EVIDENTIARY HEARING
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of: )
the Los Esteros Critical Energy ) 03-AFC-02
Facility 2, Phase 1 )
______________________________)

CALIFORNIA ENERGY COMMISSION
HEARING ROOM A
1516 NINTH STREET
SACRAMENTO, CALIFORNIA

MONDAY, DECEMBER 6, 2004
10:09 a.m.

Reported by:
Peter Petty
Contract No. 170-04-001

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345
COMMITTEE MEMBERS PRESENT
William J. Keese, Chairman, Presiding Member
Jackalyne Pfannenstiel, Commissioner

HEARING OFFICER, ADVISORS PRESENT
Ed Bouillon, Hearing Officer
Scott Tomashefsky, Advisor to Chairman Keese
Timothy Tutt, Advisor to Commissioner Pfannenstiel

STAFF AND CONSULTANTS PRESENT
Robert Worl, Project Manager
Dick Ratliff, Senior Staff Counsel
Steve Baker
Gabriel Taylor

PUBLIC ADVISER
J. Mike Monasmith

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PROCEEDINGS

10:09 a.m.

PRESIDING MEMBER KEESE: Good morning and welcome to this evidentiary hearing on the Los Esteros Critical Energy Facility 2, Phase 1.

I'm Bill Keese, Chair of this Committee. And on my left is my Advisor, Scott Tomashefsky. Commissioner Pfannenstiel is Second on this case; and on the far right, her Advisor, Tim Tutt.

Mr. Ed Bouillon will be conducting this hearing as our Hearing Officer. Mr. Bouillon, do you want to take over?

HEARING OFFICER BOUILLON: Thank you, Mr. Chairman. This is a duly noticed hearing on docket number 03-AFC-2 for the Los Esteros Critical Energy Facility 2, Phase 1. The possible recertification of the existing power plant.

This notice was duly filed with the Commission on November 23, 2004. I note that the parties are all present with the exception of CURE I don't see. But they have, I believe, elected not to participate in this evidentiary hearing.

I would like to request now that we go around the table, starting with the applicant. And if one person from each party would introduce
himself and those with him, and then we'll go
good through the staff and CARE.

MR. TETZLOFF: I'm Rick Tetzloff,
Project Manager for Calpine. And along with me is
Chris Ellison, counsel; and behind me is Gary
Rubenstein and Steve DeYoung.

HEARING OFFICER BOUILLON: Mr. Ratliff.

MR. RATLIFF: Dick Ratliff, counsel for
staff. And with me is Bob Worl, the Project
Manager. We have with us also today Steve Baker,
who is a witness on energy efficiency; and we have
also Gabriel Taylor, who is in the air quality
office.

HEARING OFFICER BOUILLON: Mr. Sarvey.

MR. SARVEY: Bob Sarvey representing
CARE.

HEARING OFFICER BOUILLON: Well, let's
begin, and I would suggest that we begin with the
applicant. Mr. Tetzloff, is he prepared?

MR. TETZLOFF: Yes, I'm here.

HEARING OFFICER BOUILLON: Okay, are you
going to provide a general overview, could you
give us a few minutes on that?

MR. ELLISON: Actually, Mr. Bouillon,

let me just mention a couple housekeeping matters,
if I may.

HEARING OFFICER BOUILLON: Okay.

MR. ELLISON: The first is that I spoke just a few moments ago with Mr. Ratliff and Mr. Sarvey. And we have all agreed that we will stipulate to the admission of the staff's testimony, as well as Calpine's testimony. So I would propose that with that stipulation, which you can confirm with the other parties, that we can skip all the foundational questions on direct, and proceed directly to the substance.

And then secondly what we would propose to do is to put our three witnesses up as a panel because there is a certain amount of cross-over overlap between the three issues that CARE has raised in the proceeding. And allow cross-examination of all three witnesses as a panel, the three witnesses being air quality, efficiency and environmental justice.

So those are the two housekeeping matters.

HEARING OFFICER BOUILLON: Mr. Sarvey, do you find that agreeable?

MR. SARVEY: Yeah, I think it would expediate the hearing, so I think it's a good
idea.

HEARING OFFICER BOUILLON: I'm sorry, I've got a little bit of a cold --

MR. SARVEY: I believe it would expedite the hearing, so I believe it's a good idea, yes, I agree to it.

HEARING OFFICER BOUILLON: Well, maybe we should take a step backwards then and first introduce the testimony that the parties have agreed can come in by stipulation subject to the right of cross-examination. Would you want to put those documents on the record.

MR. ELLISON: Certainly. The Calpine testimony is that testimony that was dated November 23, 2004, and is titled, testimony for the application for certification for the Los Esteros Critical Energy Facility, with the docket number.

And consists of -- the pages are not necessarily sequentially numbered, but roughly 40 pages of testimony, including affidavits and r,s,um,s of witnesses.

The testimony also includes in each subject area other documents that are incorporated by reference and that are identified specifically
in the 40 pages of testimony that I just referred to. And that generally is the respective sections of the application for certification and certain responses to data requests.

So what we propose be admitted pursuant to the stipulation is the testimony filed November 23, 2004, and all of the documents incorporated by reference therein.

HEARING OFFICER BOUILLON: Mr. Ratliff, do you agree with that?

MR. RATLIFF: Yes.

HEARING OFFICER BOUILLON: Mr. Sarvey?

MR. SARVEY: I just have one matter. Our petition for intervention requested that I be placed on the proof of service list. So to date I have not received an AFC, although I understand from Mr. Boyd, he has. And it's quite a voluminous document so it's almost impossible for me to download.

So I'm a little bit handicapped in that respect, but I do accept the testimony. And also I wanted to let the Committee know that this is my first look at the testimony from the applicant here, as I did not receive a hard copy of this testimony, either.
HEARING OFFICER BOUILLON: You received that this morning?

MR. SARVEY: Yes, just now.

HEARING OFFICER BOUILLON: And with regard to the AFC, you should have been provided with a copy.

MR. SARVEY: I wasn't. Apparently -- I looked at the proof of service list this morning. I'm not on it, even though the petition for hardship specifically asked that I be placed on it.

HEARING OFFICER BOUILLON: Okay. For today, you can have mine.

MR. SARVEY: Okay.

HEARING OFFICER BOUILLON: And I realize that --

MR. WORL: Commissioner, if I may --

HEARING OFFICER BOUILLON: Just one second. I realize that Mr. Sarvey is at somewhat of a disadvantage in that his petition to intervene was granted only a few days ago, and he has had insufficient time to prepare. But I do note that in his petition to intervene, and in subsequent communications, they have indicated that they were prepared to proceed and take the
case as they found it. And we are prepared to proceed on that basis this morning.

Now, Mr. Worl.

MR. WORL: Yes. We did, even though CARE had not appeared yet on the proof of service list, we did, on the basis of the last meeting, send them an AFC. But we sent the CD of the AFC. We didn't have a hard copy to send at that time. And it went to CARE, and the address of record is Mr. Boyd. So I just wanted to, for the record, say that we did, in fact, respond to the Committee's direction.

HEARING OFFICER BOUILLON: Mr. Sarvey, let me ask you this. I don't recall the order granting the petition at this time. Normally proof of service would list Mr. Boyd at the organization's headquarters. You live in, I believe, Tracy, is that correct?

MR. SARVEY: Tracy, that's correct.

HEARING OFFICER BOUILLON: And is it your desire to also be placed on the proof of service, if you are not already?

MR. SARVEY: Absolutely, yes. I'm not on it officially, and I don't intend to delay the proceedings here. I just wanted to note for the
record that I was a little bit disadvantaged, and
this will help, thank you.

