFICER TOMPKIN: I'm going to
7 ask you to step to the podium, Ms. Sundberg, so
8 that we can hear you better.

9 RE CROSS EXAMINATION

10 BY INTERVENOR SUNDBERG:

11 Q Mr. Stein, in your written testimony
12 from GWF under tab ten, you stated that with
13 mitigation the TPP will not cause or contribute to
14 an exceedence of an applicable ambient air
15 standard; is that correct?

16 A That's correct.

17 Q In your expert opinion, without local
18 mitigation, how can the applicable ambient air
19 standard be maintained?

20 A Well, as I explained, it's kind of a --
21 the analysis is kind of a two-pronged analysis.
22 First, we looked for localized impacts. We do
23 that evaluation without consideration of
24 mitigation. So we run the modeling as if there's
25 no mitigation other than the air pollution

1 controls that are proposed for the facility. That
2 analysis has been done both by myself and the team
3 of folks that worked for me on this project, as
4 well as by the district and the CEC staff.

5 And the analysis shows that there are no
6 significant localized hot spots or significant air
7 quality levels that are created or would be
8 created by the operation of this facility. In
9 addition, the project will provide emission
10 reduction credits or emission offsets which are
11 greater than the proposed emissions from the
12 facility.

13 So it won't generate a significant local
14 air quality problem, and it will reduce regional
15 emissions below existing levels.

16 Q So in your earlier testimony, you
17 suggested that mitigation from over 200 miles
18 away; am I correct?

19 A Yes.

20 Q Thank you. How can mitigation located
21 200 miles away from the TPP eliminate impacts on
22 local children and adults here?

23 APPLICANT COUNSEL GRATTAN: Well, I'm
24 sorry, I'm going to object. Wasn't that question
25 answered several times?

1 INTERVENOR SUNDBERG: I am not sure that
2 we answered the question of how it would eliminate
3 the impacts on children and adults.

4 PRESIDING COMMISSIONER PERNELL: I think
5 it was explained how the mitigation bank worked
6 and how the district -- and that might be a
7 question for the district, but how the districts
8 administer the mitigation bank credits.

9 INTERVENOR SUNDBERG: Okay, thank you.

10 BY INTERVENOR SUNDBERG:

11 Q Hypothetically, if we believe that the
12 people here were healthy, how can mitigation
13 located over 200 miles from the TPP, which is
14 about to be permitted to emit 82.4 tons of PM10,
15 13.4 tons of volatile organic compound, and 153
16 tons of NOx from negatively impacting local
17 children and adults who already have associated
18 health problems here?

19 APPLICANT COUNSEL GRATTAN: Once again,
20 I believe that question has been answered.

21 INTERVENOR SUNDBERG: Okay.

22 BY INTERVENOR SUNDBERG:

23 Q In your testimony, did you consider when
24 you were doing your analysis on the TPP here, that
25 the Odessa auto auction was going to be coming to

1 the area?

2 A That was not a part of my analysis, no.

3 Q And latest docketed cumulative analysis
4 on March 4th, you stated you based your analysis
5 on two existing stationary sources and five
6 proposed; is that correct?

7 A Yes, and I subsequently did additional
8 calculations including the Mountain House
9 facility.

10 Q Did you do -- You did extensive
11 research, then, on the two existing stationary
12 sources?

13 A Could you please clarify the question in
14 terms of what extensive research you're referring
15 to?

16 Q In your research, did you research
17 extensively, so did you look into it, the two
18 existing stationary sources, being the Biomass
19 plant and the glass company?

20 A I consulted the San Joaquin Valley Air
21 District to request information regarding the
22 physical parameters that would permit me to enter
23 the sources into a model. I consulted a
24 California Air Resources Board database that
25 provides information on annual emissions from

1 those two facilities. That was the extent of my
2 research, Ms. Sundberg.

3 Q Thank you. In your expert opinion,
4 having examined both of those stationary sources,
5 do you believe that the sources are in compliance
6 or have had any compliance problems?

7 A I can't answer that question. I haven't
8 conducted any evaluation of the compliance history
9 of Owens Brockway, the -- I can't offer to
10 corroborate the information that has already been
11 provided for the record on the compliance history
12 of the Tracy Biomass plant. And I've testified to
13 that previously.

14 Q So, in your cumulative study, you didn't
15 request any compliance documentation from the San
16 Joaquin County Air Quality Control Board?

17 A No.

18 Q In your earlier testimony tonight, I
19 want clarification. In this cumulative study, did
20 you include Tracy Hills and Schulte as the two
21 residential developments, when tonight earlier you
22 stated -- Which one is right -- Tracy Hills,
23 Schulte and Mountain House? Which of these was
24 the correct statement?

25 A All three were included in an analysis.

1 The material that was prefiled was an analysis
2 that only included Tracy Hills and South Schulte.
3 We subsequently obtained information for the
4 Mountain House development. That information was
5 provided to the committee orally tonight.

6 Q Okay. So it wasn't in your written
7 testimony that we were presented yesterday.

8 A No, it was not. It was clarified today
9 on the record.

10 Q But those numbers were used.

11 A Yes.

12 Q Thank you. "Furthermore, where
13 emissions offsets are required for siting or
14 expansion of power units, the state and local air
15 district must achieve equity for communities near
16 new or expanded power projects by locating offsets
17 close to the location of the project and ensuring
18 that communities impacted by power plant emissions
19 do not experience degraded air quality."

20 HEARING OFFICER TOMPKIN: Ms. Sundberg,
21 is there a question in there?

22 INTERVENOR SUNDBERG: Yes, there is.

23 BY INTERVENOR SUNDBERG:

24 Q Referring to Mr. Sarvey's position
25 statement, are you fulfilling this?

1 A I'm not sure what position statement
2 you're referring to, and what --

3 Q The one earlier that was read into the
4 record.

5 A Ms. Sundberg, the facility has been
6 determined, through my and my team's analysis, to
7 comply with all applicable air quality laws,
8 ordinances, regulations, and standards. And we've
9 evaluated the impact from the project individually
10 and cumulatively, in combination with other
11 reasonably foreseeable projects, and concluded
12 that there will be no significant impact to the
13 environment. That analysis has been performed
14 independently, an analysis has been performed
15 independently by the staff, and has reached the
16 same conclusion.

17 That's the determination that I've made.

18 Q Thank you. If you triple the amount of
19 SCR catalyst used, can you lower the NOx emissions
20 to a below 2.5 ppm?

21 APPLICANT COUNSEL GRATTAN: I believe
22 this is beyond the scope of this witness's
23 testimony and beyond the scope of this witness's
24 expertise to respond.

25 INTERVENOR SUNDBERG: Fine.

1 BY INTERVENOR SUNDBERG:

2 Q In the comparison of the regional
3 emissions here that was published in the
4 statement, there's a comparison, and --

5 COMMISSIONER LAURIE: Excuse me, let me
6 interrupt for a moment, because I want to get our
7 procedure right.

8 Sir, was that an objection?

9 APPLICANT COUNSEL GRATTAN: Yes, that
10 was an objection.

11 COMMISSIONER LAURIE: Before you go on
12 to your next question, we will rule on the
13 objection to let you know whether or not he has to
14 answer the question.

15 INTERVENOR SUNDBERG: Okay.

16 COMMISSIONER LAURIE: Don't give up so
17 easily, okay?

18 (Laughter.)

19 COMMISSIONER LAURIE: Madam Hearing
20 Officer, do you care to rule on the objection?

21 HEARING OFFICER TOMPKIN: We're trying
22 not to. I'm sorry, I've forgotten what the
23 objection was, so could you restate the question
24 and the objection?

25 INTERVENOR SUNDBERG: Well, actually,

1 it's from the supplemental air quality testimony
2 here, David Stein's supplemental testimony here.
3 And I want to ask the question out of the
4 comparison chart here.

5 BY INTERVENOR SUNDBERG:

6 Q What was the radius used in the study of
7 cumulative impact, and would the TPP impacts be
8 much lessened if the six miles, which is up here,
9 ratios had been used? If six-mile ratios had been
10 used on this, would they have been lessened?

11 A I'm not sure I understand your question,
12 Ms. Sundberg.

13 Q Okay. The radius that you used up here,
14 on this chart --

15 COMMISSIONER LAURIE: Can you identify
16 the chart?

17 INTERVENOR SUNDBERG: The chart is from
18 the supplemental air quality testimony by David
19 Stein.

20 BY INTERVENOR SUNDBERG:

21 Q And in that chart, the study of
22 cumulative impacts, would that have changed the
23 impacts if it had been a larger study, other than
24 the six-mile radius?

25 A I can't answer that question. I didn't

1 do a study beyond six miles.

2 Q Okay. So what radius did you use for
3 this study?

4 A Approximately six miles.

5 INTERVENOR SUNDBERG: Thank you.

6 INTERVENOR TUSO: Boy, this is a lot of
7 scientific stuff. I don't know what all this
8 stuff is about. I'm going to keep mine real
9 simple.

10 I'm Chuck Tuso. I'm here because I have
11 a real concern for myself and my wife and my two
12 children and my mother and father, who are 80
13 years old who live out there --

14 HEARING OFFICER TOMPKIN: Thank you,
15 Mr. Tuso, but this is your opportunity to ask
16 questions.

17 INTERVENOR TUSO: I'm going to ask a
18 question, but I'm here on a concern.

19 RE CROSS EXAMINATION

20 BY INTERVENOR TUSO:

21 Q I guess what it is, is I just want to be
22 real clear that we're not going to have any --
23 what I'm understanding is, even though there's
24 going to be all this tons and tons of pollution
25 coming out of these smokestacks, that we are not

1 going to have any negative impacts for us folks
2 that live real close to the facility; is that
3 true?

4 A That is true. I'd also offer your
5 characterization of smokestack as, I'd take the
6 smoke off of it. They do have stacks, but all the
7 gases that will be emitted from this facility are
8 odorless and colorless, so they won't be visible.

9 Q Okay. I guess the question I really
10 had, does it make any difference in your proximity
11 to the facility on the impacts that a person would
12 have?

13 A Yes. In general, the further away from
14 the facility a person or sector resides, the lower
15 the concentration.

16 Q So, in other words, the reverse, the
17 closer you are, the worse it is.

18 A Well, in general. This facility's hot
19 buoyant plume causes the dispersion to go out
20 quite a ways, so in this particular circumstance
21 there may actually be a region close to the source
22 where the impacts are actually lower.

23 Q Okay. Well, I'm probably less than a
24 half a mile away, so what does that do for us out
25 there?

1 A Well, I haven't plotted the -- I mean,
2 we've -- at another public hearing we came with
3 some figures that show concentrations, predicted
4 concentrations on a map. I can't recall
5 specifically where your residence is, Mr. Tusso,
6 but I simply offer that even at the point of
7 highest concentration, it's my expert opinion that
8 there are no significant impacts even at that
9 location. So everywhere else, it's even better.

10 Q I guess my other question is how can we
11 determine or how do you determine that there won't
12 be long-term effects from, health effects from
13 this? I mean, I guess the analogy is it took a
14 lot of years and a lot of deaths before they
15 figured out that cigarette smoking was bad. How
16 do you know what the long-term effects of
17 breathing this stuff is every day out there?

18 A Well, there's a fairly large body of
19 scientific literature on the health effects of
20 various air contaminants, and that body of
21 literature is the basis for the setting of ambient
22 air quality standards that are the framework by
23 which all types of sources -- Not just power
24 plants are regulated. Perhaps Dr. Krieger would
25 care to offer any other observations on the

1 literature, and the efficacy of the literature.

2 WITNESS KRIEGER: Well, it's really a
3 two-part answer. One is that that's the intent of
4 how the risk assessment is set up, and that's the
5 power of the risk assessment process in this
6 particular case. And it does things with lots of
7 safety factors built in at every step of the way,
8 and it runs it out in that condition over very
9 long periods of time.

10 It makes assumptions of full duration of
11 lifetime at continuously high concentration based
12 on some other factors that are well known from the
13 scientific literature. So that is one of the
14 powers of the risk assessment is to try to get at
15 that particular question that you're asking. And
16 because there is always some level of
17 uncertainty -- you know, science changes -- the
18 numbers tend to get lower, not higher, in terms of
19 where the standards go. Typically they get lower,
20 they don't get raised.

21 And so to compensate for that, so that
22 you're not redoing these things every two or three
23 years because a new study comes out, they build in
24 multiple safety factors into the calculations to
25 cover that particular contingency. And so some of

1 these calculations have safety factors that are
2 easily several hundred-fold. So that it's not
3 very likely that you're going to exceed them.

4 Perhaps, you know, Dr. Greenberg may
5 address that when his -- when the merry-go-round
6 comes around to his stop, but that is sort of the
7 basic process, because it's a good question and
8 people have looked at that and asked that, well,
9 how do you know some paper is not going to come
10 out three years from now and you're going to go,
11 gee, I'm sorry, never mind.

12 And the way you do that is you have to
13 build in layers of safety factors with enough of
14 them in there so that you can never say it's
15 impossible that it's not going to happen, but it's
16 exceedingly unlikely. And the way these
17 calculations are done, it makes it -- in
18 California they are quite conservatively and quite
19 restrictively done, I think, relative to other
20 places. So that it's not very likely, if not
21 exceedingly unlikely that that's going to happen.

22 And so that's how the system is set up.

23 INTERVENOR TUSO: That doesn't sound
24 very definite, it sounds kind of grey, so we don't
25 know --

1 WITNESS KRIEGER: No, that's not -- not
2 at all. That's not a don't know. What that tells
3 you is, I'll give you an idea how stringent these
4 calculations are. One in two men in the US over a
5 lifetime -- That's the probability, 50 percent --
6 will develop cancer, one in two. In women, it's
7 one in three is a lifetime probability.

8 The standard that this is held to, so
9 that's, you know, one in two or one in three, but
10 the standard this is held to is ten per million.
11 So look at the enormous amount of difference
12 between those. And so that gives you some idea of
13 the margin of safety. So that's not an I don't
14 know; that gives you a tremendous amount of safety
15 factor built into what everyone already has every
16 day in this country.

17 So I wouldn't agree that it's an I don't
18 know. It's far from that. There's a tremendous
19 amount of safety factors built into the system so
20 that you do have a high degree of certainty.

21 BY INTERVENOR TUSO:

22 Q I guess the next question is with all
23 this pollution that's going to go in the air, who
24 is more definitely affected? I mean, we're
25 talking about tons of stuff going in the air. Who

1 is it affecting? It's got to go somewhere.

2 APPLICANT COUNSEL GRATTAN: I don't know
3 if the witness understands the question. Maybe if
4 you could rephrase it.

5 INTERVENOR TUSO: Well, it was brought
6 to my attention anyhow, but I don't know that I
7 could rephrase. That was about as simple as I
8 could make it.

9 BY INTERVENOR TUSO:

10 Q It's just there's all this pollution,
11 where does it go? It's got to -- Does it just
12 disperse into the air and disappears or what
13 happens to it?

14 A It doesn't disappear, it disperses into
15 the environment.

16 Q Okay.

17 INTERVENOR TUSO: I think that's all the
18 questions I have. Thank you.

19 HEARING OFFICER TOMPKIN: Thank you,
20 Mr. Tusso.

21 INTERVENOR PINHEY: I have some --

22 HEARING OFFICER TOMPKIN: Could you step
23 up to the podium, Mr. Pinhey.

24 INTERVENOR PINHEY: Can you hear me now?

25 Okay. I have some brief questions for

1 Mr. Stein.

2 RECROSS EXAMINATION

3 BY INTERVENOR PINHEY:

4 Q Mr. Stein, in response to the city's
5 written testimony, you provided some presentation
6 that credits and offsets would result in a net
7 improvement of air quality with the facility in
8 place; is that correct?

9 A Yes.

10 Q So, then, you could characterize the
11 Tracy peaker plant as a positive impact; would
12 that be a correct statement?

13 A Yes.

14 Q Then would it be accurate to say that
15 the city should not be concerned with the
16 facility, in terms of future environmental
17 documentation for projects that may be located
18 within the vicinity of the Tracy peaker project?

19 A I'm not sure I can answer that question.
20 I'm not sure what you're getting at, Mr. Pinhey.

21 Q In other words, if it's a net public
22 good or a net positive impact rather than a
23 negative impact, for purposes of environmental
24 documentation for projects within the vicinity, we
25 should not be concerned about the facility, the

1 Tracy peaker project facility?

2 A I don't believe that the City of Tracy
3 should have any concern about the impacts from
4 this facility, if that's your question.

5 INTERVENOR PINHEY: Thank you.

6 HEARING OFFICER TOMPKIN: Okay. If
7 there's nothing further for this witness --

8 Mr. Grattan?

9 APPLICANT COUNSEL GRATTAN: One bit of
10 redirect.

11 REDIRECT EXAMINATION

12 BY MR. GRATTAN:

13 Q Mr. Stein, in response to Mr. Pinhey's
14 question, you certainly I'm sure weren't telling
15 the City of Tracy what they should care about and
16 what they shouldn't, you were merely rendering
17 your professional opinion that the project was
18 not -- Talk about leading questions here, but that
19 the project wouldn't affect the public health or
20 safety?

21 A Yes, that's my professional opinion. I
22 wouldn't presume to tell the City of Tracy what
23 they should or should not be concerned about.

24 HEARING OFFICER TOMPKIN: All right.

25 Mr. Grattan?

1 APPLICANT COUNSEL GRATTAN: We'd at this
2 point like to move Mr. Stein and Dr. Krieger's
3 testimony into evidence, along with some exhibits
4 which Irwin Karp will give to the committee.

5 INTERVENOR SUNDBERG: Excuse me, I'd
6 like to object.

7 HEARING OFFICER TOMPKIN: Go ahead.

8 INTERVENOR SUNDBERG: I'd like to object
9 to the fact that Mr. Sarvey's testimony when he
10 was up here, that his questions weren't answered,
11 and that everything was referred back to the
12 documentation. And that's where I'm at.

13 HEARING OFFICER TOMPKIN: Okay. Well,
14 I'm not sure I understand exactly where you're
15 going with that. What we're doing right now is
16 we're considering the testimony that's being
17 offered or sponsored by Mr. Stein. Mr. Sarvey's
18 thing is something different, and we can deal with
19 that separately.

20 INTERVENOR SUNDBERG: Mr. Stein didn't
21 answer the questions for Mr. Sarvey, and I would
22 like to know, you know, I want to object to that.
23 He did not answer the questions that he was asked.

24 HEARING OFFICER TOMPKIN: That's noted
25 and overruled.

1 INTERVENOR SUNDBERG: Thank you.

2 APPLICANT COUNSEL KARP: Madam Hearing
3 Officer, Irwin Karp. Applicant would like to mark
4 some exhibits for the record and then would be
5 moving those into evidence.

6 These were sponsored by Mr. Stein, and
7 some of these are also sponsored in responses to
8 Intervenor Sarvey's filings, and those are on the
9 witness list. So I'm just going to go through
10 these in order.

11 The first is the AFC application,
12 submitted August 2001, Sections 8.1 and Appendix
13 B -- That is already Exhibit One, we're adding
14 those portions to Exhibit One -- and the AFC
15 supplement submitted October 2001, Section 3.1 of
16 that. That is already Exhibit Two.

17 Now, a new exhibit which I believe,
18 carrying over from yesterday's numbering, gets us
19 to 25; is that correct?

20 HEARING OFFICER TOMPKIN: That's
21 correct.

22 APPLICANT COUNSEL KARP: Okay. So this
23 would be new Exhibit 25, Data Responses 1 to 13
24 submitted November 9th, 2001.

25 HEARING OFFICER TOMPKIN: Okay. That

1 will be marked for identification as
2 Exhibit Number 25.

3 (Thereupon, the above-referenced
4 document was marked as Staff's
5 Exhibit 25 for identification.)

6 APPLICANT COUNSEL KARP: Okay. Now, new
7 Exhibit 26, supplement to the first set of data
8 responses, to A, to D9-10, 13 and 82,
9 November 28th, 2001.

10 HEARING OFFICER TOMPKIN: All right.
11 The first supplement will be marked as Exhibit 26.

12 (Thereupon, the above-referenced
13 document was marked as Staff's
14 Exhibit 26 for identification.)