HEARING OFFICER BOUILLON: All right.
I'd note I've just found the motion to intervene.
And I note that you have requested to be placed on
the proof of service. And if you have not been I
will see that you are --

MR. SARVEY: Thank you.

HEARING OFFICER BOUILLON: -- this
afternoon.

MR. ELLISON: Mr. Bouillon, if I could
just make one brief comment to this colloquy. To
the extent that there is any disadvantage to CARE
that's been referred to, it is certainly our view
that it is entirely the result of CARE's own delay
in filing their petition for intervention.

We have no objection to placing Mr.
Sarvey on the service list. Mr. Boyd has already
been on the service list. And all of Calpine's
documents, and we believe all of the staff
documents, have been served in accordance with all
of the orders regarding the service list.

So the only reason that Mr. Sarvey
hasn't been served is that their petition asking
that he be placed on the service list has only
come in very recently, and after the filing of all the documents that we've been referring to.

HEARING OFFICER BOUILLON: All right, let us proceed. Have you premarked -- you have not assigned any exhibit numbers?

MR. ELLISON: We have not.

HEARING OFFICER BOUILLON: The testimony for application for certification described by Mr. Ellison we will mark applicant's exhibit 1.

The documents referred to therein will be incorporated into that exhibit by name and not given any other exhibits, other than incorporating them. In the decision we will have to use names for them.

MR. ELLISON: Actually, if I could make a suggestion, I would suggest that the main document that's incorporated by reference is the AFC. Because of the potential for there being duplicate page numbers as between the testimony and the AFC, I would suggest that we separately number the AFC as exhibit 2.

HEARING OFFICER BOUILLON: I think that's an appropriate suggestion. The AFC will be exhibit 2.

MR. ELLISON: Okay, and with that I
would, pursuant to the stipulation, move the admission of exhibits 1, including all documents incorporated by reference therein, which includes exhibit 2.

So both exhibit 1, exhibit 2, and any other incorporated documents, I would move the admission.

HEARING OFFICER BOUILLON: Any objection?

MR. SARVEY: No objection.

MR. RATLIFF: No.

HEARING OFFICER BOUILLON: There being no objection, they are admitted.

Mr. Ratliff, do you have any documents to submit by stipulation?

MR. RATLIFF: The staff would submit two documents, one of which is the final staff assessment, which --

HEARING OFFICER BOUILLON: What has been referred to as the staff report?

MR. RATLIFF: Yes, well, that is right, that is what it is. But it also is titled the final staff assessment at the top of the document, at least. And I believe the date on that is November 15th.
And we have a second document which is a November 23rd errata for the very minor change to one condition of certification in the cultural resources section.

HEARING OFFICER BOUILLON: Errata for staff testimony, cultural resources?

MR. RATLIFF: Yes.

HEARING OFFICER BOUILLON: Mr. Sarvey, have you been provided with both of those documents?

MR. SARVEY: Yes, I have.

HEARING OFFICER BOUILLON: The final staff assessment we will mark as exhibit 3. And the errata for staff testimony on cultural resources dated November 23, 2004, will be exhibit 4.

Anything else, Mr. Ratliff?

MR. RATLIFF: No.

HEARING OFFICER BOUILLON: Mr. Sarvey, I understand you have no testimony -- no evidence to offer, as such?

MR. SARVEY: I have no witnesses and no exhibits at this time. Perhaps through cross-examination I may present some that the parties are already in possession of. But other than
HEARING OFFICER BOUILLON: Any objection to accepting exhibits 3 and 4 into evidence?

MR. ELLISON: No objection.

MR. SARVEY: No objection.

HEARING OFFICER BOUILLON: They will be admitted.

All right, we can turn to the matter then of the panel of witnesses for the applicant to be cross-examined by Mr. Sarvey first, and by Mr. Ratliff, should he care to do so.

MR. ELLISON: Thank you. I would call as Calpine's panel Mr. Rick Tetzloff, Mr. Steve DeYoung, and Mr. Gary Rubenstein.

Whereupon,

RICK TETZLOFF, STEVEN DEYOUNG AND GARY RUBENSTEIN

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

MR. ELLISON: In the interest of brevity, Mr. Bouillon, we have a limited set of disputed issues here. The testimony already provides summary, so I would simply make the panel available for cross-examination.
HEARING OFFICER BOUILLON: Thank you.

Mr. Sarvey.

MR. SARVEY: Thank you.

CROSS-EXAMINATION

BY MR. SARVEY:

Q Mr. Rubenstein, the applicant provided $565,000 to the Air District for PM10 mitigation, and is now being asked to surrender approximately 34 tons of SO2 credits in addition, to meet the original PM10 liability, is that correct?

MR. RUBENSTEIN: I believe that's correct, yes.

MR. SARVEY: And, Mr. Rubenstein, you disagree with the CEC Staff on the effectiveness of the PM10 mitigation program. Could you briefly summarize the disagreement and the magnitude of the emission reductions you believe were achieved under this program.

MR. RUBENSTEIN: In summary, the disagreement was that we believed, and we continue to believe, that the emission reductions that were achieved in the mitigation program required, under the original licensing, provided benefits greatly in excess of the direct tons of emissions reductions that were documented.
In particular we believe that because of both the different dispersion characteristics between simple cycle gas turbine and the mitigation sources, which, in this case, were diesel school buses and fireplaces and wood stoves; and also because of the increased toxicity of the pollutants coming from, for example, diesel school buses as compared with the toxicity of the particulates coming from this gas-fired power plant, that the benefits were greater, as I said, than just the direct reductions in emissions. In the mitigation plan that was submitted to the Commission and approved in 2002, we actually quantified what we believe those benefits to be.

And based on the quantification techniques included in that analysis we believe that the PM10 impacts from the project were, in fact, fully mitigated.

The nature of the dispute with the CEC Staff is that they believe that only the direct reductions in emissions on a tonnage basis are providing mitigation benefits. And the additional emission reduction credits that we proposed to surrender, as documented in the staff assessment,
represents a compromise in an effort to resolve
the issue, with both parties agreeing to disagree
on whether in fact that additional mitigation was
required.

MR. SARVEY: Have you surrendered those
SO2 credits as of yet?

MR. RUBENSTEIN: No, we have not. They
are not required to be surrendered until after the
project decision.

MR. SARVEY: In your analysis of
benefits that the PM10 mitigation program
achieved, did the applicant receive any credits
for the jobs that are produced by the mitigation
program, such as wood stove installers and bus
manufacturing?

MR. RUBENSTEIN: I'm not sure I
understand your question, received any credits
how?

MR. SARVEY: Do you feel that that's a
benefit of the program, basically is what I'm
asking, that should be considered when evaluating
this program.

MR. RUBENSTEIN: In evaluating the air
quality benefits? No, I don't.

MR. SARVEY: Okay. Did the applicant
receive any credit for the public awareness of the air quality issue and benefits derived from this PM10 mitigation program? Were you credited anything for that? Do you believe that that was a benefit?

MR. RUBENSTEIN: I'm not aware that the applicant was credited in any way for that.

MR. SARVEY: Do you believe that was a benefit?

MR. RUBENSTEIN: I think that to the extent that the funds spent by the Bay Area District in advertising this mitigation program resulted in increased public awareness of the need to reduce wood stove and fireplace emissions in the Bay Area in the wintertime.

To the extent those funds contributed to that awareness, I think there was a corollary environmental benefit, yes.

MR. SARVEY: Thank you. If staff would allow the applicant to provide the same amount of money to the wood stove program as the cost of the additional 34 tons of ERCs to satisfy the applicant's CEQA liability, would that be a greater benefit to the community? And would the applicant be willing to do so?
MR. RUBENSTEIN: If it was strictly on the basis of dollars, and if all the applicant was required to do was to literally write a check for the amount equivalent to the cost of those ERCs, then I think the applicant might be willing to do that. However, that option was explicitly rejected by the Commission Staff.