15 APPLICANT COUNSEL KARP: Okay. Then
16 Sections 2.1 in Appendix A of the wet weather
17 construction contingency plan; that is already
18 Exhibit 12. And comments on the CEC staff
19 assessment regarding air quality. The comments
20 are already Exhibit Three.

21 Also adding a number of new exhibits
22 from our exhibit list. These are under Air
23 Quality. Should I read you the numbers on the
24 exhibit list and then give the new -- Okay.

25 Under Air Quality, number eight on

1 applicant's exhibit list, which will be marked as
2 Exhibit 27, Supplement to the first set of data
3 responses, submitted November 28th, 2001.

4 HEARING OFFICER TOMPKIN: All right.
5 That will be marked as Exhibit 27.

6 (Thereupon, the above-referenced
7 document was marked as Staff's
8 Exhibit 27 for identification.)

9 APPLICANT COUNSEL KARP: Okay. Then
10 number nine on our exhibit list, to be marked as
11 Exhibit 28, the DOC application with the included
12 certificate of compliance, August 17th, 2001.

13 HEARING OFFICER TOMPKIN: All right.
14 That document will be marked as Exhibit Number 28
15 for identification.

16 (Thereupon, the above-referenced
17 document was marked as Staff's
18 Exhibit 28 for identification.)

19 APPLICANT COUNSEL KARP: Okay, and
20 applicant's exhibit list item ten, Air Quality and
21 Public Health Modeling Files, submitted
22 August 16th, 2001, to be marked as Exhibit 29.

23 HEARING OFFICER TOMPKIN: That will be
24 so marked for identification.

25 APPLICANT COUNSEL KARP: Thank you.

1 (Thereupon, the above-referenced
2 document was marked as Staff's
3 Exhibit 29 for identification.)

4 APPLICANT COUNSEL KARP: Number 11 on
5 the list, Cumulative Air Impact Study, submitted
6 March 4th, 2002, to be marked Exhibit 30.

7 HEARING OFFICER TOMPKIN: That will be
8 so marked for identification.

9 (Thereupon, the above-referenced
10 document was marked as Staff's
11 Exhibit 30 for identification.)

12 APPLICANT COUNSEL KARP: Applicant's
13 exhibit list number 12, Response to Data Request
14 Regarding Cumulative Air Impact Analysis from
15 Robert Sarvey, dated February 3rd, 2002, submitted
16 on February 13th, same year, Number 31.

17 HEARING OFFICER TOMPKIN: That document
18 will be numbered Exhibit 31 for identification.

19 (Thereupon, the above-referenced
20 document was marked as Staff's
21 Exhibit 31 for identification.)

22 APPLICANT COUNSEL KARP: Okay. On
23 applicant's exhibit list item 13 under Air
24 Quality, Response to Data Request Regarding Air
25 Quality from Robert Sarvey, dated February 3rd,

1 2002, submitted February 13th, 2002.

2 HEARING OFFICER TOMPKIN: Okay.

3 APPLICANT COUNSEL KARP: That will be
4 marked Exhibit 32, please.

5 HEARING OFFICER TOMPKIN: That will be
6 so marked for identification.

7 (Thereupon, the above-referenced
8 document was marked as Staff's
9 Exhibit 32 for identification.)

10 APPLICANT COUNSEL KARP: Okay. And the
11 last one from our exhibit list, number 14,
12 Response to Data Request 3 from Irene Sundberg,
13 dated February 3rd, 2002, submitted February 13th,
14 2002, to be marked as Exhibit 33, please.

15 HEARING OFFICER TOMPKIN: That will be
16 so marked for identification.

17 (Thereupon, the above-referenced
18 document was marked as Staff's
19 Exhibit 33 for identification.)

20 APPLICANT COUNSEL KARP: Now, Mr. Stein
21 also testified, in addition to air quality and
22 public health on the panel, is sponsoring Section
23 8.6 of the original application as well as
24 Appendix F -- That's the August 2001 application,
25 it's already Exhibit One. We're adding those

1 sections. And, likewise, Section 3.6 of the
2 application supplement dated October 2001. That
3 is already Exhibit Two.

4 All of the exhibits that we have marked
5 for identification, now we would like to move
6 those into evidence.

7 HEARING OFFICER TOMPKIN: Is there any
8 objection? Hearing no objection, the exhibits
9 previously identified -- 25, 26, 27, 28, 29, 30,
10 31, 32, 33 -- as well as the previously mentioned
11 sections will be admitted in evidence.

12 APPLICANT COUNSEL KARP: Correct, thank
13 you.

14 (Thereupon, the above-referenced documents,
15 marked as Staff's Exhibits 25-33 for
16 identification, were received in evidence.)

17 HEARING OFFICER TOMPKIN: All right.

18 (Thereupon, the witnesses were
19 excused from the stand.)

20 HEARING OFFICER TOMPKIN: At this time,
21 then, we'll proceed with the staff presentation.

22 STAFF COUNSEL WILLIS: At this time
23 staff is going to call the Air Quality and Public
24 Health panel. That includes William Walters, Jim
25 Swaney, and Dr. Alvin Greenberg, and if we could

1 swear them all in together.

2 APPLICANT COUNSEL KARP: Counsel, before
3 we do that, we just wanted to clarify something
4 for the record. We may not have moved the
5 doctor's testimony in, just to make sure that that
6 has been done? The reporter is not sure that
7 happened.

8 HEARING OFFICER TOMPKIN: I don't recall
9 that being mentioned.

10 APPLICANT COUNSEL KARP: Okay.

11 HEARING OFFICER TOMPKIN: Is there any
12 objection to that? Hearing no objection, the
13 testimony of Dr. Krieger will be admitted.

14 APPLICANT COUNSEL KARP: Thank you.

15 Whereupon,

16 WILLIAM WALTERS, JIM SWANEY,

17 and ALVIN GREENBERG

18 Were called as witnesses herein and, after first
19 being duly sworn, were examined and testified as
20 follows:

21 STAFF COUNSEL WILLIS: I'm going to
22 first start with Mr. Walters.

23 DIRECT EXAMINATION

24 BY STAFF COUNSEL WILLIS:

25 Q First of all, please state your name for

1 the record.

2 A William Walters.

3 Q Did you prepare the air quality
4 testimony in the staff assessment?

5 A Yes, I was the lead analyst and I was
6 supported by Lisa Bluett in our office.

7 Q And did you also prepare the air quality
8 section of the staff assessment supplement?

9 A Yes, I did.

10 Q Was a statement of your qualifications
11 attached to your testimony?

12 A Yes, it was.

13 Q And could you briefly state your
14 education and experience, as it pertains to air
15 quality analysis?

16 A I have a bachelor of science in chemical
17 engineering. I'm also a registered chemical
18 engineer in the State of California. I have
19 approximately 16 years of experience in the
20 environmental field, primarily in air quality,
21 including air quality modeling and permitting for
22 the last ten years, and some combustion research
23 the first couple of years after college.

24 Q Thank you. Do you have any changes to
25 your testimony tonight?

1 A Yes, we have one minor change. In order
2 to address one of the comments or actually a data
3 request, late data request we got from the
4 intervenors, both Mr. Sarvey and Ms. Aguirre, we
5 went back and asked the district to make sure that
6 we had captured all of the sources of the
7 modeling, and we were able to identify a new
8 source called the Odessa Auto Auction facility.
9 That facility was added to the cumulative analysis
10 of the stationary sources that we performed, and
11 the results of the modeling didn't actually
12 change, but those results are -- will be shown in
13 some later graphics.

14 Q And, finally, do the opinions contained
15 in your testimony represent your best professional
16 judgment?

17 A Yes, they do.

18 Q Now, Mr. Walters, could you please
19 describe the existing air quality in the plant
20 vicinity?

21 A Yes. Currently the area is identified
22 as attainment for nitrogen dioxide, sulfur
23 dioxide, and carbon monoxide. The area is
24 identified as in severe non-attainment for PM10 on
25 the federal level and -- excuse me, for ozone on

1 both the federal and state level, and serious for
2 state for PM10, and non-attainment for federal
3 PM10. And with that being the entire San Joaquin
4 Valley air basin designation.

5 The information that we used to
6 determine that is provided in tables two through
7 nine with testimony, and with additional
8 information provided in figures one through four
9 showing progress both on PM10 and ozone non-
10 attainment in the general project site area.

11 Q Thank you. Could you please describe
12 the emission controls and generation technology
13 being proposed for the project?

14 A Yeah, the project is a simple-cycle
15 project with two turbines. It is going to use a
16 dilutionary system to drop the exhaust temperature
17 so that it can use a high-temperature catalyst,
18 selective catalytic reduction system to reduce the
19 nitrogen oxide emissions.

20 Being a simple-cycle plant, it does not
21 have a cooling tower, and so it does not have the
22 additional particulate emissions that would result
23 from a cooling tower. And there will also be a
24 small emergency engine, and it is using controls
25 to reduce its nitrogen oxide emissions to meet

1 BACT for the valley.

2 Q Now, there have been some concerns
3 expressed that this equipment might be outdated.
4 Can we have your professional opinion on this?

5 A Considering the design of the plant, the
6 simple-cycle design, this particular proposal is
7 actually innovative in how it's going to control
8 its NOx emissions. There are no other 7E frame
9 turbines that are using a hot-temperature
10 selective catalytic reduction system. In fact,
11 there are current units right now that are
12 operating I believe at limits of eleven or twelve
13 ppm down lower in the valley.

14 And we also had other proposals from
15 other projects where they would not, and, in fact,
16 consider this type of technology to not be
17 feasible, so they've actually kind of pushed the
18 envelope a little bit to propose this particular
19 type of control on a simple-cycle project.

20 Q Did you analyze the direct air quality
21 impacts from this project?

22 A Yes, I did.

23 Q And before I ask you to state your
24 conclusions, we would like to present figures one
25 through eight that we've listed on our staff

1 exhibit list and have those marked, and I'd like
2 to lay some foundation for using those.

3 STAFF COUNSEL WILLIS: We can either
4 mark them as a group or mark them individually.

5 HEARING OFFICER TOMPKIN: Okay. Well, I
6 can go ahead and mark them as a group or --

7 STAFF COUNSEL WILLIS: Okay, and that
8 would be --

9 HEARING OFFICER TOMPKIN: Where are they
10 on your exhibit list?

11 STAFF COUNSEL WILLIS: They're starting
12 with air quality, TPP Modeling Results, Project
13 Direct Impacts, Figure One; and all the way
14 through Figure Eight.

15 HEARING OFFICER TOMPKIN: Actually, a
16 better way to handle it is as you refer to them,
17 we'll mark them individually, so actually go
18 through -- unless you're going to describe them
19 collectively.

20 STAFF COUNSEL WILLIS: He's going to be
21 going through them one by one.

22 HEARING OFFICER TOMPKIN: Okay.

23 BY STAFF COUNSEL WILLIS:

24 Q Just one second, I'm going to ask you
25 one more question on that. The figures that you

1 planned to show as visual aids, did the
2 information or the data that you used to create
3 these visuals, was that information included in
4 your prefiled testimony?

5 A In figures one through four, those
6 figures are illustrations essentially of the text,
7 of the results. We're trying to demonstrate where
8 the impacts were located and where the modeling
9 results that I had worked up for that testimony.
10 Figures five through eight are illustrating the
11 cumulative results and do include the new Odessa
12 Auto Auction facility modeling results in that.

13 Q Thank you.

14 INTERVENOR SARVEY: I'd like to object
15 to the visual aids as they were submitted after
16 the required time.

17 STAFF COUNSEL WILLIS: And we have no
18 problem not entering them as testimony. They
19 actually are just visual aids, to help guide the
20 discussion.

21 INTERVENOR SARVEY: Thank you.

22 PRESIDING COMMISSIONER PERNELL: As a
23 matter of information to the community, I think
24 the visual aids would be some additional
25 information to help them understand how the

1 modeling goes. So I'm going to overrule your
2 objection.

3 INTERVENOR SARVEY: I just objected on
4 the basis that I supplied a visual aid of birds
5 yesterday and it wasn't accepted; that was my only
6 reason for objecting, Mr. Pernell.

7 STAFF COUNSEL WILLIS: Our witness is
8 here to lay the foundation for these visuals.

9 BY STAFF COUNSEL WILLIS:

10 Q Okay. The question that we asked just a
11 few moments ago was what were the direct air
12 quality impacts from this project and what your
13 conclusions are. If you could please go through
14 each slide and describe what we're talking about
15 in the figures that you're referring to.

16 A Yeah. In figure one, this is the
17 modeling results for the one-hour NO2
18 concentration from the power plant itself. This
19 shows --

20 Q Excuse me one moment. Could you -- NO2?

21 A Nitrogen dioxide.

22 Q Thank you.

23 A As you can see, the project site is
24 located just south of the middle figure, and the
25 City of Tracy is obviously located to the east-

1 northeast. The major project impacts from a one-
2 hour standard occur in the elevated terrain to the
3 southwest of the site. This is due primarily to
4 the fact that this particular project has an
5 extremely hot stack temperature at a relatively
6 high velocity, which causes a rather high plume
7 height, final plume height because of the extreme
8 buoyancy of the plume.

9 Therefore, it doesn't generally impact
10 areas below its own stack height very intensely.
11 In fact, within several miles of the plant, you'll
12 notice that all of the impacts are below the
13 initial threshold that we've identified for the
14 model, whereas in the hills to the southwest,
15 which are about 700 feet above the project siting
16 level and about 550 feet above the stack height,
17 that's where the major impacts can occur on the
18 worst given one-hour event.

19 This modeling was done using three years
20 of data from the Tracy Patterson Pass Road
21 monitoring station, 1997 to 1999. This reflects
22 basically any of the wind conditions on an hourly
23 basis that occur during that period. Essentially,
24 what this shows is that when the wind does
25 occasionally blow towards the hills, the impacts

1 will be worse in the hills than they will be in
2 the flatlands due to the fact that the plume is as
3 buoyant as it is, and essentially just can't get
4 back down to ground that quickly and impact the
5 ground-level, the valley area to the east.

6 You'll also notice that the
7 concentrations that were presented here are a
8 function of the percentage of background. The
9 background for NOx is well under the current
10 standard. And these numbers show that in the
11 Tracy area, you'd have less than a three-percent
12 increase in the background level, which again is
13 only about 30 percent, or a little less than 30
14 percent of the standard.

15 UNIDENTIFIED SPEAKER: You know, I want
16 to protest this. The prevailing winds in Tracy
17 blow from west to east --

18 HEARING OFFICER TOMPKIN: Sir, we're not
19 accepting comments from the public at this time.
20 Please be seated.

21 UNIDENTIFIED SPEAKER: Well, don't have
22 him come up here and lie.

23 HEARING OFFICER TOMPKIN: Well, he's
24 presenting his testimony, sir. You may not agree
25 with it, but this is his testimony.

1 UNIDENTIFIED SPEAKER: The next meeting
2 we'll move it down to the community center and put
3 the mayor in charge.

4 HEARING OFFICER TOMPKIN: Well, the next
5 meeting, sir, is scheduled for tomorrow --

6 UNIDENTIFIED SPEAKER: You won't come to
7 Tracy and lie.

8 HEARING OFFICER TOMPKIN: Sir, please.

9 PRESIDING COMMISSIONER PERNELL: Please
10 continue.

11 THE WITNESS: Thank you. These are the
12 annual results --

13 BY STAFF COUNSEL WILLIS:

14 Q And, just for the record, you're looking
15 at figure two?

16 A I'm looking at figure two. These are
17 the nitrogen dioxide annual results from the
18 modeling. You'll see that the maximum impacts
19 occur, again, in the hills, but you will also see
20 that there are some higher numbers, although
21 higher is a relative term. Because, again, if you
22 look at the percent of background, they're very
23 low numbers from this particular single facility.

24 But there is a secondary impact area to
25 the south of the city site.

1 PRESIDING COMMISSIONER PERNELL: Do you
2 have a pointer? If you have a laser there, is
3 that the --

4 THE WITNESS: Yeah, the highest impacts
5 actually occur here, in the Altamont Pass area or
6 just above it in the hills here (indicating).
7 There also is another area which shows the
8 prominent wind direction, by the way. And that's
9 why you see it out there. The fact that most of
10 the hours, the wind is blowing in this direction;
11 however, the impacts from the stack at a given
12 hour are very low. So you add them all up and
13 they're still not as high as the occasional very
14 high impacts that occur in the hills.

15 I realize that it's not intuitive, but
16 the fact is, if you have a buoyant plume, it just
17 can't come back to ground. I could give you
18 illustrations of all sorts, but I'm not sure I'd
19 still get the point through.

20 Now, figure three is the 24-hour PM10
21 results. And again, they're very similar. On a
22 short-term basis, on any given worst day, what
23 you're seeing is that the impacts, when the winds
24 do go in this direction -- I'm not saying it
25 happens very often, but when it does, you have

1 higher impacts in the hills than you do down in
2 the valley. And again, it's because you've got a
3 high stack with an extremely hot plume with a high
4 velocity, just can't get back down to ground that
5 easy.

6 So what it --

7 UNIDENTIFIED FEMALE SPEAKER: Excuse me,
8 which -- he said when the wind blows from which --

9 PRESIDING COMMISSIONER PERNELL: I'm
10 sorry, I'm sorry, you can't ask questions from the
11 audience. Please let him continue with his
12 presentation.

13 THE WITNESS: And figure four is the
14 PM10 annual concentration model results, which are
15 very similar, as you would expect, to the NOx
16 modeling results since they're the same stacks.
17 The numbers are different as the amount of
18 pollutant is different, but the impact areas are
19 essentially identical with the major impacts,
20 again, or the highest impacts -- again, it's a
21 relative term because if you take a look at the
22 percentiles, they're very low, occur in those --
23 oh, excuse me -- occur in hills to the west of the
24 project site. But you'll also see that due to
25 prevailing winds, that you do have some impact

1 numbers that, at least in the range of the values
2 presented here, do show up along the predominant
3 wind direction.

4 And it is during these annual conditions
5 that you'll see the function of the prominent wind
6 direction show up in any modeling results, whereas
7 in a worst-hour condition or a worst-day
8 condition, any particular day the wind can be
9 blowing in any particular direction. And it's
10 really a function of things like terrain whether
11 or not the worst impacts will be at any particular
12 location.

13 Now, it just so happens in this
14 particular situation that the population is
15 located on the valley floor as opposed to in the
16 elevated terrain where the maximum short-term
17 impacts, particularly the maximum short-term
18 impacts occur. And these are basically what we
19 have found, in terms of the direct impacts from
20 the project itself.

21 BY STAFF COUNSEL WILLIS:

22 Q And, Mr. Walters, did you also analyze
23 cumulative impacts to air quality from this
24 proposed project?

25 A Yes, I did.

1 Q And could you please describe the
2 conclusions.

3 A The cumulative impact modeling included
4 the modeling of four stationary sources, including
5 the TPP site, as well as the East Altamont energy
6 center, which is located to the northwest of the
7 site, approximately I think seven to seven and a
8 half miles.

9 Q And, just for the record, you're looking
10 at figure five?

11 A I'm looking at figure five right now and
12 showing the illustration of the points of the
13 model. The Tesla power project which is located
14 more westerly of the project site was modeled, and
15 the Odessa Auto Auction facility, which is I
16 believe located about four and a quarter miles
17 from the project site was modeled. I think Tesla
18 was around five and a half to six miles, maybe a
19 little bit less.

20 These modeling results show that you
21 have some impacts locally from each of the
22 sources, but the cumulative or the highest
23 cumulative impacts, again, for the short-terms in
24 a one-hour NO2 nitrogen dioxide concentration
25 again occur in the hill areas, and for much the

1 same reasons as occur at the other locations,
2 although you'll notice the local impacts on some
3 of these others are closer to their project sites,
4 since they don't have the same buoyant plume.

5 For comparison, this plume from Tracy is
6 over 800 degrees Fahrenheit. The combined-cycle
7 projects for East Altamont, the current
8 temperature assumption is 155 degrees Fahrenheit,
9 almost 700 degrees lower, and Tesla I believe is
10 somewhere around the 190, 185 to 190 Fahrenheit,
11 which is over 600, maybe 650 degrees lower in
12 temperature than the stack from the simple-cycle.
13 The Odessa Auto Auction facility has very low
14 stacks, and their temperature is somewhat
15 variable, depending on the particular source.
16 There are a total of eight different sources, all
17 relatively small emission sources at that site
18 that were modeled.

19 Figure six shows the annual NO2
20 concentrations that were modeled. Interestingly
21 enough, the maximum impact for this one actually
22 occurs fairly well adjacent to the Odessa Auto
23 Auction facility. Again, the stacks are very low,
24 they're about ten meters high. And they don't
25 have the same plume buoyancy, much lower

1 velocities and much lower flows. So the plumes
2 can impact ground closer to the site; however,
3 again, if you take a look at the percentiles,
4 they're very low and they would not create any
5 potential chance for any exceedence of either the
6 one-hour or annual NO2 standards.

7 Figure seven shows the maximum 24-hour
8 PM10 concentrations found in the modeling. For
9 this particular one, if you scroll back to the
10 PM10 numbers from the Tracy site, you'll see that
11 the highest numbers for the cumulative are
12 probably occurring when either the wind direction
13 is blowing these two plumes in this area or
14 blowing these three plumes up in the hills, up
15 through here. And again, the highest
16 concentrations occur up in the elevated terrain,
17 and the area around Tracy has much lower
18 concentrations than those other areas.

19 And figure eight is the PM10 annual
20 concentration modeling results. This one shows
21 the two peaks are actually located and essentially
22 the direct impacts from the East Altamont energy
23 center located here and the direct impact, the
24 highest impact from Tesla, which is a nearby
25 hillside where the plume impacts that hillside,

1 since that particular project is located in a
2 valley in that particular area, so it impacts the
3 adjacent hillside as its worst impact area.

4 And again, the impacts from those two
5 projects for PM10 are considerably worse than from
6 the TPP site, mainly -- well, there's two reasons.
7 Number one, they have cooling towers, which have
8 low-level and less buoyant plumes, and the fact
9 that their main stack plumes, the Hersig
10 (phonetic) plumes also are much lower temperature
11 and less buoyant, so they can reach the ground
12 sooner and, therefore, are not as dispersed or
13 diluted when they do hit ground.

14 Q Okay. Did you also perform an air
15 dispersion modeling analysis of the proposed
16 future residential development of the South
17 Schulte specific plan in Tracy Hills?

18 A No, I did not. In reviewing the IR
19 information, there were several problems in trying
20 to do a modeling analysis that would have had any
21 reasonable value. Number one, while there were
22 some final emission numbers, I did not have a
23 chance to review the calculations like I did for
24 all of these other sources that I modeled, nor do
25 I know where the emissions occurred on any of

1 these, whether a lot of the emissions were long
2 trips to and from work and there would be no way
3 to distribute the emissions and model them
4 properly.

5 Also, in looking at some of the emission
6 estimates, there were pretty obvious errors that
7 must have been occurring in some of them, because
8 some of the numbers were somewhat fantastic.

9 Q Thank you. In your professional
10 opinion, is there any potential for plume overlap
11 with the proposed Tracy peaker project and the
12 proposed future residential development? For
13 example, the South Schulte specific plan in Tracy
14 Hills?

15 A Generally, no, because the emissions
16 that are going to occur from those projects are
17 either going to occur locally in the projects
18 themselves which would be occurring from space-
19 heating, from fireplaces, from local automobile
20 traffic or would be occurring along the major
21 traffic corridors in the area. And those would be
22 very localized on those traffic corridors so that
23 there would not be a whole lot of overlap since
24 they wouldn't affect the same elevated terrain
25 areas.

1 Q You also analyzed the potential for a
2 visible water vapor plume from this facility. I
3 realize that that is generally covered under the
4 section of Visual Resources, but since you're here
5 today testifying, if you could please tell us what
6 your conclusions were in that area.

7 A Yeah. Due to the extremely hot stack
8 for this particular source, there is no way that
9 there would be a water vapor plume, basically a
10 seen plume. The water content isn't high enough
11 and basically, as the plume dilutes, it stays
12 below the cyclometric curve for the condensation
13 of the water, and stays well below it. There's
14 really no potential way. If the stack temperature
15 were down to maybe 300 degrees Fahrenheit or less,
16 then there might be some potential, but it's more
17 like 850, it's just not even close.

18 Q Has staff proposed conditions of
19 certification to mitigate construction impacts or
20 potential construction impacts to air quality?

21 A Yes, we have. We've developed four
22 different conditions of certification for dealing
23 with the construction impacts. The first
24 condition is for fugitive dust mitigation, the
25 second condition is for diesel equipment

1 mitigation, and the third is for gasoline permit
2 mitigation. And the fourth is basically a request
3 that the offsets, the PM10 offsets for the project
4 be surrendered early as additional mitigation for
5 the project's construction.

6 Q Are conditions of certification also
7 being proposed to mitigate for potential
8 operational impacts?

9 A Yes. Those basically are the conditions
10 that are provided in the PDOC from the district,
11 and there are 60- to 70-odd of those.

12 Q And the PDOC is?

13 A The preliminary determination of
14 compliance, and actually, at this point it's the
15 final determination of compliance conditions that
16 we're using.

17 Q In your professional opinion with the
18 proposed mitigation, will this project pose any
19 significant adverse air quality impacts?

20 A No, it would not. The impacts to the
21 valley are extremely low and are essentially not
22 measurable. And, at least for the non-attainment
23 pollutants, PM10 and ozone, you wouldn't be able to
24 measure a change due to this particular project.

25 And the other pollutants, there would be

1 no way that this project could cause any violation
2 for any of those attainment pollutants.

3 Q And finally, will this project be in
4 compliance with all laws, ordinances, regulations,
5 and standards?

6 A Our determination and that of the
7 district is that yes, it will be in compliance
8 with all LORS.

9 Q Thank you. Does that conclude your
10 testimony?

11 A Yes, it does.

12 STAFF COUNSEL WILLIS: I'd like to turn
13 to Mr. Swaney.

14 BY STAFF COUNSEL WILLIS:

15 Q Mr. Swaney, could you please state your
16 name for the record.

17 A Jim Swaney.

18 Q And what agency are you representing
19 today?

20 A I'm representing the San Joaquin Valley
21 Air Pollution Control District.

22 Q And could you please state your job
23 title and briefly explain your duties.

24 A Yes. I am the permit services manager
25 for the northern region of the air district. I

1 manage a staff of nine engineers. I oversee all
2 of the permitting actions for sources under our
3 regulations within San Joaquin, Stanislaus and
4 Merced Counties. And we, for every project that
5 comes through, we ensure that they are in
6 compliance with all of ours rules and regulations.

7 Q Thank you. What documents are you
8 sponsoring tonight?

9 A I'm sponsoring the district's final
10 determination of compliance.

11 STAFF COUNSEL WILLIS: And at this time
12 we'd like to mark that as an exhibit.

13 HEARING OFFICER TOMPKIN: All right.
14 The final determination of compliance will be
15 marked as Exhibit 34 for identification.

16 (Thereupon, the above-referenced
17 document was marked as Staff's
18 Exhibit 34 for identification.)

19 STAFF COUNSEL WILLIS: And we also have
20 not marked our figures.

21 HEARING OFFICER TOMPKIN: Fine.

22 After hearing the presentation, I think
23 it would be a good idea to mark the figures
24 collectively, so the figures will be collectively
25 marked, and I'm talking about the modeling results

1 described by Mr. Walters, as Exhibit 35.

2 STAFF COUNSEL WILLIS: All right, thank
3 you.

4 (Thereupon, the above-referenced
5 document was marked as Staff's
6 Exhibit 35 for identification.)

7 BY STAFF COUNSEL WILLIS:

8 Q Mr. Swaney, could you please describe
9 the process that is involved in developing the
10 final determination of compliance?

11 A Yes. First, once we receive an
12 application for a power plant subject to the
13 Energy Commission's regulations, we evaluate it to
14 make sure that, one, we have all the information
15 we need. Once we ensure that the application is
16 complete, we evaluate the project to demonstrate
17 compliance with all of our rules and regulations.

18 At that point we issue what is known as
19 a preliminary determination of compliance. We do
20 a public notice on that, we put a notice in the
21 paper of general circulation. Additionally, we
22 send a notice to the Energy Commission staff, to
23 the State Air Resources Board, and to the federal
24 Environmental Protection Agency. There is a
25 public comment period of 30 days.

1 At the conclusion of that comment
2 period, if there are any comments that have been
3 submitted to us, we address all of those comments.
4 If the comments do not result in a change to the
5 project, at that point then we will issue a final
6 determination of compliance. Once the final
7 determination of -- One thing I should mention is
8 that the determination of compliance does not act
9 as an authority to construct the operation until
10 the Energy Commission certifies the project.

11 Q And finally, could you briefly summarize
12 what the final determination of compliance states.

13 A Yes. As stated in the final
14 determination of compliance, the proposed Tracy
15 peaker plant satisfies and is in compliance with
16 all of the air district's rules and regulations,
17 including but not limited to the best available
18 control technology for a simple-cycle turbine,
19 providing the required offsets as required in our
20 new source review rule, and we determined that it
21 would not cause or make worse a violation of an
22 ambient air quality standard.

23 Q Does that conclude your testimony?

24 A That concludes my testimony.

25 Q Okay.

1 STAFF COUNSEL WILLIS: Now finally, I'd
2 like to go to Dr. Greenberg.

3 BY STAFF COUNSEL WILLIS:

4 Q Could you please state your name for the
5 record.

6 A Alvin Greenberg.

7 Q And did you prepare the public health
8 testimony in the staff assessment?

9 A Yes, I did.

10 Q And did you prepare the public health
11 section in the staff assessment supplement?

12 A Yes, I did.

13 Q Was a statement of your qualifications
14 attached to your testimony?

15 A Yes, it is.

16 Q And could you briefly state your
17 education and experience.

18 A Ms. Willis and Mr. Chairman, with your
19 permission, because I'm also sponsoring the
20 testimony on waste management and hazardous
21 materials, I'd like to state my qualifications in
22 all three areas just once, so I don't have to
23 restate them.

24 HEARING OFFICER TOMPKIN: That's
25 permissible.

1 THE WITNESS: Thank you.

2 I received a bachelor in science from
3 the University of Illinois in Urbana, Illinois. I
4 received my Ph.D. in pharmaceutical and medicinal
5 chemistry from the University of California
6 Medical Center in San Francisco. I conducted
7 three years of postdoctoral work in the area of
8 pharmacology and toxicology in the School of
9 Medicine at the University of California, San
10 Francisco. And I had additional postgraduate
11 training in inhalation toxicology at the Loveless
12 Inhalation Toxicology Research Institute in
13 Albuquerque, New Mexico.

14 I am board-certified as a qualified
15 environmental professional, a certification
16 recognized by the US EPA. I'm a California
17 registered environmental assessor, and a fellow of
18 the American Institute of Chemists. I'm a member
19 of the Society for Risk Analysis, the Airways
20 Management Association, the Society of
21 Environmental Toxicology and Chemistry, and the
22 American Chemical Society.

23 I have worked or rather I have served on
24 several federal and state advisory committees,
25 including the California EPA Advisory Committee on

1 Stochastic Health Risk Assessment Methods, the US
2 EPA work group on Cumulative Health Risk
3 Assessment, the Cal EPA Peer Review Committee on
4 the Health Risks of Using Ethanol in Reformulated
5 Gasoline, the California Air Resources Board
6 Advisory Committee on Diesel Emissions, and the
7 California EPA Department of Toxic Substances
8 Control Review Committee, and the Department of
9 Toxic Substances Control Integrated Site
10 Mitigation Committee; the California Department of
11 Health Services Advisory Committee on County and
12 Regional Hazardous Waste Management Plans. And,
13 back in 1986, I was a member of the Solid Waste
14 Advisory Committee of the Governor's Task Force on
15 Hazardous Waste.

16 Previously, I was an assistant deputy
17 chief for health with the California Occupational
18 Safety and Health Administration in the Jerry
19 Brown administration, and I was appointed by the
20 governor to the State of California Cal OSHA
21 standards board, one of five people appointed by
22 the governor to adopt health and safety
23 regulations in the State of California.

24 Presently, I am chairman of the Bay Area
25 Air Quality Management District Hearing Board, and

1 I have six years in that part-time position, six
2 years experience in adjudication of air quality
3 issues. I have experience at numerous federal and
4 state superfund sites, review and evaluation of
5 over 90 human health risk assessments for Cal
6 EPA's Office of Environmental Health Hazard
7 Assessment, and I've provided consultative
8 services to the California Energy Commission since
9 1993 for over 25 proposed power plants throughout
10 California.

11 Q Thank you. Do you have any changes to
12 your testimony?

13 A Yes, I do, and I would refer you to page
14 5.6-9. this would be the third full paragraph,
15 which starts, "In order to mitigate potential
16 impacts from particulate emissions." And if we go
17 to the third sentence, the third sentence reads,
18 "Low sulfur diesel fuel or the installation of
19 soot filters." I would like to change that word
20 "or" to the word "and," so that it reads, "Low
21 sulfur diesel fuel and the installation of soot
22 filters."

23 Q And do the opinions contained in your
24 testimony represent your best professional
25 judgment?

1 A Yes, they do.

2 Q And can you briefly state how public
3 health differs from air quality analysis?

4 A Well, as it's been stated before, there
5 certainly is a little bit of overlap between air
6 quality issues as a technical area and public
7 health, but they have been separated by the CEC
8 staff because -- mainly because the air quality
9 area addresses what we term criteria pollutants;
10 that is, those pollutants that have national
11 ambient air quality standards set for them. These
12 are health-based airborne concentrations.

13 The public health issues that I work on
14 assess toxic air contaminants for which there is
15 no criteria. There is no standard; therefore, a
16 human health risk assessment has to be conducted
17 in order to determine what is a safe or unsafe
18 level.

19 Q Did you evaluate the health risk
20 assessment for the Tracy peaker project?

21 A Yes. My job was to conduct an
22 independent evaluation of that health risk
23 assessment that was prepared by consultants to the
24 applicant.

25 Q And briefly, could you explain what the

1 health risk assessment is.

2 A There's the hazard identification --
3 Human health risk assessment contains four
4 separate areas: One of them is hazard
5 identification. The second is dose response.
6 Dose response essentially addresses the toxicity
7 of the toxic air contaminants. The concept of
8 dose response is well honored, well studied and
9 well established that essentially says the larger
10 the dose, the more the response; the smaller the
11 dose, the lower chances of there being a response.

12 Exposure assessment such that the mere
13 presence of a toxic substance does not, in and of
14 itself, mean there is going to be an impact on
15 public health. There needs to be a substance
16 present, it needs to have toxicity, and then a
17 person has to be exposed to a certain amount of
18 that toxic substance. So exposure assessment is
19 part of the health risk assessment.

20 And finally, those three areas of hazard
21 identification, dose response and exposure
22 assessment are put together in what we call a risk
23 characterization. This is a standard procedure
24 that is not only endorsed by Cal EPA and US EPA,
25 but also by various non-governmental agencies and

1 quasi-governmental agencies, such as the National
2 Academy of Sciences and its research arm, the
3 National Research Council, the EPAs of any number
4 of countries around the world, such as European
5 country EPAs, Canadian EPA and the World Health
6 Organization.

7 In this health risk assessment, both
8 acute, short-term impacts as well as chronic --
9 that's long-term impacts due to long-term
10 exposure, are assessed, including the risk of
11 contracting cancer. And all of this assessment is
12 accomplished through looking at how much of a
13 toxic air contaminant is emitted from a stack.
14 Even though there are very minute amounts, we can
15 calculate what the probability would be of
16 somebody coming into contact with a sufficient
17 amount to cause the illness.

18 The results are expressed as a
19 theoretical maximum risk of cancer. That does not
20 mean to say that we think this is the exact risk.
21 Instead, what we're trying to say is this is the
22 maximum it could be, and that the true risk could
23 be anywhere between zero, no risk, and whatever
24 that maximum number is. If that maximum number is
25 below a level of regulatory significance, as

1 determined by Cal EPA, the air districts and US
2 EPA as well, then we can say that the risks are
3 negligible or insignificant.

4 Q And I'd like to ask you the results of
5 the health risk assessment, and first, if we could
6 start with the results of the health risk
7 assessment as it involves construction.

8 A Well, the results for construction,
9 operations and cumulative, can all be summed up in
10 one word and that is insignificant. Construction
11 risks are due to the diesel particulate emissions
12 from the heavy-duty earthmoving machinery. Diesel
13 particulates from the exhaust are a toxic air
14 contaminant, pursuant to California codes and
15 regulations. And there is a cancer factor that is
16 applied to that.

17 Maximum emissions are used, once again,
18 to make sure that we have a ceiling and not a
19 floor, and that ceiling then is insignificant.
20 It's below the regulatory threshold. The same
21 thing happens with operations, and in this case
22 it's not just stack emissions, but also the diesel
23 particulates that come from the emergency backup
24 generator, and this emergency backup generator is
25 tested frequently, and the diesel particulates are

1 measured from that.

2 And the cumulative impact of the diesel
3 backup generator emissions as well as the stack
4 emissions are added together, and the total risk
5 was found to be insignificant. Interestingly, of
6 that total risk, even though it was far below the
7 level of significance, virtually all of that risk
8 came from the diesel backup generator, which is an
9 essential, in fact, required piece of equipment,
10 because it would operate the emergency fire pump
11 should power go out, if there would be a fire on
12 site. So it's not only good sense to have an
13 emergency backup generator, it's required.

14 Finally, the cumulative impacts which
15 were discussed in the air quality testimony also
16 have -- are involved in impacting on the public
17 health analysis. And again, the cumulative
18 impacts are insignificant on public health from
19 all of the sources that technical staff analyze in
20 the air quality section.

21 Q Now, Dr. Greenberg, we notice that under
22 the public health section there are no new
23 conditions of certification being proposed. Could
24 you please explain why that is.

25 A Once again, because of the way staff

1 differentiates between air quality and public
2 health, and there is some overlap, any conditions
3 of certification are most likely in the air
4 quality section. In fact, if you look at the
5 public health section, one would note that there
6 is a reference to the air quality section for
7 mitigation or conditions of certification. So
8 it's actually very rare that staff has a proposed
9 condition of certification in the public health
10 section. It's just sort of how the way things
11 fell out.

12 Q Thank you. Does that conclude your
13 testimony?

14 A Yes, it does.

15 STAFF COUNSEL WILLIS: This panel is now
16 available for cross examination.

17 COMMISSIONER LAURIE: Commissioner
18 Pernell, if I may?

19 PRESIDING COMMISSIONER PERNELL:
20 Commissioner Laurie.

21 COMMISSIONER LAURIE: Members of the
22 panel, let me ask you the same question that I
23 asked the applicant's witness. That is, please
24 help me providing an equivalent emissions standard
25 for non-power plant projects. That is to say, the

1 testimony of the applicant's witness was that, in
2 his opinion, albeit he did comment that he did not
3 feel he necessarily had adequate expertise in this
4 area, found that the emissions from this project
5 were roughly equivalent to 1,500 residential
6 units. And the residential unit impact would
7 include the transportation element resulting from
8 that residential impact.

9 I would ask you the same question. Is
10 this power plant emission the equivalent of one or
11 two or three industrial parks, ten or 15 thousand
12 homes, 1,500 homes, a large commercial shopping
13 center? I need, and I think it would be helpful
14 for the public to understand, when we talk about
15 total emissions from this project, what kind of
16 similar project can we equate it to?

17 WITNESS GREENBERG: Commissioner Laurie,
18 I don't have the exact answer to your question of
19 how many homes or other industries, but what I can
20 do is give you the perspective of what the
21 emissions of this power plant would mean, in terms
22 of public health risk, to some of those other
23 sources that you're talking about.

24 COMMISSIONER LAURIE: Okay, a question
25 before you do that. To what extent are the

1 emissions from this power project the same as
2 emissions from other development projects, non-
3 power-related? And that is, if I were going to
4 develop 15,000 residential units or if I were to
5 develop an industrial park, would these type of
6 emissions in various quantities show up?