MR. SARVEY: And do you believe that that option would provide a greater benefit to the community than providing the SO2 ERCs?

MR. RUBENSTEIN: If the funds were efficiently spent on projects to reduce emissions, I think that it would be equivalent and perhaps better.

MR. SARVEY: Can you think of a better method to encourage these types of PM10 mitigation programs that the applicant has surrendered in this case?

MR. RUBENSTEIN: Yes, those are the measures that were included in the original mitigation plan that we submitted to the Commission and was approved.

MR. SARVEY: Thank you. What is the current best available control technology level for NOx in the Bay Area Air Quality Management
District for simple cycle turbines of this size?

MR. RUBENSTEIN: I believe it's 2.5 parts per million, but I'm not certain.

MR. SARVEY: I'd like to offer this as an exhibit, Mr. Bouillon, if it's acceptable to the parties.

HEARING OFFICER BOUILLON: Mr. Sarvey, is this an exhibit for purposes of refreshing the witness' recollection, or to establish facts independently of --

MR. SARVEY: To establish BACT.

HEARING OFFICER BOUILLON: Excuse me?

MR. SARVEY: To establish BACT in the Bay Area Air Quality Management District for simple cycle turbines is 2.5 parts per million averaged over three hours.

HEARING OFFICER BOUILLON: All right. At this point we will mark it exhibit 5 for identification.

MR. ELLISON: Mr. Bouillon, if I could just ask Mr. Sarvey how he obtained the document, and whether this is the complete document, or whether it's simply a portion of a larger document.

MR. SARVEY: In actuality I obtained it
off the internet. And there is actual no complete
document. It's just referenced by section off the
internet. So there is no actual complete document
for -- because it's updated regularly as new items
come on.

MR. ELLISON: Okay, so you got it off
the Bay Area Air Quality Management District's
website as --

MR. SARVEY: That's correct.

MR. ELLISON: -- as the bottom of the
document would indicate?

MR. SARVEY: That's correct.

MR. ELLISON: Okay.

HEARING OFFICER BOUILLON: Mr. Ellison,
for purposes of the record I will attempt to
identify this and see if Mr. Sarvey agrees. I
believe this is a page printed off the internet
from the website of the Bay Area Air Quality
Management District, is that correct?

MR. SARVEY: That's correct.

MR. ELLISON: And the other concern that
I have is it's not apparent to me how this
document is relevant to the PM10 and PM2.5
emissions issues that you raised in your petition
for intervention.
HEARING OFFICER BOUILLON: Well, we're going to let him try to establish that through his questions, I believe.

MR. ELLISON: Okay.

MR. SARVEY: Ready to proceed?

HEARING OFFICER BOUILLON: It's marked for identification. It's dated 11/27/2004, which I assume is the date it was printed, not the date it was compiled?

MR. SARVEY: Yes, it was printed.

HEARING OFFICER BOUILLON: Go ahead and ask whatever question that you have based upon this document.

BY MR. SARVEY:

Q Mr. Rubenstein, did you work for the applicant in the permitting of the Creed Energy Center?

MR. RUBENSTEIN: No, I did not.

MR. SARVEY: Did your firm?

MR. RUBENSTEIN: Not in the original licensing of it, no.

MR. SARVEY: Okay. As part of the mitigation program for the impacts from this project, you were required to apply best available control technology, is that correct?
MR. RUBENSTEIN: Are you referring to the PM10 mitigation program?

MR. SARVEY: I'm referring to the mitigation for this project in general, which would include the PM10 mitigation, since NOx is a precursor to PM10.

MR. RUBENSTEIN: No. The PM10 mitigation program for this project was very explicitly limited to the retrofit of wood stoves and fireplaces, and the replacement of diesel school buses.

There was no reference to NOx emissions or best available control technology as part of the PM10 requirements.

Best available control technology is required under the Bay Area District's regulatory program, however.

MR. SARVEY: And in your opinion do emissions of NOx contribute to secondary formation of PM2.5 in those winter months?

MR. RUBENSTEIN: The emissions of NOx contribute to secondary formation of PM2.5 throughout the year, not just in the winter months.

MR. SARVEY: Okay, thank you. And by
limiting these NOx you would, in effect, be contributing to the reduction of PM2.5 formation, is that correct?

MR. RUBENSTEIN: I'm hesitating because it's a complicated answer that requires modeling to respond to. In general the answer is yes, but the extent to which it contributes would vary depending on the location, meteorology and time of year.

MR. SARVEY: Okay, thank you. I'd like to ask a couple questions about the energy resources.

BY MR. SARVEY:

Q The applicant's testimony in the AFC on page 9.3 states that the conversion of the LECF to a natural fired combined cycle generating facility would meet the State of California's objective to license the most efficient running power plants possible as intended under Public Resources Code section 2552. Is that your testimony?

MR. DeYOUNG: That's correct.

MR. SARVEY: Now I'd like to ask a couple environmental justice questions.

BY MR. SARVEY:

Q Did the applicant meet with any minority
organizations in the project area?

MR. TETZLOFF: During this relicensing phase, no, there have not been meetings with minority groups.

MR. SARVEY: Were the mitigation programs designed in the original licensing targeted to the minority community?

MR. RUBENSTEIN: What mitigation programs in particular are you referring to?

MR. SARVEY: The PM10 program.

MR. RUBENSTEIN: No. The PM10 program was not targeted at a minority community because it was targeted at a regional air quality problem; mitigation was required to address a cumulative air quality impact and not an environmental justice issue.

MR. SARVEY: Okay. That's all I have for the applicant.

MR. ELLISON: Let me just ask one redirect question. I'll direct it to Mr. Rubenstein.

MR. RATLIFF: Excuse me, counsel.

MR. ELLISON: Oh, I apologize.

MR. RATLIFF: I did have one question I wanted to ask the panel before we -- and I was
asleep at the switch. I think I forgot to take my
cue.

CROSS-EXAMINATION

BY MR. RATLIFF:

Q    I did want to ask whichever witness is
the appropriate witness to confirm that the
operation of this facility in the first two years
of its operation has been in what could aptly be
described as a baseload operation -- I mean, not
baseload, peaking mode of operation, is that
correct?

MR. TETZLOFF: I would characterize the
way the facility has run over the last two years
as being anywhere from peaking to intermediate.
Most likely -- or in most instances it's been
asked to operate in a cycling mode where it comes
on during the peak period and off during the
offpeak.

MR. RATLIFF: Okay, thank you.

HEARING OFFICER BOULLION: Mr. Ellison.

MR. ELLISON: Thank you.

REDIRECT EXAMINATION

BY MR. ELLISON:

Q    Mr. Rubenstein, my redirect question is
is there any disagreement between staff and
applicant that the PM10 and PM2.5 emissions from this project have been fully mitigated?

MR. RUBENSTEIN: No, there is no disagreement on that.

MR. ELLISON: That's all, thank you.

HEARING OFFICER BOUILLON: Mr. Sarvey, do either of those questions raise anything else?

MR. SARVEY: I'd just like to follow up on Mr. Ratliff's question.

RE CROSS-EXAMINATION BY MR. SARVEY:

Q  Essentially this project's operating profile is not as a peaker plant, is that correct?

MR. TETZLOFF: I don't think I would say that it's not a peaker plant. I would say that it operates as a peaker, as a simple cycle facility would be expected to operate, which is basically running eight to 16 hours during the day during the week when you're having peak periods, in times of high demand. And it comes off generally at night.

MR. SARVEY: The majority of this plant's operation, then, is not triggered by stage one, two and three emergencies then?

MR. TETZLOFF: I wouldn't say it's
triggered by those. That's -- I'd say when this
plant's operating, then I'd say the two events
occur simultaneously, but they're not related.

MR. SARVEY: So this plant could operate
as it currently is in baseload operation as a
combined cycle plant, as well, correct, were it to
be converted?

MR. ELLISON: Objection, that assumes a
type of operation that's inconsistent with what
the witness testified to.

MR. SARVEY: Okay, withdraw.

HEARING OFFICER BOUILLON: Mr. Ratliff,
do you have anything further?

MR. RATLIFF: No.

HEARING OFFICER BOUILLON: Mr. Ellison,
anything further?

MR. ELLISON: No.

HEARING OFFICER BOUILLON: Earlier I
neglected to note that on behalf of the Public
Adviser's Office Mr. Monasmith was here. I don't
know if there's any member of the general public
here, but the general public has a right to make
any comments it would like, as a part of this
evidentiary hearing.

Is there anyone here who would like to
make any additional comments at this time?

Hearing no response, do you have anything further to offer, Mr. Ellison?

MR. ELLISON: No. We would ask that the panel be excused.

HEARING OFFICER BOUILLON: Mr. Ratliff?

MR. RATLIFF: The staff has two witnesses that we had confirmed that we would provide today with both the Committee and with Mr. Sarvey.

I propose that the first witness be Mr. Gabriel Taylor, who will testify on air quality.

Whereupon,

GABRIEL TAYLOR

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

MR. RATLIFF: Skipping the formalities of the preliminary questions, I'll go directly to the questions that I have for Mr. Taylor.

DIRECT EXAMINATION

BY MR. RATLIFF:

Q Mr. Taylor, did you put together the staff's recommendations for conditions of certification for the original four-month license
for this power plant?

A    I did.

Q    And in your opinion was the project adequately mitigated by those conditions of certification at that time? Or did you testify to that effect in the prior case?

A    Yes, the conditions of certification, as approved by the Commission, in the original case would have mitigated fully the project's emissions impacts.

Q    And during the past two years did you become aware that there were certain problems with the adequacy of that mitigation for the effects of that project over the long term?

A    Yes, we did become aware of that, specifically with the PM10 mitigation and the requirement for wood stove retrofits and replacements.

Q    And have you attempted to remedy that deficiency in this relicensing proceeding?

A    We have. In negotiations with the applicant we have decided that rather than attempting to correct problems with the availability of wood stoves to be retrofit, we have decided to request mitigation by ERCs, which
was an option that was allowed in the original
conditions of certification, and was the option
that we chose in negotiations to use at this time.

Q  Would you say that it's an unusual
situation that staff gets to actually look at the
efficacy of its conditions of certification and
then change them?

A  I would definitely say it's unusual, and
perhaps unique. In this case, however, I would
like to point out that the original condition of
certification that required this PM10 mitigation
did offer as an option the submittal of emission
reduction credits.

Q  And now that the applicant has agreed to
submit emission reduction credits, do you feel
that the project is fully mitigated and offset?

A  I believe that the mitigation, as stated
in the final staff analysis, if it is fully
implemented will mitigate the project, yes.

Q  Thank you. Do you have anything further
to comment on in the summary of your testimony?

A  Not at this time.

Q  Okay.

MR. RATLIFF: Thank you, that concludes
our direct testimony.
HEARING OFFICER BOUILLON: Mr. Sarvey?

MR. SARVEY: Yes.

CROSS-EXAMINATION

BY MR. SARVEY:

Q Mr. Taylor, Mr. Ratliff just asked you if you had prepared the conditions of certification for this project. And I want to call your attention to condition of certification AQ19-A, which is on page 4.1-15 of exhibit 3.

A Yes.

Q And you have recommended this project be permitted at 5 parts per million over three hours, is that correct?

A That's correct.

Q Were you aware that the current best available control technology for the Bay Area Air Quality Management District for this size turbine is 2.5 parts per million over three hours?

A I would acknowledge there's a disagreement between the exhibit number 5 that you provided here and the information provided to us at the time of publication of this document by the District.

Q Okay.

MR. SARVEY: I don't know if this has
been accepted as an exhibit, but I would like to offer it once again, if it has not.

HEARING OFFICER BOUILLON: It has not been accepted. It's been identified. It has not been authenticated. I don't know if you can do that with these witnesses or not.

If it is an official document that the Bay Area Air Quality Management District can provide to this Commission either now or at some subsequent date within the near future, of course, that it is an official record of that agency, the Commission may be able to take judicial notice of it.

I don't know that to be the case. I take it you're not prepared to, through any witnesses, be able to authenticate this document at this time?

MR. SARVEY: Well, I believe that the fact that the document has an internet address on the bottom that it is easily accessible and speaks for itself. So I do believe that it should be, as in previous proceedings --

HEARING OFFICER BOUILLON: It does, but it is not clear that this is the current standard of that agency. I don't see where it says that on
MR. TAYLOR: I believe that what's at discussion here is whether or not this is the correct BACT number. And I believe that is a number that is set by the Bay Area Air Quality Management District.

The Energy Commission does not set BACT.

BY MR. SARVEY:

Q    Mr. Taylor, did you write the staff assessment for the original project here?

A    Yes, I did.

Q    And the staff assessment for the original project on page 4.1-10 states that in the event that no other reasonable mitigation opportunities exist in the vicinity of the Los Esteros Critical Energy Facility the applicant may surrender banked ERCs with approval of the CEC. Because the ERCs are specifically a regional mitigation mechanism, this should be considered only a fair mitigation option for the project's emissions.

Does that statement imply that this option is inferior to the actual PM10 mitigation program?

A    Yes.
Would staff be willing to accept the money that the applicant is surrendering for the SO2 credits as complete mitigation for this project?

No.

Do you feel that this circumstance that arose over this mitigation program in any way deters project applicants from performing mitigation programs such as the applicant has?

I can't comment on the motivation of individual applicants. However, I would like to point out that this program has offered a lot of real evidence on how to implement this type of a program. And that other projects have successfully or are successfully implementing this program.

And staff has received requests from other parties concerning information about this program. So this is building on existing information and providing more real-world experience for successfully implementing these types of PM10 mitigation programs.

Yeah, I believe that the staff and the applicant should be proud of this program. Do you agree with that?
A   Yes, definitely.

Q   Okay. Do you know where the SO2 credits that the applicant is going to surrender were created, and when they were created?

A   The applicant has not, to my knowledge, identified specific SO2 credits at this time.

Q   So at this time they have not been surrendered, correct?

A   Right.

Q   Okay. The project's NOx emissions have the potential to convert to secondary PM2.5. How does staff propose to mitigate this impact to the PM10 and 2.5 levels from the project's NOx emissions?

A   The NOx emissions from the facility are mitigated under District rules by an ERC program. And staff believes that the NOx emissions from the facility are fully mitigated at this time.

Q   Well, since the applicant provided VOC credits rather than NOx credits for the NOx emissions, how does staff reconcile that as CEQA mitigation to the secondary PM2.5 impacts?

A   This is the Bay Area Air Quality Management District's emission reduction credit program, which is a programmatic approach to
managing long-term ambient air quality pollutants.

In this case, nitrogen oxides are managed through the ERC program, which allows either nitrogen or VOC ERCs to be submitted because of their contribution to ozone.

However, in the long term the reduction of either pollutant will reduce the basinwide pollutant levels, ambient pollutant levels.

Q  Normally CEC Staff assesses an ammonia to secondary PM2.5 conversion of 30 percent. And that's even in an ammonia-rich area. What percentage of the project's ammonia emissions did your analysis assume conversion?

MR. RATLIFF: I guess I have to object on the grounds that the preliminary portion of that question is testimony that as to what staff's position on ammonia deposition actually is. And I don't know that that is a correct statement.