7 WITNESS GREENBERG: Yes, they would, and
8 they would show up from both mobile sources, and
9 also from fixed sources. And if I could just give
10 an example of that, and again, I can't quantify
11 that, but what I can do in a qualitative manner is
12 assure you that the public health impacts from
13 this project, power plant project are extremely
14 small, they're negligible, they're insignificant.
15 We can calculate an upper bound, a maximum level.
16 But the true risks are much lower than that.

17 But even that maximum level are smaller
18 than if one were to have, as someone suggested,
19 1,500 households with 1,500 automobiles, if each
20 household had an automobile. Studies repeatedly
21 have shown, in the Bay Area as well as other air
22 districts in the state, that automobile exhaust
23 contributes far more to particulate matter and
24 toxic air contaminants than gas-fired power
25 plants.

1 For example, the great majority of the
2 risk in the Bay Area air quality management
3 district, which is around 186 per million -- in
4 other words, the risk is 186 times ten to the
5 minus six, so it's per million people exposed,
6 while the maximum projected from this project is
7 .18. So you can see the difference between 186
8 and .18. And that risk in the Bay Area Air
9 Quality Management District is due mostly, far and
10 away the majority of that 186, is due to vehicle
11 emissions of benzene and 1-3 butadiene.

12 And the reason that risk is there, it's
13 not because an automobile or a truck or even a bus
14 emits a lot, it emits a small amount. But when
15 you multiple that by the number of vehicles, the
16 number of miles that vehicle travels and the fact
17 that the exhaust is right there at ground level
18 and there is very little plume rise and there is
19 very little dispersion, so it's emitting right
20 where the people are, there is a far greater
21 impact than from the automobile than there is from
22 the stack of this facility, with the high stack
23 and the great plume rise due to ejection velocity
24 and temperature of the plume.

25 COMMISSIONER LAURIE: Can you tell me,

1 as a general rule, from a public health
2 perspective, looking at emissions, would I be --
3 would there be a greater risk to me if I lived
4 within one mile of a well-traveled freeway or one
5 mile of a power plant similar to the project we
6 have in front of us today?

7 WITNESS GREENBERG: One mile from the
8 freeway. Very easy, and I said that very quickly.
9 There are numerous studies showing that it is
10 relatively unhealthy to live near freeways. There
11 is a very classic study conducted down in Los
12 Angeles about two or three years ago that showed
13 that. Granted, the risks are slowly decreasing
14 due to emission controls, but it's still far and
15 away much less healthy. It's unhealthy to live
16 closer to a freeway than it is to a power plant,
17 specifically like this.

18 COMMISSIONER LAURIE: Okay. Are any
19 other members of the panel able to provide any
20 degree of quantification of the question?

21 WITNESS WALTERS: I'm going to attempt
22 to give you a quantification.

23 COMMISSIONER LAURIE: Thank you, and
24 thank you, Dr. Greenberg.

25 WITNESS WALTERS: First, in terms of

1 development of projects, like housing, actually
2 I'm going to indicate that it would be different
3 for each pollutant, in terms of the number of
4 houses. Number two, I'd say I have a spreadsheet
5 back in my office which could tell me the answer;
6 unfortunately, it's not here. I could give you
7 that answer later, if you like it, with certain
8 assumptions on trip length for each of the
9 residences and usage of natural gas and things
10 like that.

11 But actually, related to another
12 project, since you want a more numeric answer, I'm
13 going to relate it to another very large project,
14 which is the LAX master plan. The emissions from
15 this project would, again, be related by
16 pollutant, would be somewhere between 1/20th at
17 the most to less than 1/100th for the worst. So
18 VOC would be less than 1/100th of the increase
19 that's being projected for the LAX master plan,
20 and NOx would probably be more like 1/20th of the
21 increase projected, to go from 58 million
22 passengers to 96 million passengers a year.

23 COMMISSIONER LAURIE: Okay. Well, my
24 question was general, and therefore a general
25 response was appropriate. From a public

1 perception standpoint, I guess what I'm trying to
2 get at is, wherever you go to site a power plant,
3 the population's greatest concerns are visual
4 resources, visual impacts, what is it going to
5 look like for the neighborhood; and two, fear over
6 air quality.

7 And yet, again, not specifically
8 referring to this case but commonly, in those same
9 areas you have a significant amount of
10 development. And so it is helpful to the people
11 to understand the relationship between the kinds
12 of emissions coming out of an industrial park or a
13 large residential area as compared to a power
14 plant such as this.

15 Dr. Greenberg provided a general
16 statement in response to that comment. Would you
17 care to provide a general response as well?

18 WITNESS WALTERS: Well, I guess, in
19 terms of the types of pollutants, they're very
20 similar. Because any natural gas combustion you
21 have in your home, whether it's on your rangetop
22 or in your direct heat unit, puts the same
23 pollutants that this power plant is going to be
24 putting in the air, with the exception of the
25 ammonia used in the SCR system, directly into your

1 house.

2 So from that perspective, if you add up
3 enough dwellings, then you have the same amount of
4 pollution. Of course, all that pollution occurs
5 at a lower level and/or inside the house as
6 opposed to occurring or being emitted at a level
7 that may be 150 feet in the air and then rises to
8 800 feet in the air or higher, depending on the
9 meteorological conditions. I'm not sure that
10 answered the question.

11 COMMISSIONER LAURIE: Okay. Not
12 necessarily. I'll try one more time and then I'll
13 drop it. If I were a local government official
14 and I had jurisdiction over various types of
15 projects -- an industrial park, a large
16 residential subdivision, a power plant -- and I
17 was looking solely at the question of air quality,
18 what would the data show regarding which kind of
19 use with attendant transportation facilities or
20 transportation requirements poses the greatest air
21 quality risk to the neighborhood?

22 WITNESS WALTERS: You'll have higher
23 impacts in the neighborhood from the neighborhood
24 itself.

25 COMMISSIONER LAURIE: From residential

1 development and accompanying transportation?

2 WITNESS WALTERS: Right. So if you were
3 going to be situating yourself in a new
4 residential development, the emissions that occur
5 from that new development will have higher impacts
6 of the SUVs, everything else that are emitting in
7 the area will have a higher localized impact on
8 your street than one single power plant -- well,
9 at least this particular power plant, due to its
10 characteristics.

11 COMMISSIONER LAURIE: Thank you, sir.

12 HEARING OFFICER TOMPKIN: All right.

13 Does the applicant care to question the witnesses?

14 APPLICANT COUNSEL GRATTAN: Just a
15 couple of quick questions of the representative
16 from the San Joaquin Unified Air Pollution Control
17 District.

18 How are you, Mr. Swaney?

19 WITNESS SWANEY: I'm good, thank you.

20 APPLICANT COUNSEL GRATTAN: Good.

21 CROSS EXAMINATION

22 BY MR. GRATTAN:

23 Q My first question is, we had some
24 comment earlier tonight about the valley air
25 pollution situation and Bakersfield's and the

1 difference between Bakersfield and Tracy. Can you
2 give us a little snapshot of, let's say, the ozone
3 violations in the Kern County/Bakersfield area
4 versus San Joaquin County/Tracy area?

5 A Sure. What we've found over the years,
6 and we have monitoring stations throughout the
7 valley, is that the majority of the actual
8 violations of the ambient air quality standards
9 occur in the Fresno area, the Visalia-Tulare-
10 Porterville area, and in the Bakersfield area.
11 They have many more violations, both in number of
12 days and number of hours per year, than happen in
13 the north valley.

14 That's not to say that the north valley,
15 if looked at on its own, would be in compliance
16 with the ambient air quality standards, they
17 simply have fewer days where they are not in
18 compliance.

19 Q Thank you. And can you give us another
20 snapshot, if you can, of is the air -- well, I'll
21 ask the question. Is the air in the northern San
22 Joaquin Valley, in the Tracy/San Joaquin County
23 area, is it getting cleaner or is it getting
24 dirtier?

25 A It's getting cleaner.

1 Q Thank you. One further question. Your
2 CEQA, your district regulations with respect to
3 how they handle CEQA under -- excuse me, where
4 jurisdictional power plants are involved, do your
5 regulations cover that?

6 A Yes, they do.

7 Q And do your regulations allow the
8 issuance of an FDOC?

9 A Our regulations specify that the FDOC
10 has to be issued prior to the Energy Commission
11 ruling on the project.

12 APPLICANT COUNSEL GRATTAN: Thank you.

13 UNIDENTIFIED FEMALE SPEAKER: Can we
14 have a clarification on FDOC?

15 WITNESS WALTERS: I'm sorry, FDOC is
16 the --

17 APPLICANT COUNSEL GRATTAN: Thank you,
18 that's all I have.

19 WITNESS WALTERS: Go ahead and clarify?

20 PRESIDING COMMISSIONER PERNELL: Yes,
21 please answer the question on the FDOC.

22 WITNESS WALTERS: Okay. I'm sorry, an
23 FDOC is the final determination of compliance.

24 APPLICANT COUNSEL GRATTAN: I'm sorry, I
25 apologize.

1 HEARING OFFICER TOMPKIN: All right.
2 Are there any questions for the witnesses from the
3 intervenors?

4 CROSS EXAMINATION

5 BY INTERVENOR SARVEY:

6 Q Would a concentration of 184 micrograms
7 per cubic meter of PM10 be considered a health
8 risk?

9 A Yes.

10 Q And consulting table 8.1-18 for
11 construction activities for the Tracy peaker
12 plant, because of this accelerated construction
13 schedule, would you expect that PM10 level to rise?

14 HEARING OFFICER TOMPKIN: Could you
15 clarify what table you're looking at? Is that of
16 the --

17 INTERVENOR SARVEY: The table 8.1-18 of
18 the applicant's AFC.

19 STAFF COUNSEL WILLIS: Just for a point
20 of clarification, the staff produced the staff
21 assessment and the staff assessment supplement,
22 not the AFC.

23 WITNESS WALTERS: Just to clarify, the
24 PM10, maximum PM10 concentration is found in the
25 staff's modeling analysis, which basically was

1 just a more rigorous model of analysis than what
2 the applicant provided. We provided or found a
3 maximum project impact at fence line of 27
4 micrograms per cubic meter. But that maximum
5 fence line concentration drops rapidly as you get
6 away from the fence line.

7 The major emission source that is the
8 culprit in the PM10 is the fugitive dust emissions
9 which occur at ground level, and, therefore, have
10 a very high impact very close to where they're
11 formed, because they are not in any way buoyant
12 and don't rise and essentially just stay along the
13 breathing pathway.

14 But they drop pretty significantly with
15 distance, and we were showing that they dropped to
16 about one-sixth of maximum level at the residence.
17 It was indicated to be about .4 miles west of the
18 site, and for the Lammers Road residences it would
19 be more like 1/14th of the maximum. So I just
20 wanted to identify that the number that you
21 provided is not a number that staff believes is
22 accurate, considering the mitigation that the
23 project is going to be using and just providing a
24 more rigorous modeling analysis.

25 INTERVENOR SARVEY: Well, I'll restate

1 my question, because I don't believe you answered
2 it.

3 BY INTERVENOR SARVEY:

4 Q If this construction schedule is
5 accelerated by 30 to 40 percent, will this figure
6 rise, the PM10 level figure rise?

7 A If the construction schedule is
8 accelerated, and we have no knowledge of that
9 being the case right now, if the specific
10 activities are identified under the worst day,
11 which would mainly be the grading type activities,
12 the high fugitive dust activities, if those were
13 to increase in the number of hours in the day of
14 operation or increase the amount of equipment,
15 there could be a possibility of having higher PM10
16 concentrations, yes.

17 INTERVENOR SARVEY: Thank you. I'd like
18 to ask Dr. Greenberg, again --

19 BY INTERVENOR SARVEY:

20 Q Would you consider that level of 184
21 micrograms per cubic meter unhealthy?

22 A Assuming that's over a certain period of
23 time --

24 Q Thank you.

25 A -- as opposed to an instantaneous

1 reading, yes.

2 INTERVENOR SARVEY: Thank you.

3 BY INTERVENOR SARVEY:

4 Q Mr. Swaney, what paper is your PDOC
5 notice advertised in?

6 A The notice was placed in the Stockton
7 Record, the newspaper of general circulation
8 within the county.

9 Q Would it appear in the Tracy Press?

10 A It did not appear in the Tracy Press.

11 INTERVENOR SARVEY: Thank you, Mr.
12 Swaney.

13 BY INTERVENOR SARVEY:

14 Q Dr. Greenberg, you said you had been
15 appointed to the CARB Advisory Board?

16 A One of them, yes.

17 Q Do you have knowledge or are you aware
18 of the fact that the San Joaquin Valley Air
19 Pollution Control District has filed suit against
20 CARB, alleging that the Bay Area Air Quality
21 Management District induced emissions and are
22 creating San Joaquin Valley Air Pollution Control
23 District's non-attainment problems?

24 STAFF COUNSEL WILLIS: I think I'm going
25 to object to that question. It's outside this

1 witness's, the scope of this witness's testimony.
2 I don't know that he's established which CARB
3 board or commission he's on.

4 HEARING OFFICER TOMPKIN: I'll sustain
5 the objection. Next question.

6 BY INTERVENOR SARVEY:

7 Q In your cumulative analysis in response
8 to my data request that we discussed earlier, did
9 you identify the 5,000 homes that are currently
10 under construction known as Plan C development?

11 A I know of the existence of various
12 development projects; however, as I indicated
13 before, the information to model those projects is
14 not available, nor is the required traffic survey
15 information as well as detailed emission
16 calculations. They just aren't there.

17 Q I'll ask -- Did you identify the Plan C
18 as being part of your cumulative analysis?

19 STAFF COUNSEL WILLIS: I'm going to
20 object. That question was just asked and
21 answered.

22 HEARING OFFICER TOMPKIN: I'll overrule.
23 You may answer.

24 WITNESS WALTERS: As part of my modeling
25 analysis, I include the four stationary sources I

1 identified earlier: the East Altamont energy
2 center, the Tesla power project, the Tracy peaker
3 project, and the Odessa Auto Auction facility.

4 BY INTERVENOR SARVEY:

5 Q So the answer is no, then.

6 A The answer is in the modeling analysis,
7 that particular, no, that was not included.

8 Q Thank you. Has this project, as
9 proposed, without cooling, been approved in
10 practice by the EPA?

11 PRESIDING COMMISSIONER PERNELL: Which
12 EPA, federal or state?

13 INTERVENOR SARVEY: Either.

14 WITNESS SWANEY: I'm not sure that I
15 exactly understand your question, but I can say
16 that federal EPA has established that best
17 available control technology levels for simple-
18 cycle turbines is five ppm for nitrogen dioxide.

19 BY INTERVENOR SARVEY:

20 Q Well, the applicant earlier stated that
21 this technology had never been applied and to
22 reduce the particular equipment they had down to
23 five parts per million. And the question that I
24 was asking, has the technology this applicant is
25 using been approved by the EPA in practice?

1 A As has been stated, I believe I believe
2 this is the first project that will have it. If
3 it's not in practice, it can't be approved to be
4 in practice.

5 Q Okay. So, therefore, it has never been
6 applied so therefore it has never been approved in
7 practice, so would it be considered experimental?

8 A I suppose it could be considered
9 experimental. It was not put forth to us that
10 way, simply as this is what they will build.

11 Q How about the SCONOx technology? Would
12 it be considered experimental or approved in
13 practice by the EPA?

14 A It has not been considered approved in
15 practice for this size and type of turbine.

16 Q Would it be considered experimental?

17 A The fact that it has never been placed
18 on this size or type of turbine, yes.

19 Q Okay. Mr. Swaney, the San Joaquin
20 Valley Air Pollution Control District has recently
21 filed as an intervenor in the Tesla project. Can
22 you tell me why they have intervened? Is it
23 because of the cumulative analysis or why have
24 they intervened?

25 STAFF COUNSEL WILLIS: I'm going to

1 object and ask for the relevance of this question,
2 because I'm not involved in the Tesla project and
3 so I think that we need to know --

4 INTERVENOR SARVEY: It's relevant in
5 terms of the San Joaquin Valley Air Pollution
6 Control District's intention in intervening in
7 this project and not intervening in the GWF peaker
8 project.

9 STAFF COUNSEL WILLIS: They're the air
10 district, the jurisdictional air district for this
11 peaker project. They are not in the other
12 project.

13 INTERVENOR SARVEY: I understand that,
14 but --

15 STAFF COUNSEL WILLIS: So they don't
16 need to intervene in this process is my statement.

17 HEARING OFFICER TOMPKIN: Well, I'll go
18 ahead and rule on the objection. Whether or not
19 they intervened in the Tesla project is really
20 irrelevant to this proceeding, so I'll sustain the
21 objection.

22 INTERVENOR SARVEY: Okay.

23 BY INTERVENOR SARVEY:

24 Q Does your opposition to the Tesla
25 project have anything to do with the location of

1 air emission reduction credits?

2 A We are not in opposition of the Tesla
3 project, we merely want to be a formal party to
4 the proceedings.

5 Q Does your intervention as a formal party
6 have anything to do with the location of their
7 emission reduction credits?

8 HEARING OFFICER TOMPKIN: Well,
9 Mr. Sarvey, I've indicated we're really not
10 interested in the Tesla project here. If you have
11 a question that relates to the Tracy peaker
12 project --

13 INTERVENOR SARVEY: This is a
14 foundational question for my next question.

15 HEARING OFFICER TOMPKIN: Well, ask your
16 next question relating to the Tracy peaker
17 project.

18 BY INTERVENOR SARVEY:

19 Q Since GWF's required emission reduction
20 credits are located predominantly 200 miles away,
21 much further than the emission reduction credits
22 for the Tesla project or the East Altamont
23 project, shouldn't you object to such for the
24 local residents that you are protecting?

25 STAFF COUNSEL WILLIS: I am going to

1 object as argumentative.

2 INTERVENOR SARVEY: Okay.

3 HEARING OFFICER TOMPKIN: I'll sustain
4 the objection.

5 INTERVENOR SARVEY: Okay. I would like
6 to see figure three again, please.

7 HEARING OFFICER TOMPKIN: And, for the
8 record, that's figure three of Exhibit 35, I
9 believe.

10 BY INTERVENOR SARVEY:

11 Q If those purple areas there were located
12 in a heavily populated area, would that cause a
13 concern?

14 A Okay. Well, to read the figure, those
15 purple areas are between one percent and 1.4
16 percent of the background, which is identified as
17 150 micrograms per cubic meter, which means that
18 the values are between one and 1.5, or 1.4, excuse
19 me. No, that's not quite right -- 1.5 to about 2,
20 and I think it was about 2.11 was the max up in
21 those hills.

22 I guess it would depend on what your
23 criteria for significance is. I know the
24 district's criteria are along the lines of EPSD
25 requirements, which are five micrograms per cubic

1 meter. So under their permitting purview, that
2 would not be considered significant.

3 WITNESS GREENBERG: May I answer from a
4 public health perspective?

5 HEARING OFFICER TOMPKIN: You may.

6 WITNESS GREENBERG: Okay. There have
7 been several studies conducted on the effects of
8 particulates, particularly in inducing or
9 exacerbating asthma in children. A particulate
10 level of 2.11 micrograms per cubic meter would
11 have no impact at all on the general population
12 and would have no impact at all on inducing asthma
13 in children nor exacerbating asthma in children.

14 One of the studies is from Seattle,
15 1993; the other is a recent study in January of
16 this year from the New England Journal of
17 Medicine, and another article as well -- I'll give
18 you the quote on that other one in a moment -- The
19 Lancet, February 2nd, 2002. This was the asthma
20 study and exercise in children that was funded by
21 the California Air Resources Board and the author
22 is Rob McConnell, including a primary author,
23 Dr. John Peters of USC Medical School.

24 HEARING OFFICER TOMPKIN: Anything
25 further?

1 PRESIDING COMMISSIONER PERNELL: Do you
2 need the light? Do you want to hit the lights for
3 a minute?

4 BY INTERVENOR SARVEY:

5 Q Do any of these, in these figures five,
6 seven, three, or one -- I know that's hard, to run
7 them all by you at once -- do any of those
8 concentrations in the purple area, would they
9 bother you if they were in a heavily populated
10 area?

11 STAFF COUNSEL WILLIS: Could you clarify
12 the word "bother"? I mean, that's not a
13 scientific term.

14 BY INTERVENOR SARVEY:

15 Q Well, would they affect your assessment
16 that there was no impact to health or maybe not
17 health, but to ambient air quality in that area?