So, since we have no witness making that testimony I object to the question --

MR. SARVEY: I'll restate it.

BY MR. SARVEY:

Q What percentage of the project's ammonia emissions did your analysis assume conversion to PM2.5?
A Just to clarify, are you referring to the original analysis or the FDOC, the current FDOC -- I'm sorry, FSA?

Q The original analysis or the current.

A Or? I'm not sure. I would have to review my notes for those, but I believe that we did not assume any ammonia converted to PM10 for this project.

Q Are you the author of the original condition AQSC-4 in the original decision?

A Yes.

Q Okay. Part of that condition reads: This mitigation shall be approved by the CPM in total and initiated prior to the first fire, and must be fully realized prior to the second year of operation."

Was this mitigation fully realized prior to the second year of operation?

A No.

Q Has there been any consequences since this condition hasn't been met?

A Yes, this is why staff met with the applicant and negotiated to require the previously addressed SO2 credits be submitted.

Q So this is pending mitigation, then?
A    That's correct.
Q    Okay.

MR. SARVEY: That's all I have for Mr. Taylor; thank you.

HEARING OFFICER BOUILLON: Mr. Ellison,
do you have any questions for this witness?

MR. ELLISON: I'm sorry, I do.

CROSS-EXAMINATION

BY MR. ELLISON:

Q    Mr. Taylor, is it your understanding

that the project has begun its second year of

operation?

A    Yes, it's my understanding.

MR. ELLISON: Well, let the record

reflect I have a different understanding, but

we'll let that go.

BY MR. ELLISON:

Q    Secondly, with respect to exhibit number

5, which is the webpage. Am I correct that the

District's BACT standard for NOx was 5.0 parts per

million at the time the project was originally

licensed?

A    That is correct.
Q    And so at the time the project was

originally licensed there was no relaxation of
that requirement by the Energy Commission?

A    The Energy Commission does not set BACT.

Can you clarify that? What do you mean by relaxation of --

Q    The Energy Commission's license for this project was fully consistent with the 5.0 parts per million BACT requirement in effect at that time, correct?

A    That is correct. And to clarify, there was a 5.0 one-hour average -- I'm sorry, 5.0 short-term average, and a 2.5 annual average BACT determination.

Q    And the project was licensed by the Energy Commission consistent with both of those requirements?

A    Yes, the requirements on the Energy Commission's license are identical to the District licensing.

Q    And Calpine relied upon those requirements in procuring the equipment for the facility and constructing the facility, correct?

A    Presumably, yes.

Q    And there's a substantial investment involved in doing that, correct?

A    Again, presumably.
Q Is it your understanding that the project has completed its second year of operation?

A I do not think so. I believe the first fire for the facility was approximately May, I believe, of last year, which would mean we're approximately 15 months in.

Q Isn't it correct that if NOx emissions from this project were reduced from 5 parts per million to 1.5 parts per million the required NOx mitigation would be correspondingly reduced?

A That's not as simple as it sounds since the applicant is requesting to increase the fuel flow rate through the facility, as well as the operational hours of the facility may change, depending on whether or not the applicant -- depending on the operational behavior of the facility, the assumptions, I'm sorry.

In other words, if the facility operated and burnt more fuel per hour and operated more frequently, then the annual emissions may increase or stay the same.

Q Is it correct that in June of this year the Bay Area District removed the three-year restriction on the operation of the plant?
A The Bay Area District did, yes.
Q And in doing so the District did not propose to change BACT from the 5.0 parts per million level, is that correct?
A That is correct.
Q Let me return to the answer you gave a moment ago about Calpine proposing changes in the hours or the fuels consumption.
If I were to limit my question to just the phase 1 relicensing and not phase 2, would your answer be different?
A To limit your question, and as far as I understand you're asking if the BACT determination were to be reduced by 50 percent, and the hours of operation and fuel flow rate were to remain the same, would the annual NOx emissions be reduced.
The answer would be yes.
Q And the required NOx mitigation would be correspondingly reduced, correct?
A The NOx mitigation has already been submitted and approved and withdrawn from the District bank. So if the facility were to reduce its emissions I believe it would have to apply to the District for a new ERC, which may or may not be approved.
Q    The staff is supporting the phase 1 relicensing of this project, at least -- and your air quality testimony supports it, correct, with the conditions of certification?

A    With the recommended mitigation, yes, staff is supporting relicensing.

Q    Okay, so with that recommended mitigation can I safely assume staff believes that the project complies with applicable LORS and is fully mitigated?

A    Yes.

MR. ELLISON: That's all I have, thank you.

HEARING OFFICER BOUILLON: Mr. Ratliff, do you have anything?

MR. RATLIFF: Yes.

REDIRECT EXAMINATION

BY MR. RATLIFF:

Q    Mr. Taylor, regarding the document that Mr. Sarvey gave us during his cross-examination of the Bay Area Management District's guidelines for BACT, first of all are you generally familiar with the way the Bay District applies its BACT regulations?

A    Yes.
Q    And with regard to the relicensing of this facility, is there any change in the annual tonnage of NOx emitted by this facility between the existing license and the relicense?
A    No.
Q    And under the Bay District's regulations would BACT therefore apply to this relicensing project?
A    BACT, the best available control technology, for the District consists of two parts. First the level at which the facility must comply with. And secondly, whether or not the facility is required to comply with that level.
And that trigger of whether or not required to comply with is two part. First of all, it has to emit more than 10 pounds per hour; and secondly, it has to be increased in emissions. And this facility did not increase emissions, and so it did not trigger the requirement to comply with BACT.
Q    So, if I can just go one step beyond your last answer, does this document have any application to the relicensing of this facility?
A    I do not believe it does.
Q    Okay, thank you.
HEARING OFFICER BOUILLON: Mr. Sarvey,
do you have further questions?

MR. SARVEY: Yeah.

RECROSS-EXAMINATION

BY MR. SARVEY:

Q Mr. Taylor, have you had an opportunity
to examine the FDOC for this project? Phase 1?

A There was no FDOC published for the
phase 1 project. There was a PDOC published for
the phase 2. But the phase 1 project was not
reviewed by the Bay Area Air Quality Management
District.

They prepared an administrative
modification of their existing license, which
eliminated the expiration date, the three-year
expiration date. And that was the extent of their
analysis.

Q If this project were to run a full 8760
hours at 5 ppm what is your professional opinion
whether it could meet an annual limit of 74.9
tons?

A It could not at 5 ppm.

Q So, in fact, this project's licensed for
8760 hours at 5 ppm, but it cannot meet the annual
limit, is that correct?
A That's correct. The annual tonnage limit is based again on a 2.5 ppm assumption, over 8760 hours.

Q Is it correct that the annual tonnage limit is projected on 4330 hours at 2.5 ppm, and that gives you the 74.9? That's what's reflected in the FDOC, I don't --

A I believe that's more accurate. I think that I would have to check again my notes, but the assumption is based on a certain amount of down time and maintenance time.

MR. SARVEY: I'd like to offer the FDOC as an exhibit, if I can find it. I do have it here.

MR. RATLIFF: A question. Which FDOC are we talking about?

MR. SARVEY: For phase 1 from the Bay Area Air Quality Management District.

MR. RATLIFF: The witness just testified there was no FDOC.

MR. SARVEY: I have it right here in my hand.

MR. TAYLOR: The original licensing?

MR. SARVEY: From the original licensing, yes. That's correct. I do not have
copies. I'll just go on. I could have this verified when I have the District BACT verified by the District personnel, if that would be okay with the Committee.

MR. RATLIFF: Could we ask Mr. Sarvey what is the date on the document that he's --

MR. SARVEY: 2/1/02.

HEARING OFFICER BOUILLON: Show it to Mr. Ellison, also.

(Pause.)