18 A All right. I'll start with figures one
19 and five. Those are the NO2 concentrations, and
20 those numbers would remain, even with the maximum,
21 adding to a maximum background level in the area,
22 would remain well under the health-based
23 standards, attainment standards. So the answer
24 would be no, that would not cause me any undue
25 concern.

1 Now, the other ones were three and
2 seven?

3 Q Three and seven, right. In particular,
4 figure seven.

5 A Well, I think in terms of significance,
6 we answered the question on figure three, which
7 was that it's considerably under the normal
8 significance of threshold of five micrograms per
9 cubic meter that's normally applied.

10 PRESIDING COMMISSIONER PERNELL: Could
11 you get a little closer to the mic so we can get
12 it on the record, please.

13 WITNESS WALTERS: Yes. And as far as
14 figure seven goes, the percentages there are a
15 little bit higher, and are approaching five. And
16 if the TPP site were a major contributor to those
17 cumulative impacts, then there might be some
18 concern; however, the TPP site is not a major
19 contributor to the cumulative impacts in that
20 particular area.

21 BY INTERVENOR SARVEY:

22 Q In your assessment, were you aware that
23 the future Tracy Hills project is located in these
24 areas where these purple markings are?

25 A Actually, based on my mapping, they're

1 actually in the areas that are a little bit lower
2 and a little bit further away from the power lines
3 than where the purple areas are.

4 Q Thank you. Have you reviewed the
5 supplemental air quality testimony of David Stein
6 dated March 5th, 2002?

7 A Yes, I believe I have.

8 Q Do you feel that the lack of a specific
9 radius of six or ten miles would hamper a
10 cumulative impact or comparison of regional
11 emissions with known or reasonably foreseeable
12 projects, in terms of a viable cumulative impact
13 study?

14 A I think the use of a six-mile radius is
15 a reasonable, or a ten-kilometer radius is a
16 reasonable number to use, considering the fact
17 that plumes generally don't overlap that much when
18 you get that far away from each other.

19 Q Were you aware that the San Joaquin
20 regional area is 1,440 square miles?

21 A I wasn't aware of that specific number.

22 Q Do you feel that the percentage increase
23 from TPP is representative of the comparison of
24 those two areas with those amounts of
25 contaminants?

1 A I'm sorry, I just did not understand
2 that question.

3 Q The applicant asserts that the
4 percentage from TPP for PM10 is .5 percent when
5 compared to the entire San Joaquin County region,
6 and I'm asking is that an appropriate comparison
7 for a cumulative impact study?

8 A I think what that was, was just a simple
9 illustration of how big the emissions are in
10 comparison to the rest of the emissions in the
11 county.

12 Q Well, this is advertised, I believe, as
13 a supplemental air quality statement of cumulative
14 air quality impacts. And the question I'm asking
15 is, isn't it normally representative of a
16 cumulative air quality study to use a six- or,
17 even in extremes, a ten-mile radius rather than an
18 entire county?

19 A Which was done in the modeling analyses.

20 Q No, I'm speaking of this specific
21 conclusion, that the percentage increase from TPP,
22 in terms of this model, is only .5 percent, but
23 it's being compared to the entire San Joaquin
24 County, instead of a six- or ten-mile radius is
25 what I'm implying and that's the question that I'm

1 asking.

2 A Well, you're talking about two separate
3 analyses there that are drawing two separate
4 conclusions.

5 Q Right, but this analysis is put to us as
6 a cumulative air impact analysis, and what I'm
7 saying is because it does not have a six-mile
8 radius of comparison, it's not valid.

9 HEARING OFFICER TOMPKIN: Is that a
10 question?

11 INTERVENOR SARVEY: Yes.

12 HEARING OFFICER TOMPKIN: And could you
13 restate your question?

14 BY INTERVENOR SARVEY:

15 Q Oh, if this were a cumulative impact
16 analysis, wouldn't a six-mile radius be imposed on
17 the percentage increase of the area, in terms of a
18 cumulative impact analysis? Isn't that how that
19 usually works? You compare it to a background?

20 A We don't look at percentage increases
21 for cumulative analysis, we look at modeling
22 results.

23 Q And you use a background, right? A
24 background level, correct?

25 A And we add it to the background.

1 Q Okay. Do you think this is a
2 representative background of the area, using the
3 entire San Joaquin County?

4 A I think it's a different kind of
5 analysis and you're trying to identify whether or
6 not it makes any sense in relation to the other
7 analysis, but they're really two separate things
8 to be taken in their own context.

9 Q Okay. I'll get back to that one.
10 NOx levels from Owens Brockway, the
11 applicant has stated, are almost 700 tons per
12 year, more than the three power plants combined.
13 With your knowledge of the emission violations of
14 Owens Brockway Glass which you have testified in
15 previous -- excuse me, not testified but mentioned
16 in previous workshops, does that bother you?

17 A What, that there are 750 tons of NOx?

18 Q That there's 750 tons of NOx and that's
19 more than all three power plants combined, and
20 that we're permitting these power plants, but this
21 particular facility that we're permitting this
22 power plant by is right next to an emissions
23 source of 700 tons of NOx per year.

24 A Let me see if I can figure out a
25 question from that.

1 HEARING OFFICER TOMPKIN: It seems the
2 witness is confused. Can you clarify that and
3 shorten your question?

4 INTERVENOR SARVEY: Okay.

5 BY INTERVENOR SARVEY:

6 Q The NOx levels from Owens Brockway Glass
7 are almost 700 tons per year, more than the three
8 power plants. With your knowledge of the emission
9 violations of Owens Brockway Glass, does that
10 bother you?

11 A My knowledge of --

12 STAFF COUNSEL WILLIS: Excuse me, I need
13 to object to the question as to does it bother
14 him. I don't quite understand what the question
15 actually is for this witness. This is a technical
16 witness that can provide an answer to a technical
17 or a question in this area.

18 BY INTERVENOR SARVEY:

19 Q Does that affect your conclusion that
20 this is a proper place to put the TPP?

21 A Well, the area background, which would
22 include the effects of Owens Brockway, are in the
23 analysis. So to the extent that the Owens
24 Brockway is next to the site is not unusual,
25 considering the fact that normally industrial

1 locations, you get a number of industrial sites.
2 As opposed to popping a power plant on the corner
3 next to your house, they are going to be in an
4 area that's around industrial areas, and I've been
5 evaluating cases where that's been the case in
6 most cases.

7 So the fact that it's around another
8 emission source is nothing new for this case
9 versus any other.

10 Q One of the magnitude of 700 tons per
11 year of NOx is not unusual for the CEC to site a
12 power plant next to, when it's one mile away from
13 residents or less?

14 A Some of the existing power plants in the
15 south coast air basin have much higher emissions
16 than that, and we've been evaluating projects in
17 and around those particular project areas.

18 Q And does the CEC normally site a plant
19 this close to -- this high of emission that's this
20 close to a residence?

21 STAFF COUNSEL WILLIS: I'm going to
22 object. This witness can testify to this power
23 plant. I don't know that he can testify to what
24 the Energy Commission normally does.

25 HEARING OFFICER TOMPKIN: I'll sustain

1 that objection.

2 INTERVENOR SARVEY: Okay.

3 BY INTERVENOR SARVEY:

4 Q In your analysis, did you include the
5 156,940 pounds per year of ammonia slip from the
6 three stacks -- Owens Brockway, Tracy Biomass and
7 the TPP?

8 A No, we did not model ammonia emissions.
9 There is no standard, no criteria standard for
10 them.

11 INTERVENOR SARVEY: All right.

12 BY INTERVENOR SARVEY:

13 Q In your health analysis, Doctor, I
14 haven't seen much reference to any kind of study
15 on impacts to asthmatics; has there been an
16 analysis of that? Because most of what I've read
17 has been related to cancer.

18 A Yes, Mr. Sarvey, there was a study.
19 There have been several studies done. I alluded
20 to some of them in my previous response to one of
21 your questions. They've been coming out very
22 recently and they reinforce the dose response
23 relationship between pollutants and either
24 induction of asthma or exacerbation of existing
25 asthma.

1 And the reason that you don't see much
2 of a discussion of that is because the analysis
3 talks about acute and chronic health risks, of
4 which asthma is one of those. And my analysis led
5 me to conclude that there will not be an acute or
6 chronic hazard as a result of emissions from the
7 facility.

8 I understand that you've been asking
9 some questions about the number of tons that this
10 facility would emit. From a public health
11 perspective, it's not so much the number of tons
12 or pounds that would be coming out of the
13 facility, but rather, what is the airborne
14 concentration at the ground level that a person
15 would be exposed to.

16 For example, you could have a hundred
17 tons come out of the stack and it gets dispersed
18 such that the concentration is very low. You
19 could have one pound come out of somebody's home
20 fireplace chimney, and they could be more at risk
21 from that fireplace than they would be from the
22 ton coming out of the stack. And it has to do
23 with what I had mentioned earlier, the
24 toxicological principle of dose and response.

25 So it's not the mass that I am concerned

1 about when it comes to a public health analysis,
2 but rather, what are people exposed to? And I
3 have conducted that analysis and I feel very
4 confident in my skills in analyzing this so that I
5 can tell you that the airborne concentrations will
6 be so low you will not be able to really measure
7 that. I mean, we don't even have analytical
8 equipment that would be able to detect particulate
9 matter this low.

10 And there would be -- If you did a
11 before and after measurement, you would find the
12 same measurements before this plant were built as
13 opposed to after this plant was running for five,
14 ten, or 15 years. You would not be able to tell
15 the difference, and I, therefore, can state that
16 you won't be able to tell the difference in public
17 health impact as well, from what we know in
18 toxicological and medical science of how these
19 contaminants, pollutants affect people.

20 If the concentrations were higher, then
21 I would tell you there could be an impact, but
22 they're not.

23 Q So if we were considering an air basin
24 that was right at the threshold of, say, the
25 federal PM10 standard, would you consider any

1 contribution from this plant as a possible harmful
2 effect on asthmatics or people with respiratory
3 problems?

4 A No, sir, I wouldn't, even if it were
5 over the federal threshold. Because the
6 incremental increase, it is theoretical and not
7 even measurable. And the best science that we
8 have says that there will be no impact, even on
9 the most sensitive members of the population, such
10 as asthmatics.

11 Q Thank you, Dr. Greenberg.

12 Previously the applicant referred to my
13 testimony and my position statement from the
14 American Lung Association, and I'd like to see if
15 you agree with this particular comment:

16 "Furthermore, where emissions offsets
17 are required for siting or expansion of power
18 units, the state and local air district must
19 achieve equity for communities near new or
20 expanded power projects by locating offsets close
21 to the location of the project and ensuring that
22 communities impacted by power plant emissions do
23 not experience degraded air quality."

24 A Well, I don't know the context of the
25 entire statement or the entire document that came

1 from, but in general I think what we're looking
2 for, much as Dr. Greenberg identified, is to make
3 sure that the concentrations, the dose that people
4 are going to be receiving from this plant, is
5 insignificant. And I think that is what our
6 analysis has determined, regardless of whether or
7 not the offsets are local or not.

8 That being said, we are encouraging the
9 applicant to try to get offsets and do the
10 community benefit plan to get more localized
11 impact, reduction impact in the community.

12 INTERVENOR SARVEY: Thank you.

13 BY INTERVENOR SARVEY:

14 Q Mr. Swaney, in the FDOC attachment D8,
15 which I referred to the applicant earlier -- It's
16 the NOx control alternative, Capital Costs, per GE
17 PG 7241FA SCCT unit with SCR reduction to 2.5
18 parts per million; is this a feasible technology
19 for the applicant?

20 A As part of our best available control
21 technology analysis, we do what is known as a top-
22 down analysis. The first step in that is
23 identifying all control measures that may be
24 applicable. The second step is to eliminate those
25 that are not technologically feasible.

1 Anything that's left over, you do a
2 cost-effectiveness analysis. So the simple fact
3 that a cost-effectiveness was done means that we
4 did not rule it out as technologically infeasible.

5 Q Okay. I understand that you're not --
6 that that's not your decision, about the cost-
7 effect analysis. Was this particular alternative
8 rejected because of the cost analysis?

9 A It was found to be not cost effective
10 and, therefore, not required under our BACT
11 regulations.

12 Q Thank you, Mr. Swaney.

13 Q Carrying on with the FDOC, in the docket
14 log, Mr. Keith Golden submitted his comments on
15 October 4th to comment on the PDOC. Is it unusual
16 to have an FDOC issue 24 hours after you receive
17 comments from the CEC?

18 A For any comments that are submitted, we
19 look at what the comments are, and we address
20 them. If the comment is very simple, say, it's
21 correcting typographical errors, then yes, we can
22 have a very fast turnaround to do the final
23 determination of compliance.

24 Q Are you familiar with his questions in
25 the FDOC?

1 A I know that I have read them. I do not
2 have a copy of that document with me tonight.

3 Q Okay. Do you feel that those were
4 complicated questions or they were very easy to
5 answer or is that beyond what you can answer
6 without this document in front of you?

7 A That's beyond what I can answer without
8 the document.

9 Q There are emergency diesel generators
10 located at all three plants -- Tracy peaker plant,
11 Owens Brockway, and the Tracy Biomass. What
12 effect did this have on local air quality, if all
13 three generators were to come on in a blackout,
14 and have you made an assessment of that risk?

15 PRESIDING COMMISSIONER PERNELL: Who is
16 the question for?

17 INTERVENOR SARVEY: The CEC
18 representative.

19 WITNESS WALTERS: Well, I can't address
20 the risk, but in terms of emergency generators at
21 the different project sites, emergency generator
22 impacts are very local, so there wouldn't be much
23 in the way of a cumulative impact. Their highest
24 impacts are mainly near fenceline, you know, for
25 each location.

1 So in terms of analyzing the particular
2 TPP engine, that is included in the analysis and
3 for those particular hours that it would be on,
4 we've shown what the worst-case emission impacts
5 for one-hour NOx would be and they still are below
6 the ambient air quality standards.

7 BY INTERVENOR SARVEY:

8 Q Do you recall what that level was?

9 A I can probably look it up.

10 Yeah, the maximum impact, again, which
11 would be at fenceline and would drop pretty
12 quickly with distance, was about -- for NOx,
13 nitrogen dioxide -- was about 212 micrograms per
14 cubic meter. Added to a worst-case background,
15 came up with a resulting maximum NO2
16 concentration, nitrogen dioxide concentration of
17 361 micrograms per cubic meter, which is well
18 under the standard of 470.

19 Q Were the PM10 levels analyzed in that
20 also?

21 A I believe the PM10 levels were not
22 actually higher than the peak levels that were
23 identified. Actually, to answer your question, we
24 didn't do -- the PM10 24-hour standard assumes
25 that the engine was operating for an hour. So the

1 numbers that were provided in the analysis do
2 include that. The maximum impacts for a 24-hour
3 situation with only one hour of the engine
4 operating still occur in the hills, the elevated
5 terrain. And the impacts that are closer to the
6 facility are quite a bit lower.

7 Q Okay. So the only danger would be if
8 you were located near the fenceline, then,
9 correct?

10 A I'm not saying there would be any danger
11 if you were located on the fenceline, unless the
12 wind was always blowing in that direction and the
13 engine was always on.

14 Q Okay. I noticed in the modeling, and
15 you'll have to excuse my inexperience here, but in
16 the fumigation analysis, I never see a level, any
17 type of PM10 figure. Could you explain to me why
18 that is? I mean, this is a question that --

19 A Fumigation analyses -- Well, basically,
20 fumigation is a short-term event. It happens
21 essentially at daybreak, at least in this
22 particular condition, this particular power plant
23 is not on a shoreline. So you don't have to
24 evaluate shoreline fumigation, you evaluate
25 essentially the inversion breakup fumigation that

1 can occur in rural areas, which this is determined
2 to be a rural area. If it were an urban area, we
3 might do a fumigation analysis, but it really
4 wouldn't be proper, although it is done in a lot
5 of the cases.

6 And since it only happens for a short
7 period of time, an hour to 90 minutes, it doesn't
8 affect the 24-hour impacts from PM10 very
9 significantly, and generally, you only look at the
10 short-term standards, the one-hour, three-hour
11 standards to determine if there's going to be any
12 significance through fumigation.

13 Q So there is no, like, one-hour PM10
14 analysis in a fumigation condition?

15 A No, because there's no standard. I
16 mean, we could make it a 24-hour, but since it
17 would only -- fumigation would only occur for one
18 of those hours, then it wouldn't impact the
19 overall 24-hour concentration very significantly,
20 since it's only for a percent of the time of that
21 day.

22 BY INTERVENOR SARVEY:

23 Q Mr. Swaney, has the applicant provided
24 substantial evidence of compliance with all
25 applicable LORS, particularly Air Pollution

1 District regulations, thus ignoring potentially
2 significant environmental impacts, among other
3 things?

4 A As was stated in the final determination
5 of compliance, we found that the proposed project
6 is in compliance with all of the air pollution
7 rules and regulations that we have delegation
8 authority over.

9 Q Has the applicant provided any evidence
10 of recent compliance with Air District LORS?

11 A In terms of what?

12 Q The Biomass plant.

13 A Well, we would know the compliance
14 history.

15 Q So there are no recent violations, then.

16 A The most recent violation at Tracy
17 Biomass occurred back in June of 2001.

18 Q Thank you, Mr. Swaney.

19 What is the efficiency of the emission
20 control technology SCR versus SCONOx?

21 A At the moment, because of unresolved
22 scale-up and reliability issues with SCONOx, we do
23 not consider SCONOx to have a greater efficiency
24 than typical selective catalytic reduction
25 systems.

1 BY INTERVENOR SARVEY:

2 Q What is the effect of partial load and
3 startup/shutdown on criteria pollutants and TAC
4 emissions, toxic air contaminant emissions?

5 A Right. Mr. Sarvey, it's my
6 understanding that the startup would be
7 approximately ten to 15 minutes. Because this
8 particular facility is a peaker plant, and so it's
9 going to start up a whole lot quicker.

10 I looked at that issue in response to
11 your filing that included some comments from
12 Mr. Michael Boyd. And what I have found is that
13 the toxic air contaminants are emitted in such a
14 low amount -- We're not even talking about a lot
15 of mass here -- and that the airborne
16 concentration, at even the point of maximum
17 impact, which is not in the town of Tracy, but the
18 maximum ground level concentration is up in the
19 hills somewhere.

20 But even if a person were to be there in
21 the future, that even if one were to take the
22 figures from Mr. Boyd's written submittal and
23 apply that to, say, formaldehyde, the risk would
24 still be far lower than one in a million. And, of
25 course, the standard is ten in a million for

1 review.

2 So I have looked at that, and my
3 response is it's not going to make a difference,
4 this ten- or 15-minute startup period.

5 INTERVENOR SARVEY: Thank you, Doctor.

6 BY INTERVENOR SARVEY:

7 Q In terms of the emissions from a
8 natural-gas-fired plant, would you characterize
9 the majority of emissions as PM -- or, in terms of
10 PM10, would it be PM10 or PM2.5, or do you have some
11 sort of ratio that is emitted from natural-gas-
12 fired plants?

13 A I know in the old literature, CARB used
14 to make an assumption of somewhere between 96 and
15 98 percent as 2.5, I believe. And I'm stating
16 this from pretty old memory. But I think in terms
17 of what we assume for our analysis, we assume it's
18 all PM2.5, or we would assume it was all PM2.5.

19 INTERVENOR SARVEY: Thank you.

20 BY INTERVENOR SARVEY:

21 Q The CARB guidelines and the EPA
22 guidelines for ammonia slip are five parts per
23 million, Mr. Swaney. Can you tell me how that
24 affected your decision to allow the Tracy peaker
25 plant to achieve ten parts per million in their

1 ammonia slip?

2 A For all power plant projects that we
3 have recently improved, we have specified an
4 ammonia slip limit of ten ppm. We are aware of
5 both CARB and EPA, California Air Resources Board
6 and the Environmental Protection Agency's
7 determination on that. They have commented on
8 certain of our projects, and our responses have
9 been that because of the air quality issues within
10 the valley, we would much prefer to see compliance
11 with the NOx limits, and we do health risk
12 assessment for the impact of the higher ammonia
13 slip limits, and have, in every case, including
14 Tracy peaker plant, have determined that it does
15 not pose a significant risk to the surrounding
16 population.