MR. ELLISON: Mr. Bouillon, let me just say that the document that was just given to us is approximately 36 pages. The pages appear to be out of sequence. The document appears to be incomplete. I showed it to Mr. Rubenstein who is our air quality witness, and we, in the amount of time offered, really can't make heads or tails of it.

So, we're not prepared to stipulate to the legitimacy of this document as an FDOC for the original phase 1 relicensing.

I would also say that this is an issue which we view a being outside the scope of the issues that were raised by CARE in its petition for intervention. And if this line of questioning
is allowed to continue we would ask that we be
allowed to recall Mr. Rubenstein, which we're
prepared to do immediately, to comment on the
issue.

MR. SARVEY: I've completed my
questioning on that item.

HEARING OFFICER BOUILLON: Wait a
second, Mr. Sarvey. Mr. Ratliff, do you have any
comments?

MR. RATLIFF: Well, we're reluctant to
object to a document which is a matter of public
record, but then I guess there is always some
question as to whether the document we have in our
hand is the actual final document.

I don't know what it is, and I'm not
quite sure why it's being offered. But if the
Committee really thinks it needs to look at the
FDOC for the first licensing in the four-month
process for the project, that document does exist
and is in our docket, and is available to the
Committee. For what purpose I'm not quite sure
you would want to look to it.

I do have at least one redirect question
for my witness before you decide whether or not to
put on Mr. Rubenstein again, however.
HEARING OFFICER BOUILLON: Mr. Sarvey,

do I understand that the purpose of this
collection of paper you have there in your hand is
an attempt to use it as the FDOC in the original
certification of Los Esteros?

MR. SARVEY: Well, I understand from Mr. Ratliff here that it's already part of the proceedings, so I'll just reference to it. And it's already accepted in the administrative record, and I'll offer it to the evidentiary record. I have no more questions about it.

HEARING OFFICER BOUILLON: That --

MR. SARVEY: The purpose was just to show --

HEARING OFFICER BOUILLON: That FDOC --

MR. SARVEY: -- that this project cannot meet 74 tons annually at 5 ppm, and this project is licensed for 8760 hours.

HEARING OFFICER BOUILLON: The substantive part of your argument aside, if you're seeking to establish something through your questions that refers to the FDOC in the original certification that is a matter of public record, and a matter contained in this Commission's public records, and if you would ask the Commission to
take judicial notice, or the Committee to take
judicial notice of that document, we could do so.

And if you need to refresh the
recollection of the witness by using some paper
you have, if it helps, you can do so. I'm not
going to -- I have not seen those papers, but I'm
not going to mark something as an exhibit if it is
not a complete document. But if you can use it to
assist you in your questioning, you're welcome to
do so.

MR. SARVEY: I trust the Commissioners'
discretion. Judicial notice is fine with me,
thank you.

HEARING OFFICER BOUILLON: All right, we
will do that.

MR. ELLISON: Mr. Bouillon, we would
still ask to recall Mr. Rubenstein for one
question based upon the questioning that has just
occurred.

HEARING OFFICER BOUILLON: I see no
problem with that.

MR. ELLISON: Okay, at the appropriate
time we'll do that.

HEARING OFFICER BOUILLON: Do you have
some additional questions for this witness, Mr.
Sarvey?

MR. SARVEY: No. Thank you, Mr. Taylor.

MR. RATLIFF: I have merely one question on redirect, and that is to try to clarify, I think, perhaps some confusion about this.

FURTHER REDIRECT EXAMINATION

BY MR. RATLIFF:

Q Mr. Taylor, with regard to the prior proceeding there was a final DOC, final determination of compliance issued by the Air District for the original four-month license for this proceeding, is that correct?

A That's correct.

Q And is it your understanding that that is what the document that was just offered into evidence by Mr. Sarvey?

A That is correct, I'm familiar with that document.

Q And for the current licensing proceeding, or relicense proceeding of this project that we are discussing today, there is no such final determination of compliance, is that correct?

A That is also correct.

Q Is there any further elaboration you
wish to make on this which would clarify it any
further it needs to be? And be careful here,
don't make it more complicated.

A Just as a minor point of clarification,
the staff has been treating this as three separate
individual analyses, three separate projects, the
original project, the relicense project and the
combined cycle project.

And that was named in the AFC as phase 1
and phase 2, so the unnamed original project is --
its doesn't have a name, but the original project.
When Mr. Sarvey asked me about the phase 1, I
assumed he meant the relicense, not the original
project. I apologize for the difference.

MR. RATLIFF: I have no other questions.

HEARING OFFICER BOUILLON: Mr. Ellison,
do you have any further questions for this
witness?

MR. ELLISON: For this witness, no.

HEARING OFFICER BOUILLON: Mr. Sarvey,
does that last question by Mr. Ratliff raise
anything in your mind?

MR. SARVEY: I only have one other
question.

Mr. Taylor indicated that this project
had run 12 months, and I just wanted to offer the
compliance record as an exhibit. It has run 12
months.

HEARING OFFICER BOUILLON: I'm sorry,
what is that?

MR. SARVEY: This is the compliance
record for the Los Esteros project. It was given
to me by Lance Shaw. I have his card attached to
it.

So, in fact, this project has run over
12 months.

HEARING OFFICER BOUILLON: Let's hold
off on that for one moment.

Mr. Ellison, you wanted to recall a
witness that you think has some relevance to this
matter?

MR. ELLISON: I do. We would like to
recall Mr. Rubenstein who has been previously
sworn.

HEARING OFFICER BOUILLON: You may do
so. You're still under oath.

Whereupon,

GARY RUBENSTEIN

was recalled as a witness herein, and having been
previously duly sworn, was examined and testified
further as follows:

DIRECT EXAMINATION

BY MR. ELLISON:

Q    Mr. Rubenstein, you heard the cross-examination of Mr. Taylor, correct?

A    Yes, I did.

Q    Do you have any comments on the issue of the ability of the plant to run at 5.0 parts per million NOx for 8760 hours and meet the limits of the District?

A    Yes, I do. As Mr. Taylor indicated in his testimony, the short-term BACT limit was originally set for the project at 5 parts per million. However, the project was also designed to meet half that level or 2.5 parts per million on a long-term average basis. That was clearly discussed during the record of the prior proceeding.

The relevance of that is that this plant does, in fact, have the ability, both from an engineering perspective and legally under its permit, to operate 8760 hours per year should it be called on to do so.

You can see that quite simply by taking a look at the staff assessment for this phase of
the proceeding, and looking in particular at
condition AQ-19, subparagraph (g) as in George.
That's on page 4.1-16 of the staff assessment.
That condition limits the total NOx
emissions on a short-term basis to 34.2 pounds per
hour for all four turbines. That 34.2 pound per
hour number is based on the short-term
concentration of 5 parts per million.
If you just simply cut that number in
half, going from 5 parts per million down to 2.5
parts per million, which is the long-term design
basis for the plant, then instead of 34.2 pounds
per hour, the emissions from all four turbines
combined would be 17.1 pounds per hour.
If you multiply that by 8760 hours, and
divide that by 2000 pounds per ton, you arrive at
exactly 74.9 tons per year, which is the annual
emissions limit shown in condition AQ-22 further
down on that page.
There are a number of different
operating scenarios obviously that a plant like
this can operate under. I merely wanted to
clarify, based on what I heard earlier, that the
design basis was not based on some fraction of a
year operation. The plant, in fact, was designed
so that from both an engineering and a legal perspective it could operate up to 8760 hours per year at full load and remain in compliance with the 74.9 ton-per-year NOx limit.

MR. ELLISON: That's all we have, thank you.

HEARING OFFICER BOUILLON: Mr. Sarvey, you wish to cross-examine on that topic?

MR. SARVEY: Yeah.

CROSS-EXAMINATION

BY MR. SARVEY:

Q Mr. Rubenstein, this project, as permitted with the Bay Area Air Quality Management District, its emission rates indicated that the project at 5 ppm would well exceed 74.9 tons per year, is that correct?

A If it were to operate at 5 parts per million year-round, yes, it would exceed 74.9 tons per year.

Q So you're speaking of design limits, not permit limits, correct?

A No, I'm speaking of two types of permit limits, both the short-term limit and a long-term limit. And as Mr. Taylor indicated, and I agree, the long-term limit of 74.9 tons per year is based
on the concentration of 2.5 parts per million, not 5 parts per million.

Q Okay. You prepared answers to the data requests for air quality and biology, is that correct, in terms of the air quality impacts from this project?

A Yes, I did.

MR. ELLISON: I'm sorry, let me clarify that question. Did you ask about both air quality and biology?

MR. SARVEY: The air quality sections of the biology project.

MR. ELLISON: Okay.

BY MR. SARVEY:

Q And you prepared attachment Bio-1, daily NOx and NH3 emissions, is that correct?

A Can you tell me which data request that's in response to?

Q That would be data request 4. It's on page 17 of your data request response.

HEARING OFFICER BOUILLON: Sorry, Mr. Sarvey, what page are you on?

MR. SARVEY: Unfortunately these pages are not numbered. Page 17 is attachment Bio-1; that would be of the data request responses.
MR. RUBENSTEIN: I'm sorry, Mr. Sarvey, I'm still trying to figure out which data response attachment Bio-1 was provided in response to. You had indicated that it was data response 4, but data response 4 has nothing to do with -- it's an air quality data response, not biology. So I'm still looking to see what the reference was for that.

I see now. It was in response to data request 15.

BY MR. SARVEY:

Q Fifteen, that's correct.

A On page 8. And this was prepared by the applicant; I can't recall whether it was prepared by the plant staff and submitted by us, or whether we prepared this based on data provided by the plant staff.

Q So it wasn't prepared by you, then?

Okay. Well, looking at this response prepared by the applicant, does it look like this project is meeting 2.5 on a consistent level?

A No, because it hasn't been required to, to comply with any of the permit limits, --

Q Okay.
A  -- including the 74.9 ton per year limit.

Q  Okay. In fact, biology staff has indicated that they project that this project will emit 161 tons per year operating at 8760 hours. Do you disagree with that?

A  Absolutely.

Q  Okay, thank you.

MR. SARVEY:  That's all I have.

(Pause.)

MR. RATLIFF:  And, Mr. Bouillon, if I may I just wanted to assure the Committee that in terms of the amount of criteria emissions any project emits, it is staff's practice to always have that be an air quality witness matter, not to be contradicted by biological testimony.

So it will be, to be certain, those numbers will have to be reconciled if they are not the same. But I don't believe that there is any testimony by the biological witnesses as to the emissions of criteria pollutants in this case.

HEARING OFFICER BOUILLON:  All right.

Anything left on this topic?

MR. ELLISON:  I do have some redirect and followup to the last question from Mr. Sarvey.
HEARING OFFICER BOUILLON: Go ahead, Mr. Ellison.

REDIRECT EXAMINATION

BY MR. ELLISON:

Q Mr. Rubenstein, your last answer was that you absolutely disagreed with the statement that running at 8760 hours per year that the project would exceed the 74.9 tons per year limit. Would you explain why you absolutely disagree with that statement?

A Yes. Because there is a permit limit of 74.9 tons per year, and the facility hasn't even come close to approaching that limit. And there's sufficient design flexibility, both in terms of operating the plant and operating the emission control systems, to insure that that limit is met.

Q So to sum up, on a short-term basis the project can operate at up to 5 parts per million, correct?

A That's correct.

Q But on a long-term basis it has to achieve the 74.9 tons per year limit, correct?

A That's correct.

Q And it can do so both under its permit and under its physical operation, operating -- it
can, when I say do so, it can achieve the 74.9 tons per year limit consistent with both its permit and its physical design, correct?

A    That's correct.

MR. ELLISON: That's all I have, thank you.

HEARING OFFICER BOUILLON: Mr. Sarvey.

MR. SARVEY: That's all I have, thank you.

HEARING OFFICER BOUILLON: There are two other witnesses from the staff. Do you have any cross-examination? In light of what's gone heretofore, do you have any further cross-examination of staff witnesses?

MR. SARVEY: A couple of quick questions of the two other witnesses, nothing extensive.

HEARING OFFICER BOUILLON: Mr. Ratliff, would you call your next witness, please.

MR. RATLIFF: Yes. Our next witness is Mr. Steve Baker, who is the staff witness on power plant efficiency. Mr. Baker was the supervisor for Shahab Khoshmashrab, who was the original witness who prepared the testimony, but who was unavailable today because he had to take his son to the doctor, I believe.
So, I believe it's agreeable; I told --
we were aware of this conflict when we had the
prehearing conference. I told all parties that
Mr. Baker would testify in place of the actual
witness. And that was agreeable at that time; no
parties objected at least then. And so Mr. Baker
is now going to be that witness.
Whereupon,

STEVE BAKER
was called as a witness herein, and after first
having been duly sworn, was examined and testified
as follows:

HEARING OFFICER BOUILLON: Mr. Ratliff,
I would ask preliminary to this testimony if you
would establish his abilities to testify for the
witness who did prepare this testimony.

MR. RATLIFF: Yes.

DIRECT EXAMINATION

BY MR. RATLIFF:

Q    Mr. Baker, you're familiar with the
testimony of Mr. Shahab Khoshmashrab on power
plant efficiency in this case, is that correct?

A    Yes.

Q    And did you supervise and review the
preparation of that testimony?
A Yes, I did.

Q And is that testimony true and correct to the best of your knowledge and belief?

A Yes, it is.

Q Do you have any changes to make in it at this time?

A No.

Q Okay. Can you briefly describe why our electric supply system requires both peaking and baseload facilities?

A The load on the grid at any one moment is constantly changing. Since storing electricity is very expensive, we generate the electricity at the exact moment that it's needed or demanded.

Since the load is always changing, the demand is always changing. Therefore, the supply has to be continually changing also.

Baseload power plants like to run at a constant output. They work efficiently and cleanly when they run at a constant output. Yet, since the demand is constantly changing, we have to have some power plants on the grid that can vary their output on a short-term basis, either daily or hourly or minute-by-minute.

We need a certain amount of these
plants, and we need some of them near the load itself. Peaking plants are intended to serve this need. Peakers are typically fairly small. They can be adjusted -- their output can be adjusted up and down fairly quickly to meet demands. And some of them have to be located near the load in order to maintain power quality.

The Los Esteros project does fit the definition of a peaker. It can be -- it's output can be adjusted up and down rather rapidly, and it is located very near the load center.

Q You heard the earlier discussion today concerning the way in which this power plant has been operated as a peaking or load-following facility, is that correct?
A Yes.

Q Do you agree with that testimony or have any comment to make about it?
A I agree with it. Looking at the actual plant energy output over the first 19 months of operation, that's March 2003 through September 2004, looking at statistics compiled by the staff's assessments office, the average capacity factor of the Los Esteros project, that is the actual energy output, as a portion of the
potential output, had it run at full output, it's
capacity factor over those first 19 months was
only about 12 percent.

In other words, it only ran about an
equivalent of one-eighth of the time. This is a
number consistent with a peaker.

Q    Why is it not economic to operate a
peaking facility as a baseload unit?
A    A peaker typically is less fuel
efficient than a baseload plant, so it's going to
burn more fuel. Fuel costs money. Therefore,
operating a peaker in place of a baseload would
consume more fuel, consume more money.

If you could serve the load with your
more efficient baseload plant, you would obviously
choose to do so.