17 INTERVENOR SARVEY: Thank you,
18 gentlemen.

19 PRESIDING COMMISSIONER PERNELL: I do
20 have one question for the air quality witness, and
21 that is you stated under the construction phase
22 that there are some impacts in relation to dust.
23 And my question is have you submitted any
24 mitigation for that, for the dust levels at the
25 fence?

1 WITNESS WALTERS: We have identified
2 mitigation measures for the fugitive dust
3 generating activities, which is an AQC-1,
4 condition of certification AQC-1. And then we
5 also have tailpipe emission mitigation measures
6 for both the diesel and gasoline equipment for
7 this facility.

8 Some of those activities may or may not
9 have been identified and included in the modeling,
10 but I do not believe all of them were. So we
11 would expect and particularly the tailpipe
12 emission productions were not all identified in
13 the modeling. So we would expect that the
14 modeling results are conservative and do not
15 include all of the additional mitigation that we
16 are requiring.

17 PRESIDING COMMISSIONER PERNELL: In
18 terms of mitigation for the dust, is it -- Scratch
19 that, let me think about this question.

20 In terms of mitigation for the dust,
21 would using water for example mitigate some of
22 that impact, a water truck when you're moving
23 dirt?

24 WITNESS WALTERS: Watering is one of the
25 activities that's identified as being necessary in

1 their mitigation plan. So yes, watering is one of
2 many measures that can reduce the fugitive dust
3 emissions from the construction.

4 PRESIDING COMMISSIONER PERNELL: And
5 that's part of the mitigation of the dust?

6 WITNESS WALTERS: Right. It's part of
7 the mitigation plan that has to be approved and
8 implemented during the construction.

9 HEARING OFFICER TOMPKIN: Ms. Sundberg?

10 INTERVENOR SUNDBERG: I'd like to
11 address this to Mr. Walters.

12 CROSS EXAMINATION

13 BY INTERVENOR SUNDBERG:

14 Q I truly appreciated your presentation,
15 but it would have been so much nicer for me and I
16 would have understood it so much better if you had
17 explained to us which way the winds were blowing
18 on the presentation.

19 A I think what should be noted is that in
20 the modeling results we used three years of data,
21 and we then pull out the absolute maximums we find
22 for any of those hours of those three years, the
23 23,000-odd hours that are modeled. And those
24 concentrations are provided, the absolute maximum
25 at any particular hour. So the maximum that may

1 occur, say, in the City of Tracy may not be the
2 same hour, if it was an hourly standard, such as
3 the one-hour NOx figures were provided.

4 So the maximum that occurred, say, up in
5 the upper northwest area, the wind would have been
6 blowing, of course, in that direction. But that
7 would have been a different hour than the maximum
8 that would have been occurring down in the
9 southwest, where the wind would have been blowing
10 in that direction at that particular time.

11 For the annual results, it's a
12 combination of all the various wind directions and
13 wind speeds that are all added to create an
14 additive total number that will occur, an average
15 number over the entire year. So in terms of which
16 way the wind is blowing, it's blowing in the
17 worst-case direction for each receptor that's
18 modeled.

19 Q Okay, thank you. Do any inversion
20 conditions exist out there?

21 A Well, there's the potential for
22 fumigation conditions to occur in any rural area,
23 and fumigation modeling was performed. One of the
24 keys of this particular project, again, because it
25 has a very buoyant plume, it's very hard for it to

1 get back down to the ground, and actually the
2 fumigation results bear that as witness, that it's
3 hard to push down such a hot plume. It's much
4 like trying to force a hot air balloon back to the
5 ground after you've got the bell heated up.

6 Q Okay. So, then, is there a ceiling
7 height on that, where the inversion layer would
8 stay?

9 A Well, if you're talking about an upper
10 inversion layer, that's also identified in the
11 modeling as essentially the mixing height in the
12 modeling files. And essentially, the plume rise
13 can be essentially stopped at that inversion
14 layer, and that is included in the modeling, in
15 the modeling results.

16 Now, if the stack, of course, is higher
17 than the inversion layer, than it won't notice the
18 inversion layer being the plumes are already above
19 it.

20 Q Just above it. Okay, thank you.

21 Can you tell me which modeling station
22 that was used to -- that you received your PM10
23 information from?

24 A Well, actually, we presented PM10
25 information from a number of stations, in terms

1 of --

2 Q Can you name those stations for me?

3 A Yeah, there's the Stockton-Hazelton
4 station, there's the Stockton-Holt Avenue station,
5 and I think we may have presented one other. I
6 was considering actually putting in some stations
7 from Alameda and Contra Costra County to show kind
8 of a bracket of the conditions, but we didn't do
9 that -- the Beth Lyland station and the station up
10 in Livermore.

11 In terms of what we used for background,
12 we used the Stockton station. If I had a closer
13 station that was more representative I would have
14 used it, and I actually did consider using
15 Livermore as being more representative,
16 considering the normal wind direction.
17 Livermore's numbers were a lot lower, so to be
18 conservative we used the higher numbers from the
19 Stockton station, which may not actually represent
20 the site as well.

21 And let me answer the rest of that
22 question real quick. Okay, yeah, we only
23 presented the two Stockton stations actually in
24 the report. I do have data for other stations
25 available, though.

1 Q Is that -- That is available?

2 STAFF COUNSEL WILLIS: Mr. Walters has a
3 graph, but it would be new information that has
4 not been prefiled.

5 HEARING OFFICER TOMPKIN: And what are
6 you suggesting?

7 STAFF COUNSEL WILLIS: I mean, if you
8 want him to use -- if you want him to present the
9 information; otherwise, I think his answer would
10 be based on the testimony that he has prefiled.

11 HEARING OFFICER TOMPKIN: Is that
12 information that's part of the staff assessment
13 and the basis for your conclusions, or is this
14 just --

15 WITNESS WALTERS: The Stockton data is
16 included in there, but there's also some
17 additional data which is all readily available
18 from the Air Resources Board web site. It just
19 shows a comparison of the PM10 levels, both from
20 the west and the east, and then to the southeast
21 of the site, which kind of bracket what you would
22 expect to see in Tracy.

23 HEARING OFFICER TOMPKIN: At this point,
24 since we're considering the additives for this
25 project, I would think it would be more

1 appropriate to refer to that web site and stick to
2 the information that's the basis for your
3 assessment in this case.

4 So that's the preferred alternative, and
5 I don't think we'll accept any extraneous evidence
6 on that.

7 INTERVENOR SUNDBERG: Thank you.

8 BY INTERVENOR SUNDBERG:

9 Q How does the lack of a cooling tower
10 reduce the particulate emissions? I know this
11 particular project doesn't have one, but can you
12 explain how that works for me?

13 A Yeah. A cooling tower works through the
14 direct evaporation of water. Basically, to make a
15 long story short, there's a lot of heat rejection
16 in a combined-cycle power plant, and that heat
17 rejection is in the form of the latent heat of the
18 steam. You have to recondense the steam that goes
19 through the steam turbine, and then send it back
20 through the tubes to make it steam again to create
21 the force to push the steam turbine again.

22 So in condensing that steam, you're
23 pulling a thousand BTUs per pound, essentially,
24 out of that water. And that essentially is done
25 through heat system, where you take a separate

1 cooling water system through a heat exchanger, and
2 put that through a cooling tower. Now, that water
3 is essentially concentrated as it operates,
4 because it's evaporating, and that's basically the
5 main part of the cooling is the evaporation of the
6 water. There's a little bit of air heating going
7 on, in terms of the air that goes through the
8 cooling tower as well. But 80 to 95 percent of
9 the cooling, depending on the ambient conditions,
10 is done through direct evaporation of water.

11 Now, evaporation of water isn't the
12 problem. The problem is the fact that the cooling
13 tower also has what's called drift, and that's
14 actual particles of water that are not evaporated
15 that get released from the tower. Most towers
16 have some controls for that, drift eliminators
17 that reduce that, but you still get a lot of
18 pounds of just plain old water droplets which have
19 been concentrated from the evaporation cycle to
20 the point where you may have 4,000, 7,000 parts
21 per million of solids, essentially total dissolved
22 solids. The same stuff you would get if you were
23 to take a glass of water and evaporate it, you get
24 that little bit of, essentially mainly calcium and
25 sodium salts that are just in the water.

1 That material is then emitted from the
2 cooling water. It's usually not a lot. A big
3 cooling tower with a good mist eliminator may be,
4 oh, 60 pounds a day of emissions, which is lower
5 than you'd see from the turbines. But those
6 emissions occur much lower and they occur at
7 temperatures that are only about 20, 30 degrees
8 above the ambient condition. So they don't have
9 the same level of plume rise, and so they mix more
10 rapidly and the actual concentrations that hit
11 ground hit closer to ground, and they're less
12 dispersed.

13 So that's essentially the mechanism and
14 the reason why you get some locally high, can get
15 locally high concentrations of PM10 from cooling
16 towers. When I say "high," it's a relative term.
17 It's still not a real high number, but in
18 comparison sometimes the highest numbers are very
19 much influenced by the cooling towers on some of
20 these projects.

21 Q In the testimony it was stated that this
22 plant is going to add PM10 pollution to the air
23 here. And it's also been stated that, in the
24 testimony, that this is a severe non-attainment
25 area. Can you explain to me -- I'm really

1 confused here -- if we're adding PM10 and it's in
2 not a -- it's a severe non-attainment area, how
3 can -- I don't understand how that can be.

4 And I thought Mr. Swaney was not going
5 to answer that.

6 A What our regulations require is that a
7 proposed project will not cause an exceedence, or
8 if the background is already in exceedence of a
9 standard, it will not make worse that exceedence.

10 The standard that we use to determine
11 what is constituted to make worse is a standard
12 published by the US Environmental Protection
13 Agency as applied throughout the nation for when
14 you have an existing exceedence of the standard,
15 what is considered to be making it worse. And
16 when we evaluated the project, the impact from the
17 project was below that standard.

18 INTERVENOR SUNDBERG: Okay, thank you.

19 COMMISSIONER LAURIE: Commissioner
20 Pernell, may I ask you a procedural question at
21 this time?

22 PRESIDING COMMISSIONER PERNELL: Yes.

23 COMMISSIONER LAURIE: It's 11:20. It's
24 late, we have not as yet gotten public comment.
25 Do we know what the estimated times are for the

1 additional cross examination and testimony in
2 order to get through this issue tonight? And may
3 I ask what your intention is regarding how late
4 you plan to go tonight so that people can make
5 plans?

6 PRESIDING COMMISSIONER PERNELL: Well,
7 my intention is to get through this topic. And my
8 understanding is we don't have but maybe two other
9 intervenors that want to speak to this topic.

10 COMMISSIONER LAURIE: No, my --

11 PRESIDING COMMISSIONER PERNELL: I'm
12 sorry.

13 COMMISSIONER LAURIE: That's all right.

14 I'm concerned about the length of
15 Mr. Boyd's testimony. I wouldn't want to cut him
16 off, but Mr. Boyd generally has a fair deal to say
17 in most cases, so I would be -- I'd like to have
18 some idea about how long you anticipate Mr. Boyd's
19 testimony to be.

20 INTERVENOR SARVEY: Well, Mr. Laurie, I
21 will agree to just enter his comments in the
22 record, I believe -- unless the applicant has an
23 objection and wants to stay a little later.

24 APPLICANT COUNSEL GRATTAN: We have no
25 objection to those coming in as public comments.

1 INTERVENOR SARVEY: No, no, no, no, no.
2 Evidence, testimony.

3 APPLICANT COUNSEL GRATTAN: No, we'd
4 object to that.

5 INTERVENOR SARVEY: You would like to
6 cross examine the witness?

7 APPLICANT COUNSEL GRATTAN: We would
8 object to admission of that as testimony, since it
9 failed to meet the criteria, failed to meet the
10 time lines.

11 INTERVENOR SARVEY: Well, I believe the
12 hearing officer granted us permission to present
13 this witness.

14 PRESIDING COMMISSIONER PERNELL: I think
15 we have an objection to that.

16 Well, I do want to get through this
17 topic tonight.

18 INTERVENOR SARVEY: I was offering to
19 make it short.

20 PRESIDING COMMISSIONER PERNELL: But
21 we -- I think we have another intervenor that
22 is --

23 HEARING OFFICER TOMPKIN: Well, I think
24 we wanted to just get a time estimate. Since
25 there is an objection to submission of the

1 document, what would be the time estimate of the
2 testimony?

3 INTERVENOR SARVEY: I have no idea,
4 because I have no idea how long the applicant's
5 cross examination will go. The testimony itself
6 is probably about an hour.

7 COMMISSIONER LAURIE: Well, there's
8 going to have to be a ruling on the objection,
9 because the applicant is going to object to
10 Mr. Boyd's testimony.

11 INTERVENOR SARVEY: Thank you,
12 Mr. Laurie.

13 COMMISSIONER LAURIE: It's not a
14 question of whether it's written or not, the
15 applicant will --

16 I assume you intend to object to
17 Mr. Boyd's oral testimony.

18 APPLICANT COUNSEL GRATTAN: That's
19 correct.

20 UNIDENTIFIED SPEAKER: You know, Laurie,
21 you --

22 HEARING OFFICER TOMPKIN: Okay. We are
23 not entertaining comments from the public.

24 UNIDENTIFIED SPEAKER: -- you will allow
25 the City of Tracy --

1 HEARING OFFICER TOMPKIN: Sir, you're
2 prolonging these proceedings unnecessarily. We're
3 not entertaining comments from the public.

4 UNIDENTIFIED SPEAKER: You, Pernell,
5 will be replaced with the mayor.

6 HEARING OFFICER TOMPKIN: You're keeping
7 us here too much longer, sir.

8 UNIDENTIFIED SPEAKER: Next meeting
9 you'll be replaced with the mayor.

10 HEARING OFFICER TOMPKIN: What I would
11 suggest at this point is that maybe we go ahead
12 and finish with these witnesses before we -- this
13 witness before we move to the intervenor
14 witnesses, if that is acceptable to you,
15 Commissioner?

16 COMMISSIONER LAURIE: I'm sorry, I was
17 busy picking up my mic. What?

18 HEARING OFFICER TOMPKIN: I was
19 wondering if maybe it would be acceptable to
20 complete these witnesses before we deal with the
21 intervenors' witnesses.

22 COMMISSIONER LAURIE: It's completely in
23 the presiding member's discretion. I was just
24 hoping to get some idea so that the people know
25 whether or not they should bother showing up to

1 work tomorrow.

2 (Laughter.)

3 PRESIDING COMMISSIONER PERNELL: Well, I
4 think that there will be a lot to get through the
5 intervenors. There is going to be an objection to
6 Mr. Boyd's testimony and we would have to rule on
7 that objection.

8 So before we get to that, I would like
9 to have the other intervenors cross examine
10 staff's witnesses.

11 UNIDENTIFIED FEMALE SPEAKER:
12 Mr. Pernell, will the public be allowed to cross
13 examine any of these witnesses in the public
14 comment?

15 PRESIDING COMMISSIONER PERNELL: No.

16 UNIDENTIFIED FEMALE SPEAKER: We don't
17 get to ask them any questions?

18 PRESIDING COMMISSIONER PERNELL: No.

19 UNIDENTIFIED FEMALE SPEAKER: Well, what
20 do we get to do?

21 PRESIDING COMMISSIONER PERNELL: Make a
22 public comment.

23 HEARING OFFICER TOMPKIN: All right.

24 Mr. Hooper, you may proceed.

25 INTERVENOR HOOPER: Okay, thanks.

1 HEARING OFFICER TOMPKIN: Go ahead.

2 CROSS EXAMINATION

3 BY INTERVENOR HOOPER:

4 Q Gentlemen, you stated that 96 percent of
5 the particulate matter emissions are in 2.5; is
6 that correct?

7 A Like I say, to the best of my
8 recollection, that's in the area that CARB used to
9 assume for these type of sources, for combustion
10 sources; however, I think in practicality, you
11 generally consider it all as PM2.5.

12 BY INTERVENOR HOOPER:

13 Q Is the PM2.5 the most dangerous form of
14 particulate matter?

15 A All particulate matter, PM10 or less,
16 does present a health risk. It is current
17 scientific consensus that the PM2.5 does present a
18 greater risk than that between 10 and 2.5.

19 Q Smaller is more dangerous?

20 A Yes, indeed.

21 INTERVENOR HOOPER: Got it.

22 BY INTERVENOR HOOPER:

23 Q Okay. For the gentleman with the map,
24 which year version of Tracy was this overlay done
25 on, do you know?

1 A That would have been on the available
2 USGS maps, so no, I don't know.

3 Q Maybe about 20 years old?

4 A They could be anywhere from five to 20
5 or more.

6 Q Yeah, the reason I ask is there's a lot
7 of development missing in this area.

8 A That wasn't meant to show all the
9 development, it was really meant to show all the
10 key features. We didn't put everything in the map
11 because it would have created a very busy map on
12 that scale, but we did want to put in some of the
13 major water features and major roads, and then
14 some of the other major features. But we didn't
15 use everything from the USGS map, either.

16 Q Sure. Okay, and there's no -- you've
17 testified that there is no significant effect from
18 the -- on air quality from the effluent of this
19 plant as a total?

20 A Yes.

21 Q I was wondering if you could help me
22 understand that. If there was no significant
23 addition to detriment of air quality, why do we
24 need air quality offsets for the plant?

25 A Offsets are required under the

1 California Clean Air Act, and the purpose of them
2 is to ensure that regardless of your
3 classification, in terms of the severity of an air
4 pollution problem, it allows for growth without
5 having a detrimental impact on the ambient air
6 quality. So it allows for new businesses to be
7 constructed without having over -- so that all
8 emissions over a certain threshold, there is no
9 net increase to what's going on within the air
10 basin.

11 Q Now, if this plant were producing oxygen
12 as an effluent, would there be a need for an
13 offset for that plant?

14 A No. Offsets are only required for five
15 specific pollutants, and oxygen is not one of
16 those.

17 Q Right.

18 INTERVENOR HOOPER: So you're good at
19 helping me with my questions there, Mr. Laurie --

20 WITNESS WALTERS: Actually, you know,
21 could I clarify my initial response?

22 INTERVENOR HOOPER: Sure.

23 WITNESS WALTERS: When I said it was not
24 significant? We consider not significant with the
25 mitigation that's being incorporated.

1 BY INTERVENOR HOOPER:

2 Q Without the mitigation it's significant.

3 A Without the mitigation it's potentially
4 significant, at least from a lawyer's perspective,
5 if not from a direct impact perspective.

6 Q Okay. So overall, it's not significant,
7 but it might be significant to the people living
8 wherever this effluent falls.

9 A No. What I'm saying is, is it with the
10 mitigation that we're incorporating both for
11 construction and for operation, including
12 additional ERCs above those required from the
13 District that is not considered significant. And,
14 therefore, any potential significant impact is
15 then mitigated.

16 Q The totality is not significant.

17 A The totality of the project plus the
18 project's mitigation is not significant.

19 WITNESS GREENBERG: And if I may respond
20 from a public health perspective, again, the
21 offsets are required by law based on the amount
22 that would be emitted from a facility. Public
23 health impacts are not necessarily, as I've
24 explained before, dependent on the amount, but
25 rather, what's the ground level concentration.

1 In this case, the ground level
2 concentration that you or I or anybody else would
3 have is so low that there is not an impact on
4 public health. The Air District doesn't take that
5 into account. They say we don't care what the
6 ground level concentration is, there's going to be
7 no risk to public health. You're emitting a
8 certain amount, you have to have an offset.

9 And Mr. Swaney will expand.

10 WITNESS SWANEY: I just wanted to
11 clarify one thing. When Mr. Greenberg stated that
12 we aren't concerned with what the ground level
13 impact is, only in regards to the amount of
14 offsets. We do do an analysis to determine what
15 the ground level impacts are also.

16 INTERVENOR HOOPER: You care about
17 what's in the air, you care about what's at the
18 ground --

19 WITNESS SWANEY: No, we also care about
20 what's on the ground.

21 INTERVENOR HOOPER: And what --

22 WITNESS SWANEY: Yes, everything.

23 WITNESS GREENBERG: We're trying to
24 answer your specific question of why the offsets.

25 INTERVENOR HOOPER: Right, right.

1 WITNESS GREENBERG: I certainly didn't
2 mean to imply that the Air District doesn't care
3 what's on the ground, but as far as the offsets
4 are concerned, that's not what they consider.

5 INTERVENOR HOOPER: Got it, all right.

6 BY INTERVENOR HOOPER:

7 Q And the more effluent, the more offsets
8 are needed?

9 A Correct.

10 Q Okay. My final question is you're
11 talking, several folks talked about using a model.
12 Is this a computer model, based on a program
13 that's run on a computer?

14 A Well, I think at least for the criteria
15 air pollutant analysis, we probably both used the
16 industrial source complex model, which is an EPA-
17 approved model for dispersion analysis. It is a
18 computer model where you identify the terrain for
19 all your receptors, you identify the sources, and
20 you provide hourly meteorological data, real data
21 that in this case was monitored about four miles
22 from the site.

23 Q Yeah, that I can imagine. Is there a
24 year of publication of this computer model?

25 A The model is constantly updated and

1 upgraded. The current version I think was --
2 Well, the version we used was upgraded in 2001,
3 and there has been another recent upgrade to the
4 model. It wouldn't impact our modeling results,
5 but it's a little tweak that was upgraded earlier
6 this year. So it's constantly improved.

7 INTERVENOR HOOPER: Okay, thank you.

8 INTERVENOR PINHEY: Nicholas Pinhey,
9 City of Tracy. I do have one brief question.

10 CROSS EXAMINATION

11 BY INTERVENOR PINHEY:

12 Q I note in the staff proposals, or, I
13 should say staff conditions for mitigation, there
14 is a condition for the continuous emission
15 monitoring on the plant. And my question is will
16 the data from the continuous emission monitoring
17 be available to the public?

18 A Bear with me, I'm trying to think of
19 exactly how the regulations will address that.

20 We will not require them to submit if
21 there's PM data to us, we will review it during
22 our routine inspections. So from that standpoint,
23 the data will not be part of the public record.
24 Any violations that we discover, the violation
25 would be part of the public record once the

1 violation is settled.

2 Q So the monitoring, in effect, would be a
3 self-monitoring?

4 A It's not completely a self-monitoring.
5 We have a -- We are instituting a CEM or
6 continuous emission monitoring polling program,
7 where periodically throughout the day basically
8 the computer running the continuous emissions
9 monitor has to send all of their data to our
10 agency. And we build into our receiving software
11 alarms, that if something looks out of place, that
12 triggers the inspector assigned to the area to
13 investigate to determine if a violation has taken
14 place.

15 INTERVENOR PINHEY: Thank you.

16 WITNESS WALTERS: I'm going to try to
17 answer the question from the CEC perspective, and
18 I believe that if you were to request the data
19 through the CEC, the CEC would ask to get copies
20 from the facility and would provide it. Since we
21 are subject to being able to review the data, we
22 would, I would assume, make it available through
23 the Freedom of Information Act, although I could
24 be wrong, I'm not a compliance manager on this.

25 But it is certainly under our purview,

1 as well as the district's, and I'm sure it's not
2 typically done but it might be.

3 APPLICANT COUNSEL GRATTAN: Madam
4 Hearing Officer, a point of clarification? This
5 is John Grattan.

6 I've talked to Mr. Wheeler from GWF and
7 he informs me that making -- the project owner/
8 operator is discussing with the City of Tracy at
9 the task force voluntarily, turning this data
10 over. That's certainly something applicant is
11 willing to discuss, willing to do as part of a
12 larger agreement.

13 INTERVENOR PINHEY: Thank you.

14 HEARING OFFICER TOMPKIN: Do we have
15 anything further for these witnesses? Ms. Willis?

16 STAFF COUNSEL WILLIS: Thank you. I
17 don't have any redirect, but I'd like to move our
18 documents into the record, and that would be the
19 air quality and public health sections of the
20 staff assessment --

21 APPLICANT COUNSEL GRATTAN: No
22 objection.

23 STAFF COUNSEL WILLIS: I haven't
24 finished.

25 APPLICANT COUNSEL GRATTAN: Oh, you

1 haven't finished.

2 STAFF COUNSEL WILLIS: I'll just repeat
3 my --

4 HEARING OFFICER TOMPKIN: Please.

5 STAFF COUNSEL WILLIS: We're going to
6 move the sections of the staff assessment and the
7 supplement to the staff assessment previously
8 marked Exhibit Four and 17, and those sections
9 would be the air quality and public health
10 sections. I'd also like to move the final
11 determination of compliance, the exhibit marked
12 Number 34, and the figures that were used as
13 visual aids, marked as Exhibit 35.

14 HEARING OFFICER TOMPKIN: Is there any
15 objection to admission of the testimony and
16 exhibits identified by counsel? Hearing no
17 objection, those exhibits will be admitted in
18 evidence.

19 (Thereupon, the above-referenced sections and
20 documents marked as Staff's Exhibits 34 & 35 for
21 identification, were received into evidence.)

22 HEARING OFFICER TOMPKIN: All right.

23 (Thereupon, the witnesses were
24 excused from the stand.)

25 HEARING OFFICER TOMPKIN: At this time

1 we'll move to the question of intervenor
2 testimony. Mr. Sarvey?

3 INTERVENOR SARVEY: Yeah. I wish to
4 present my witness, Mike Boyd.

5 APPLICANT COUNSEL GRATTAN: Applicant
6 respectfully objects to the admission of this
7 testimony.

8 INTERVENOR SARVEY: I knew you would,
9 Mr. Grattan.

10 STAFF COUNSEL WILLIS: Staff would also
11 object to this.

12 HEARING OFFICER TOMPKIN: All right.
13 We'll entertain argument. Well, first we'll
14 give --

15 INTERVENOR SARVEY: Okay. Well, we're
16 operating in good faith. My witness was listed on
17 the witness list. I've accepted the applicant's
18 late filing. I just accepted the staff's late
19 filing of those exhibits. I've gone in debt to
20 provide two professional witnesses. My other 16
21 witnesses have been disallowed.

22 If this witness is disallowed, I'll have
23 absolutely no witness and nothing to show for my
24 three and a half months' work. So if you say you
25 want public input, why am I not allowed one

1 witness? I allowed Mr. Grattan's claim that he
2 was going to provide some leniency in the
3 procedures here, and so far I haven't seen that he
4 granted any -- Nothing personal, Mr. Grattan.

5 But I would like to have my witness
6 presented.

7 HEARING OFFICER TOMPKIN: Mr. Grattan?

8 APPLICANT COUNSEL GRATTAN: A little bit
9 of history and chronology. My recollection is,
10 Mr. Sarvey, you intervened in November. On
11 January 18th was our first prehearing conference.
12 At that time my recollection, and I don't have a
13 transcript to wave, was that you, in requesting
14 that the schedule be extended, you stated that you
15 were requesting this because of the new
16 intervenors, many of which appeared on that night,
17 January 18th. You said, with respect to yourself,
18 well, I've had notice and I won't have any excuse.

19 I think staff and applicant agreed that
20 the time for filing testimony, first time for
21 filing testimony should be extended from
22 January 24th to January 31st. I believe that
23 later there was a hearing order and schedule, a
24 scheduling order from the committee which extended
25 the date for filing testimony from January 31st to

1 February 13th.

2 On March 5th, about three weeks after
3 the February 13th filing, Mr. Sarvey presented the
4 committee with testimony -- well, with an offer of
5 testimony from two witnesses. This testimony was
6 not accompanied by a declaration, nor was it
7 accompanied by resumes. It was actually close of
8 business on the 5th of March, giving applicant,
9 giving staff almost no time to review it.

10 You referenced my willingness to be a
11 little bit lenient. I thought that's what we did.
12 I thought that in trying to comment, irrespective
13 of whether your submission was admitted as
14 evidence, that our witnesses commenting on that
15 and giving you an opportunity further to cross
16 examine on those comments, I thought that actually
17 opened up the process.

18 But, in any event, you had ample
19 opportunity, again being an intervenor from
20 November, you had ample opportunity to submit
21 testimony on a timely basis. And, in fact, it
22 didn't happen and it happens to our prejudice and
23 to our surprise.

24 INTERVENOR SARVEY: Well, I --

25 HEARING OFFICER TOMPKIN: Okay. Let me

1 hear the response of staff.

2 STAFF COUNSEL WILLIS: Staff basically
3 concurs with the applicant's counsel. We do feel
4 that timeliness is a large issue in this case. We
5 did -- I mean, our staff assessment has been
6 available for review and comment since -- we had
7 to file it on December 31st, which was New Year's
8 Eve, so we worked through holidays to get our work
9 done.

10 We've also filed timely supplements and
11 have tried to provide comments based on the late
12 data requests that we've been receiving as well.
13 We've been trying to accommodate the schedule as
14 much as we can and to the extent practical.

15 My concern is that we received this, it
16 was not filed in my office even by e-mail before
17 5:00 p.m. on the 5th. I did receive it on the
18 6th, which was yesterday, and we were in hearings
19 the large part of yesterday and last night, and
20 have not had a chance to review the testimony.

21 And so, therefore, we would object. And
22 we do feel that all parties have had ample time to
23 submit testimony in this case.

24 INTERVENOR SARVEY: I would just like to
25 respond to a couple of assertions. First of all,

1 I did file a demand to correct or cure because the
2 notification on January 31st (sic) to file by
3 January 6th did not allow the required ten days
4 under public participation.

5 I filed a schedule motion, which Mr.
6 Grattan referred to, January 21st, 2002, that has
7 yet to have been answered. I filed another
8 schedule motion 2/7/02 which has yet to have been
9 answered. And I understand, of the volume of
10 submissions that has been in this particular case,
11 and I believe it's due to the expedited nature of
12 this case and the fact that the applicant does
13 have a contract with the Department of Water
14 Resources, which should not be the overriding
15 issue in this case.

16 And I wanted to remind everyone that
17 this is a 12-month schedule. We are currently in
18 the fifth or sixth month, and I have been
19 objecting to the speed of this since the
20 beginning. And I would like to submit these two
21 schedule requests to the record and my objection
22 that they have not been answered, as well as my
23 Bagley-Keene demand to correct or cure.

24 HEARING OFFICER TOMPKIN: Okay. Well,
25 aren't these -- I believe these have been

1 docketed, haven't they? Okay, well, we have them.
2 Well, I guess we'll re-docket them, and in
3 response to your statement that they haven't been
4 answered, they were docketed, they were considered
5 in determining the schedule.

6 So by issuing the schedule, we, in fact,
7 responded to your request, your scheduling
8 request. And that was handled in the same manner
9 as other requests that were filed by staff and
10 applicant. Those were considered in actually
11 formulating and issuing the schedule.

12 INTERVENOR SUNDBERG: Can I make a
13 statement here?

14 HEARING OFFICER TOMPKIN: No, actually
15 we're dealing with Mr. Sarvey's request at this
16 time. If you have a separate issue, we'll deal
17 with that next.

18 PRESIDING COMMISSIONER PERNELL: Could
19 we go off the record a minute?

20 (Thereupon, a recess was held
21 off the record.)

22 PRESIDING COMMISSIONER PERNELL: We are
23 back on the record. Ms. Tomkin.

24 HEARING OFFICER TOMPKIN: The committee
25 has considered the request by Mr. Sarvey to permit

1 the testimony of Mr. Boyd, and the committee has
2 reviewed Mr. Boyd's resume. And while we don't
3 feel that Mr. Boyd qualifies as an expert witness,
4 the committee is inclined to accept Mr. Sarvey's
5 offer to submit Mr. Boyd's testimony, written
6 testimony and to accept that testimony as the
7 testimony of a non-expert witness, thereby
8 overruling the objections of counsel, but
9 accepting it as non-expert testimony.

10 And if you would like to present that
11 document to be marked, Mr. Sarvey, we will accept
12 it at this time. Of course, if staff or applicant
13 wishes to cross examine, we would make -- have
14 Mr. Boyd be available for cross examination, if
15 it's desired.

16 PRESIDING COMMISSIONER PERNELL: Do we
17 have the testimony? Do we have the document?

18 INTERVENOR SARVEY: Yeah, we have the
19 written testimony.

20 INTERVENOR SUNDBERG: It's going to be
21 copied.

22 INTERVENOR SARVEY: We're getting a
23 clean copy of it right now. Mine was all marked
24 up. I didn't plan on presenting it, I planned on
25 reading my questions to my witness.

1 HEARING OFFICER TOMPKIN: While we're
2 waiting for Mr. Sarvey, Mr. Pinhey, were you
3 planning to offer any testimony on this issue?

4 INTERVENOR PINHEY: The City of Tracy
5 has provided direct written testimony which is on
6 file. At this point I'm not offering any
7 additional testimony beyond that.

8 PRESIDING COMMISSIONER PERNELL: Thank
9 you.

10 HEARING OFFICER TOMPKIN: All right.

11 COMMISSIONER LAURIE: Madam Hearing
12 Officer, we would have to take action on the
13 written testimony as being offered and whether or
14 not there's any objection, and, finally, admit it.

15 HEARING OFFICER TOMPKIN: Is there any
16 objection to the written testimony that was filed,
17 previously filed by the City of Tracy on this
18 issue, air quality and public health?

19 STAFF COUNSEL WILLIS: We have no
20 objection.

21 APPLICANT COUNSEL GRATTAN: No
22 objection.

23 HEARING OFFICER TOMPKIN: All right.
24 Then, the written testimony will be marked as
25 Exhibit 36 for identification and entered in

1 evidence.

2 (Thereupon, the above-referenced document was
3 marked as Staff's Exhibit 36 for
4 identification and received into evidence.)

5 HEARING OFFICER TOMPKIN: And, just a
6 point of clarification, was that the testimony of
7 Bill Reed and Nick Pinhey?

8 INTERVENOR PINHEY: That is correct.

9 HEARING OFFICER TOMPKIN: Thank you.
10 I'm accepting as Exhibit 37 non-expert
11 testimony of Mr. Boyd, and it's a document
12 entitled Written Testimony of Mike Boyd on
13 Compliance, General Conditions, Air Quality,
14 Public Health, Etc. And that will be marked as
15 Exhibit 37 for identification and admitted,
16 subject to the conditions previously noted.

17 (Thereupon, the above-referenced document was
18 marked as Staff's Exhibit 37 for
19 identification and received into evidence.)

20 STAFF COUNSEL WILLIS: Just a point, I
21 have a point of clarification. I have an exhibit
22 marked 22, direct testimony of Nick Pinhey. Is
23 that --

24 HEARING OFFICER TOMPKIN: That's a part
25 of the same document; is that correct?

1 INTERVENOR PINHEY: That's correct.

2 HEARING OFFICER TOMPKIN: All right.

3 Well, we'll note that for the record, but we'll
4 just basically resubmit it as part of Exhibit 36.

5 STAFF COUNSEL WILLIS: So I guess my
6 question is, is it marked Exhibit 22 or 36?

7 HEARING OFFICER TOMPKIN: Well,
8 Exhibit 22 is just the direct testimony of
9 Mr. Pinhey. Exhibit 36 is the direct testimony of
10 Mr. Pinhey and Mr. Reed, so it's the whole
11 document. Because they were submitted as one
12 document. I hope that answers your question.

13 STAFF COUNSEL WILLIS: I believe, then,
14 the same testimony is being marked as two
15 different exhibit numbers, I guess is my
16 confusion.

17 HEARING OFFICER TOMPKIN: It's
18 actually -- No, 22 is just Mr. Pinhey's testimony.
19 Exhibit 36 is Mr. Pinhey's testimony and
20 Mr. Reed's testimony. So his testimony is in two
21 documents, but they're actually bifurcated,
22 they're different documents.

23 STAFF COUNSEL WILLIS: We only received
24 one document, that's why I guess I'm confused.

25 HEARING OFFICER TOMPKIN: It is one

1 document. I pulled 22 out of 36 and made that a
2 separate document.

3 STAFF COUNSEL WILLIS: Okay.

4 HEARING OFFICER TOMPKIN: All right.

5 Did applicant or staff wish to cross examine
6 Mr. Boyd?

7 APPLICANT COUNSEL GRATTAN: In view of a
8 quick review of the unsworn, I guess, inexpert
9 testimony, and in view of the contents which are
10 largely opinion and questions, I might add,
11 passionate opinion and questions, we will waive
12 cross examination. We don't believe the document
13 has a terrible amount of probative value, and in
14 view of the lateness of the hour, I might add,
15 we'll waive cross examination.

16 HEARING OFFICER TOMPKIN: Staff?

17 STAFF COUNSEL WILLIS: Just one moment,
18 please.

19 APPLICANT COUNSEL GRATTAN: I also -- I
20 was sort of mid-sentence -- also in view, we did
21 have an opportunity to vet that document in our
22 direct testimony and we feel that we have
23 addressed all the issues raised in it.

24 HEARING OFFICER TOMPKIN: Thank you,
25 Mr. Grattan.

1 STAFF COUNSEL WILLIS: Thank you. Staff
2 also would consider this document a lay opinion
3 and not testimony based on any expert witness or
4 witness that has participated in these
5 proceedings.

6 The Air District has told me that they
7 will be responding in writing to many of the
8 assertions that have been made against them in
9 this document, which, as I stated previously, we
10 have not had adequate time to review.

11 So, based on the lack of timing and our
12 feeling that this is an opinion rather than
13 factual testimony, we will also waive our cross
14 examination.

15 HEARING OFFICER TOMPKIN: All right,
16 thank you.

17 I think, then, that we are done with air
18 quality and public health. And we will close the
19 record --

20 INTERVENOR SUNDBERG: I don't think so.

21 HEARING OFFICER TOMPKIN: No?

22 INTERVENOR SUNDBERG: No.

23 HEARING OFFICER TOMPKIN: Oh, did I miss
24 someone?

25 INTERVENOR SUNDBERG: No. Aguirre here

1 for a Dario Marengo was actually, one, a part of
2 my testimony.

3 HEARING OFFICER TOMPKIN: Do you have
4 Mr. Marengo available?

5 INTERVENOR SUNDBERG: And Mr. Marengo is
6 not available tonight, but I would like to have
7 his written testimony put into the record. It's
8 already been docketed.

9 HEARING OFFICER TOMPKIN: Do you have a
10 copy?

11 INTERVENOR SUNDBERG: Yeah.

12 INTERVENOR SARVEY: Am I allowed to
13 comment on this?

14 HEARING OFFICER TOMPKIN: Actually,
15 we're dealing with Ms. Sundberg's document at this
16 time.

17 INTERVENOR SARVEY: Okay. I'll wait for
18 public participation, thank you.

19 HEARING OFFICER TOMPKIN: Thank you.

20 Have staff and applicant had an
21 opportunity to see this document? I do recognize
22 it now that I see it.

23 APPLICANT COUNSEL GRATTAN: Yes,
24 applicant has.

25 HEARING OFFICER TOMPKIN: And is there

1 any objection to this document?

2 STAFF COUNSEL WILLIS: The only
3 objection I have is that it doesn't appear to be
4 testimony, but just merely a paragraph summary
5 and, once again, it's more comment. So I would
6 object to it being included as expert testimony --
7 Well, actually, any testimony. It should be
8 considered public comment, in our opinion.

9 APPLICANT COUNSEL GRATTAN: I share that
10 view.

11 HEARING OFFICER TOMPKIN: Off the record.
12 (Thereupon, a recess was held
13 off the record.)

14 HEARING OFFICER TOMPKIN: We're back on
15 the record. The committee has considered the
16 request for admission of the prepared testimony of
17 Dario Marengo. We note the objections of both
18 staff and applicant, but we are going to mark this
19 testimony as Exhibit 38, and admit it under the
20 same conditions as Mr. Boyd's testimony. It is
21 considered non-expert testimony, but it will be
22 admitted as testimony.

23 (Thereupon, the above-referenced document was
24 marked as Staff's Exhibit 38 for
25 identification and received into evidence.)