Q    Would you expect Calpine to convert this
facility to a combined cycle facility if they
intended to run it in a baseload capacity?
A    I'd be surprised if they did not.
Q    And is it your impression that that is
exactly what Calpine has filed an application for
its phase 2 of this proceeding?
A    Yes, it is.

MR. RATLIFF: I have no other questions.
BY MR. SARVEY:

Q Mr. Baker, you prepared the original supplement to the staff assessment for this project December 31, 2001?

MR. RATLIFF: Sorry, which document are you referring to?


MR. RATLIFF: Well, we don't have that document with us. It's not being offered in evidence today. Is this a document that was for the original licensing --

MR. SARVEY: For the original license, correct.

MR. RATLIFF: Oh, okay.

MR. BAKER: That's ancient history. I'd have to go to the files to refresh my memory.

MR. SARVEY: I'll move on.

BY MR. SARVEY:

Q Has staff considered a limit on how long this project can operate as a simple cycle facility?

A No, we have not. We don't feel it's
necessary.

Q So that limit that it was originally imposed was imposed in response to a state law, correct?

A I don't know what limit you're referring to.

Q The efficiency limit that was imposed that exists in the license as it stands now, Efficiency-1, I believe it is.

A The condition of certification under the efficiency section of the original license under which the plant now operates was there in response to a law which allowed accelerated permitting of this project, and accelerated operation of the plant in exchange for the promise that it would be later either relicensed or converted to a combined cycle facility.

Q Thank you. Were this project to be converted to a combined cycle facility could you give the Committee an idea of how many million Btus would be saved per megawatt of production from this project?

A If it were still operated at the current capacity factor of about 12 percent, not much.

Q If it were operated --
A It's not a good idea to try to compare fuel consumption of a peaker plant with fuel consumption of a baseload plant, because they're not going to be operating the same number of megawatt hours per year.

Q Were it to be operated 8760 hours, as it's permitted, could you give us an estimate, please?

A If this plant were operated continuously throughout the year we can expect a fuel efficiency of about 38 percent. The combined cycle version of this plant, putting out the same number of megawatt hours a year, would be operating at less than full capacity. So its efficiency would be somewhat less than its maximum of 46 percent.

My quick, off-the-cuff guess would be that the baseload plant could operate somewhere between 42 and 46 percent efficiency, let's say 44. So we're talking an increase in fuel efficiency of, at most, 6 percentage points.

Btus, we're talking about 2 million million Btus consumption of the plant, the existing plant, at 12 percent capacity factor. So, whereas the current plant might have consumed...
16 million Btus, the combined cycle might comparatively consume maybe 15 million Btus --
million million, excuse me.

Q  You mentioned earlier that the price of natural gas is the motivation for the applicant to convert this project to combined cycle, is that correct?

A  That's certainly an important motivation.

Q  And if the applicant had a contract that could pass the price of natural gas on to the buyer, is that motivation removed?

A  That's speculative. I wouldn't know.

MR. SARVEY: That's all I have.

MR. ELLISON: No questions.

HEARING OFFICER BOUILLON: Do you have a desire to cross-examine the third staff witness, Mr. Sarvey?

MR. SARVEY: Yes, I do.

MR. RATLIFF: There is no third staff witness.

HEARING OFFICER BOUILLON: I'm sorry.

(Laughter.)

HEARING OFFICER BOUILLON: Anything further, gentlemen?
MR. ELLISON: No.

HEARING OFFICER BOUILLON: Mr. Ratliff?

MR. RATLIFF: No.

HEARING OFFICER BOUILLON: Mr. Sarvey.

Your document, exhibit 5, has not been admitted. I'm not sure, given the testimony we've heard, and your questions based on it, that it has -- that you demonstrated any relevance to that document.

However, I think the most appropriate thing to do at this point is to take that matter of that document under submission subject to giving you maybe three days to submit to this Commission a proper request for judicial notice describing the document, where it comes from and how this Committee can authenticate it.

Once it has become authenticated we will then issue a ruling about whether or not to admit it as evidence.

But I think for purposes of concluding this hearing and making any arguments the parties wish to make, they can include references to exhibit 5 as they deem appropriate.

And I will start first with Mr. Ellison, ask you if you wish to make any argument?

MR. ELLISON: With respect to exhibit 5,
we have no objection to official notice of the entirety of the District's rules. We do have a concern with selectively noticing pieces of them. And in particular, the concern we have is if you're going to take notice of the 2.5 parts per million NOx threshold, it's critical that you also take notice of the rules that govern when that threshold applies and when it doesn't. It does not apply in this case, as the record already reflects.

So, if you're going to take notice, we would certainly stipulate with CARE to taking notice of all of the District's rules. But we would object to taking notice of some portion of them without all of them.

HEARING OFFICER BOUILLON: Mr. Ellison, I can assure you that this Committee has no intention of excerpting one page from any report and taking judicial notice of it, especially as it might establish some fact. Once we're provided the authentication of it, if we take judicial notice at all it will be of the entire document. But at this point I don't know what that entire document consists of.

When I asked you for argument, I meant
with regard to the entire proceedings here today.
Do you have anything further to off?

MR. ELLISON: No, I'm sorry, I
misunderstood. I apologize. No, we do not have
anything further.

HEARING OFFICER BOUILLON: Mr. Ratliff?

MR. RATLIFF: No.

HEARING OFFICER BOUILLON: Mr. Sarvey,
would you like to make any argument?

MR. SARVEY: Just that I didn't
understand why the environmental justice
representative wasn't here for staff, number one.

And as far as authenticating exhibit 5,
I would need ten days to execute a public records
request with the Bay Area Air Quality Management
District to authenticate it. So, that's my
limitation on that.

MR. RATLIFF: Mr. Bouillon, if I may,
the environmental justice witness, so to speak, is
essentially the socioeconomics witness. That's
where the testimony is found.

And that testimony is purely demographic
in nature, and describes the demographics of the
population within a six-mile radius of the
project.
I didn't purport to dispute that there may be minority groups living within six miles of the project. And I didn't think that that was really going to be a very useful thing for us to be testifying about.

The real issue of environmental justice has to do with whether there is a significant effect on the environment. And that is an air quality issue and that is why we produced an air quality witness.

So I thought that we had fulfilled our obligation to produce witnesses by discussing the underlying effect, not the demographics.

HEARING OFFICER BOUILLON: In looking at the prehearing conference statement submitted by CARE, I note that their discussion of environmental justice does include only the air quality portion of that.

I would agree with Mr. Ratliff and the comments he just made, that I believe a witness testifying as to air quality is sufficient to meet his burden in that regard. And I don't think there's any question been raised about the actual demographics contained in the environmental justice portion of the testimony.
Mr. Sarvey.

MR. SARVEY: Obviously I have to accept the Hearing Officer's ruling. I just wanted to make one more statement.

HEARING OFFICER BOUILLON: Go ahead.

MR. SARVEY: I wanted to thank the Committee for offering us an opportunity, and accepting us as an intervenor, and giving us the opportunity to present our position. And it's much appreciated. Thank you.

HEARING OFFICER BOUILLON: Thank you.

At this hearing, as at all hearings, we have a requirement for the public to make any comments they'd like to make. Is there any member of the public here that would like to make any statement whatsoever?

Seeing no one and hearing no one, I believe we can conclude the hearing, Mr. Chairman.

PRESIDING MEMBER KEESE: This hearing is concluded.

(Whereupon, at 11:42 a.m., the hearing was concluded.)

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PETE SHORTHAND REPORTING CORPORATION (916) 362-2345
CERTIFICATE OF REPORTER

I, PETER PETTY, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Hearing; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said hearing, nor in any way interested in outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this 13th day of December, 2004.

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