1 INTERVENOR SUNDBERG: Thank you.

2 HEARING OFFICER TOMPKIN: All right. Is
3 there anything further on air quality or public
4 health? Seeing nothing, those portions of the
5 record will be closed.

6 PRESIDING COMMISSIONER PERNELL: Okay.
7 We will now begin public comment. I would ask you
8 to please be brief. If there's something that has
9 already been said or said before in these
10 proceedings, we would appreciate not to have
11 redundancy.

12 The first person is Supervisor Bedford.
13 Mr. Bedford is a supervisor of the San Joaquin
14 County Supervisorial District Five.

15 SUPERVISOR BEDFORD: Thank you very
16 much, Mr. Pernell.

17 You brought up a real important question
18 today and that was does the San Joaquin County
19 have any representatives on a task force, on
20 behalf of San Joaquin County, and we don't. And I
21 can explain why we don't.

22 Previous to the San Joaquin County going
23 on record opposing GWF, I sat silently in the
24 audience for several months. I never said a word
25 because I wanted to give the proponents an

1 opportunity to explain their plant and how it was
2 going to affect the people in San Joaquin County.
3 And I felt like if I said something, it might be
4 an injustice to the proponents.

5 Looking back on that, I regret it.
6 Because I didn't realize at the time that San
7 Joaquin County has a very insignificant role in
8 the decision of the siting of this power plant.
9 I'd always thought that the power plant was going
10 to be sited and inspected and approved by members
11 of the staff in Environmental Health, Office of
12 Emergency Service, our security, law enforcement.
13 But I find out now, that's not the case.

14 They have a very simple criteria when it
15 comes to San Joaquin County: It's a finding of
16 facts. I've been kind of left out of the process.
17 When I found out that it was the 11th hour and I
18 was left out of the process, I initiated that
19 resolution that I submitted last night.

20 Now, my question is this: Is that
21 resolution and the City of Tracy's resolution,
22 does it have any significant value to the
23 California Energy Commission, or is all my time in
24 this audience in vain? And again, I wanted to
25 ask, is it too late for the San Joaquin County to

1 have an appointed task force of our officials,
2 people that are knowledgeable?

3 You know, God bless Mr. Sarvey. Without
4 him, I don't know where these people would be here
5 tonight. He's a shoe cobbler and a good man.
6 But, you know, he's up against a stacked deck,
7 folks. I mean, it's insurmountable. I don't even
8 know if any one of these experts could do as good
9 a job tonight as Mr. Sarvey did.

10 But my question tonight is, to you, is
11 our resolution meaningful? Will it be considered
12 before you leave the City of Tracy and take this
13 to Sacramento for people that we don't even know,
14 people that aren't responsible to the San Joaquin
15 County? These people are responsible. They're
16 trying to do a good job. If you could give me an
17 answer to that question, then I just have one more
18 question and then I'll get out of here.

19 PRESIDING COMMISSIONER PERNELL: Well,
20 the answer is yes. We consider all of the
21 testimony, including public comment. All of that
22 is part of the record. That's why we have a
23 reporter here. So all of that is considered.

24 SUPERVISOR BEDFORD: Thank you.

25 PRESIDING COMMISSIONER PERNELL: All of

1 the information that we receive is considered,
2 yes.

3 SUPERVISOR BEDFORD: Thank you, yes.
4 And about the task force, is it -- under whose
5 authority would appoint a task force? Is this the
6 authority of the City of Tracy, the CEC, your
7 staff? I know that the property that the plant is
8 located on is in the south county. You would
9 think the Board of Supervisors would have the
10 authority or the responsibility to do something at
11 this time, even though it's at the 11th hour. The
12 11th hour has never meant anything to me because,
13 as you all know, even the gates of heaven are open
14 to you at the 11th hour. Forget about these
15 little things we think are so important tonight.

16 And that's my second question is, is it
17 too late for the county to appoint a task force of
18 people that have the questions to this staff and
19 to the CEC?

20 PRESIDING COMMISSIONER PERNELL: The
21 task force is not under the CEC's jurisdiction.
22 That was a -- my understanding, and you might want
23 to talk to the City of Tracy or the applicant, but
24 my understanding is that was a task force put
25 together by neutral agreement with the applicant

1 and the City of Tracy.

2 This committee has no jurisdiction over
3 any task force or neutral agreement between the
4 applicant and any other party.

5 SUPERVISOR BEDFORD: Well, as you
6 notice, that resolution we passed is very vague.
7 It addresses concerns of the residents in the City
8 of Tracy, and in the southern valley of the San
9 Joaquin Valley. It's not pinpointed on any one
10 issue. It's on several issues.

11 And most of those issues have been asked
12 here tonight. A lot of them haven't been
13 answered. I don't know through the process, do
14 they go to Sacramento and then answer those
15 questions at that point? Or do you stay here
16 until these things are resolved?

17 PRESIDING COMMISSIONER PERNELL: We made
18 every attempt to come to Tracy to bring these
19 meetings to the community, and the final decision
20 will be in Sacramento with the five commissioners.
21 But we're not there yet. There are still
22 technical areas we have to deal with. We'll be
23 here tomorrow morning at 10:00 o'clock and we'll
24 stay here all day until we cover some of these
25 areas.

1 But, as you can see with the late hour,
2 this is not anything we're trying to rush.

3 SUPERVISOR BEDFORD: Yes.

4 PRESIDING COMMISSIONER PERNELL: We only
5 covered two issues, two of the technical areas
6 tonight. But my basic comment is the final
7 decision, we will make a recommendation to the
8 full Commission. That decision will be in
9 Sacramento, but we are making every effort to
10 bring these meetings to the community and there is
11 nothing in our rules and regulations that say we
12 have to do that.

13 SUPERVISOR BEDFORD: Well, I made a
14 commitment to the people of the City of Tracy and
15 San Joaquin County to attend all of these
16 meetings. I would appreciate that I would get,
17 either by registered mail, a notice of all of the
18 meetings. I've got to tell you, folks, if I
19 didn't read the paper, I wouldn't even know this
20 meeting was going on tonight, and I'm on the Board
21 of Supervisors. That might just tell you
22 something.

23 And, with that, God bless you and thank
24 you very much.

25 PRESIDING COMMISSIONER PERNELL: Thank

1 you. Would you please make sure the Public
2 Adviser has your name and address and you will get
3 notice.

4 SUPERVISOR BEDFORD: Thank you.

5 (Applause.)

6 HEARING OFFICER TOMPKIN: Brad
7 Williamson?

8 PRESIDING COMMISSIONER PERNELL: One
9 moment.

10 MR. WHEELER: Can I just make one
11 comment in response to the supervisor's question
12 regarding the task force? I think, from the
13 applicant's perspective, we would very much like
14 to have either the supervisor or his designate
15 participate in that task force.

16 The task force was set up by the City of
17 Tracy. Mr. Pinhey may have a comment on that, but
18 from applicant's perspective, we would very much
19 like the county to participate in that group, and
20 I don't think it's too late. We've only had one
21 meeting.

22 PRESIDING COMMISSIONER PERNELL: Perhaps
23 you all can talk about that tonight off record.

24 MR. WHEELER: Thank you.

25 HEARING OFFICER TOMPKIN: Brad

1 Williamson?

2 MR. WILLIAMSON: Good morning.

3 (Laughter.)

4 MR. WILLIAMSON: My name is Brad
5 Williamson. I'm a business representative for the
6 International Brotherhood of Electrical Workers,
7 Local 595, and I'm here representing over 150
8 contractors and 5,000 electricians in the Greater
9 Bay Area. I'd like to speak this morning on air
10 quality issues. Instead of looking at the
11 consequences of building the Tracy peaker plant, I
12 will address what might happen if the plant is not
13 built.

14 As you know, the Tri-Valley and San
15 Joaquin Valley are growing, due to expanding
16 population pressures. This expansion includes
17 housing, commercial and industrial projects.
18 Reliable energy is paramount in importance. If
19 the infrastructure does not grow along with the
20 demand shortages occur, as we saw last year.

21 Peaker plants are designed to go on line
22 only as needed. If the demand is there, but there
23 is not enough backup power in the distribution
24 system, then outages occur. What happens when
25 these outages occur? Some homes and businesses

1 lose power until the outage is over.

2 Some users have installed their own
3 backup generators. Many of these generators are
4 diesel. In the last two years, approximately 50
5 new diesel generators of various sizes have been
6 installed in the Livermore and Pleasanton area
7 alone. It is estimated that over 2,000 diesel
8 generators are in the Bay Area at present. No
9 hard figures are available on the number and size
10 of these generators, because there are very few
11 permit requirements.

12 These are private generators, and, as
13 such, their maintenance is unregulated. There are
14 no smog checks for backup generators. Diesel
15 backup generators are the highest-polluting source
16 of electricity in this state. The California Air
17 Resources Board has determined that the exhaust
18 from diesel engines contributes approximately 70
19 percent of the estimated cancer risk from toxic
20 air.

21 In addition, many peak days occur during
22 the summer months when ozone concentrations are
23 often at their highest. The use of diesel backup
24 generators can significantly impact the health of
25 people already at risk, such as those with asthma

1 and the elderly.

2 The impact on air quality between diesel
3 generators and gas-fired turbines is significant.
4 According to the Air Resources Board, two
5 pollutants are of most concern: oxides of
6 nitrogen and particulate matter. Existing backup
7 diesel generators produce 20 to 30 pounds of NOx
8 per megawatt hour, compared to 0.1 to 0.8 pounds
9 of NOx per megawatt hour for new natural gas
10 peaking turbines.

11 The difference in particulate matter is
12 also significant: one to three pounds per
13 megawatt hour for existing diesel generators, and
14 only 0.03 to 0.07 pounds per megawatt hour for new
15 gas-fired turbines.

16 Another comparison is that a one-
17 megawatt diesel generator releases approximately
18 the same NOx emissions as a 600-megawatt modern
19 natural gas-fired power plant: Just one one-
20 megawatt generator is 600 times more toxic.

21 The air from the Tri-Valley flows
22 through the Altamont Pass, straight into the San
23 Joaquin Valley, right into Tracy. When these
24 diesel generators fire up, the emissions go
25 straight to Tracy.

1 Two facilities with large backup diesel
2 generators in the Tracy area are the Tracy
3 Community Hospital and Safeway. According to a
4 recent report by the Electricity Oversight Board
5 and the Public Utilities Commission, one diesel
6 unit operating for 200 hours will cause 100 new
7 cancer cases per million people. To wait for
8 other projects to be built instead would take
9 years, and during this time backup diesel
10 generators will continue to pollute our air.

11 It makes no sense to stick our heads in
12 the sand and say we have plenty of power now, so
13 we don't need this project. This area is growing
14 and needs new businesses to move here. Without
15 clean reliable power, this will not be possible.
16 We need to plan for our future, not just provide
17 for the present. Thank you very much.

18 PRESIDING COMMISSIONER PERNELL: Thank
19 you.

20 HEARING OFFICER TOMPKIN: Lex Serpa?
21 James Miner?

22 MR. MINER: Good evening, everyone. My
23 name is James Miner. I'm here on behalf of Tracy
24 Residents for a Healthy Community.

25 I have a document I would like to submit

1 as public testimony. It is a report from the
2 Journal of the American Medical Association
3 published yesterday. It addresses the
4 relationship between an increase in particulate
5 matter pollutants and cancer and other
6 cardiovascular diseases.

7 Am I allowed to submit this?

8 HEARING OFFICER TOMPKIN: You can
9 provide it to me, and we will docket that as
10 public comment.

11 MR. MINER: Great, thank you.

12 I think after that document is
13 reviewed -- It is actually the entire article as
14 published by the Journal of the American Medical
15 Association -- indicates that as particulate
16 matter goes up, talking directly to what the
17 doctor was earlier speaking about public health,
18 as particulate matter goes up in concentration,
19 there is a direct correlation to increased risks
20 for various diseases.

21 Now, as the doctor pointed out earlier,
22 in this case the applicant and the expert
23 testimony is indicating that that risk is minimal.
24 As a layperson, I'm a little bit confused between
25 the relationship with regard to the fact that we

1 are already in a non-compliance state, to the
2 notion that we are not increasing our risk because
3 of mitigation which is occurring somewhere else.

4 So I would just like to state for the
5 record that, once again, as an organization, we
6 reject the notion of mitigation as a solution
7 towards preventing disease and injury to the
8 people of this town, and the people downwind.
9 Thank you very much.

10 PRESIDING COMMISSIONER PERNELL: Thank
11 you.

12 COMMISSIONER LAURIE: Madam Hearing
13 Officer, how do the parties get a copy of the
14 docketed material?

15 HEARING OFFICER TOMPKIN: I believe you
16 can contact the Public Adviser and they will be
17 made available.

18 COMMISSIONER LAURIE: No, I'm sorry, I
19 mean the applicant and the staff.

20 HEARING OFFICER TOMPKIN: Oh, okay.
21 We'll make a copy available.

22 COMMISSIONER LAURIE: Okay.

23 APPLICANT COUNSEL GRATTAN: Yeah, we
24 have a copy. Thank you.

25 HEARING OFFICER TOMPKIN: Okay. Susan

1 Sarvey?

2 MS. SARVEY: It was my understanding,
3 during all this air talk, that the cumulative
4 studies did not ever discuss violations, and I
5 totally do not accept the cumulative studies,
6 because one of the stationary facilities that was
7 cited was the Owens Brockway Glass plant, and they
8 have a chronic ongoing violation problem with, A,
9 not informing the Air Quality Control Board that
10 they've turned off their monitor and they're in
11 violation -- every single time they do this.

12 On 8/16 they failed to notify the Air
13 Quality Control Board that they'd turned off their
14 monitor, and they were in violation for a month
15 before they got caught when they came out for
16 their one-month log to be checked. On 9/11
17 through 9/17 --

18 PRESIDING COMMISSIONER PERNELL: I'm
19 sorry, is --

20 MS. SARVEY: No, I'm going to --

21 PRESIDING COMMISSIONER PERNELL: Does
22 that pertain to --

23 MS. SARVEY: Yes, it's going to pertain
24 to this.

25 PRESIDING COMMISSIONER PERNELL: -- this

1 plant?

2 MS. SARVEY: Yes, it's right next door
3 to it. 9/11 to 9/17, they were in violation eight
4 times, and they didn't inform the Air Quality
5 Control Board. 9/23, they failed to report again,
6 and it was for several days.

7 This is a short period of time, 8/16 to
8 9/23 of last year. They did not study this. I
9 have 15 more of these in my binder from the Air
10 Quality Control Board. I'd give them to you, but
11 I paid 35 bucks to get these, okay, so I'm not
12 sharing them. But I'll let you look at them.

13 These are pretty serious violations.
14 They're right next door to the peaker plant, right
15 next door. And they didn't take this into
16 consideration? This is an ongoing problem: every
17 two weeks these guys are turning off their monitor
18 and they're violating, sometimes for a month at a
19 stretch. So we did not have a true cumulative air
20 quality study.

21 I understand that cars emit more
22 pollution than power plants, and if I am to
23 believe them, we should quit having you have these
24 hearings for power plants and we should just put
25 one in every city. Let's put one in Berkeley, El

1 Cerrito, San Francisco, everybody will welcome
2 them in, because they don't pollute.

3 You guys should be regulating all of us
4 driving our cars because we're the problem. But
5 we both know there is no political official right
6 now who is going to regulate all these people
7 driving their cars.

8 So I can't control the car emissions
9 that are making PM10 and ozone. I'm in a
10 sanctioned valley. My only resource to
11 controlling my air quality is to try to prevent
12 stationary sources from taking me above my levels
13 when I'm already sanctioned. They may not be as
14 bad as the cars, but I can't control the cars.
15 You guys aren't willing to regulate the cars.
16 Nobody is.

17 So all we can do is the stationary
18 sources that are pushing us over the top, and it's
19 not their fault because we're all driving, I agree
20 with that -- It doesn't change. We have to draw
21 the line somewhere. We're sanctioned, we've got
22 to draw the line, we've got to do something to
23 make this air quality better.

24 Now, there was a lot of discussion from
25 the doctor about how this doesn't affect asthma,

1 and I have a couple of comments on that. I have
2 four asthmatic kids. My doctors have told me that
3 PM2.5 is worse for my kids than PM10. My kids can
4 cough out of their lungs PM10. My kids cannot
5 cough out of their lung PM2.5.

6 My doctor has told me that he has not
7 been able -- there is not proof out there
8 conclusively that PM10 and PM2.5 cause my children's
9 asthma to be exacerbated, but there is concern
10 that it is causing interstitial lung disease. My
11 mom is right now dying of interstitial lung
12 disease due to particulate matter, according to
13 her doctor, from where she lives in Berkeley. So
14 I have a deep concern with these PM10 and PM2.5
15 levels.

16 So, since you can't regulate the cars,
17 we've got to regulate the stationary guys. I'm
18 not saying you're the bad guy, I'm saying I'm in a
19 sanctioned area and I can't take any more. And I
20 don't know how to make people quit driving their
21 car and give up their SUV. I've got a big car,
22 I'm driving a smaller car. I'm trying to get an
23 electric car, I put in solar.

24 I agree with everything this gentleman
25 said about diesel generators, he's right. We live

1 in the optimum area here in Tracy for everybody to
2 have solar. I put in solar, my meter is going
3 backwards.

4 We have great wind here. It drives us
5 all crazy, our trees all lean to the east. Put in
6 a windmill. We have them all over the Pass, they
7 won't make my kids sick, they won't make you sick.
8 This isn't just about my kids being sick, this is
9 about you all getting sick.

10 And none of you care until it's you who
11 can't draw a breath. But the day you wake up and
12 you can't draw a breath, you're going to discover
13 it's the scariest thing that's ever happened in
14 your entire life. You want to get a feel of it?
15 Just try drowning. Same thing. That's what it
16 feels like.

17 So I'm sorry that we're under sanctions,
18 but obviously we are under sanctions because there
19 were air experts out there somewhere, further
20 back, who were doing the same thing these guys are
21 doing today. Oh, it's not that bad, it blows 50
22 miles away, it dissipates, it will be here, it
23 goes away, it doesn't happen. Well, obviously, it
24 happened. We're in sanctions.

25 And I don't believe -- I believe that 75

1 percent of our problem is, yes, probably cars,
2 diesel trucks and all of that. But it's also that
3 nobody is willing to draw the line. And the line
4 needs to be drawn now, before it's your kid, not
5 just my kid that can't breathe. Thank you.

6 PRESIDING COMMISSIONER PERNELL: Thank
7 you.

8 (Applause.)

9 HEARING OFFICER TOMPKIN: Annette
10 Elissagaray, and could you spell your name,
11 please?

12 MS. ELISSAGARAY: Annette Elissagaray,
13 E-l-i-s-s-a-g-a-r-a-y.

14 I'm a concerned citizen and a proud
15 property owner. During this evening's
16 proceedings, Mr. Grattan has been rude and
17 condescending towards the intervenors. He is a
18 paid professional. Unfortunately, he has not been
19 highly polished this evening.

20 We, the citizens, on the other hand, are
21 here to protect our properties, our homes and
22 their values, and our way of life. Our public
23 officials have spoken, and yet you continue to try
24 and force your way into our community. Thank you.

25 PRESIDING COMMISSIONER PERNELL: Thank

1 you.

2 (Applause.)

3 PRESIDING COMMISSIONER PERNELL: That
4 concludes our public testimony. We will be here
5 tomorrow at 10:00 a.m. --

6 UNIDENTIFIED SPEAKER: Today.

7 PRESIDING COMMISSIONER PERNELL: --
8 today --

9 UNIDENTIFIED FEMALE SPEAKER: Today,
10 look at your watch.

11 (Laughter.)

12 PRESIDING COMMISSIONER PERNELL: We will
13 be here today at 10:00 a.m. to continue going down
14 the list of the technical areas, so I would just
15 ask that those who have witnesses and those who
16 are concerned about this proceeding, we will start
17 at 10:00 a.m. today exactly.

18 And if there is nothing else to come
19 before the committee, this meeting is adjourned.
20 Thank you all for coming.

21 (Thereupon, the hearing was
22 adjourned at 12:31 a.m.)

23 --oOo--

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 public 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 workshop.

IN WITNESS WHEREOF, I have hereunto set my hand this 20th day of March, 2002.

VALORIE PHILLIPS

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