EVIDENTIARY HEARING

BEFORE THE

CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:             )
                          )
Application for Certification ) Docket No.
for the Moss Landing Power   ) 99-AFC-4
Plant Project               )

HEARING ROOM A

1516 NINTH STREET

SACRAMENTO, CALIFORNIA

THURSDAY, JUNE 15, 2000

9:00 a.m.

Reported By:

Debi Baker

Contract No. 170-99-001

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345
COMMITTEE MEMBERS PRESENT
William J. Keese, Chairman, Presiding Member
Susan Bakker, Commissioner Advisor
Cynthia Praul, Commissioner Advisor
Gary Fay, Hearing Officer

STAFF PRESENT
Caryn Holmes, Staff Counsel
Rick Buell, Siting Manager

APPLICANT
Chris Ellison
Gregory L. Maxim
Ellison & Schneider, LLP

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HEARING OFFICER FAY: Good morning.

Today we continue with the Evidentiary Hearings in the Moss Landing Power Plant Project, AFC, Application for Certification. Pursuant to the revised Notice of Evidentiary Hearings issued by the Committee May 26th, this hearing is taking place here at the Energy Commission. And we will be continuing next Tuesday, down in Moss Landing, at the power plant, with our -- possibly our final Evidentiary Hearing.

At the request of Staff and pursuant to the order issued in the -- in Attachment B of the initial notice of Evidentiary Hearings, but to begin with Air Quality and then follow with Land Use. And before we get started, are there any preliminary matters that any of the parties would like to bring up?

I see no indication, so why don't we go ahead. Mr. Ellison.

PRESIDING MEMBER KEESE: I will mention, for Mr. Ellison, that Commissioner Moore and I declared yesterday a coatless, tieless day because of the extraordinary heat, and that since it's carrying over to today, I'm sure Commissioner

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Moore will do the same. So, feel free.

MR. ELLISON: Appreciate that. Thank you.

PRESIDING MEMBER KEESE: The room started about 15 degrees cooler when we started yesterday, too.

MR. ELLISON: I guess I do have one preliminary matter. Allow me to introduce Mr. Greg Maxim, who is sitting to my right. He's with my office, Ellison and Schneider, also Counsel to Duke in this proceeding. And Mr. Maxim is going to conduct the Air Quality examination.

The Applicant's witness on Air Quality is Mr. Gary Rubenstein.

HEARING OFFICER FAY: While they're going for Mr. Rubenstein, I'll just mention that Mr. Maxim helped us out by redoing the exhibit list, and I understand it matches the exhibits as introduced today. So if you have an extra copy of that for Staff, it might be helpful. If -- if not, I do have one extra copy, if the Staff needs one to follow along.

MR. ELLISON: We have an extra copy, but it has notations on it, so.

(Pause.)
HEARING OFFICER FAY: Let's go off the
record.

(Off the record.)

HEARING OFFICER FAY: Back on the
record.

MR. ELLISON: The witness needs to be
sworn.

(Thereupon, Gary S. Rubenstein was,
by the Reporter, sworn to tell the
truth, the whole truth, and nothing
but the truth.)

TESTIMONY OF

GARY S. RUBENSTEIN
called as a witness on behalf of Applicant, having
been duly sworn, was examined and testified as
follows:

DIRECT EXAMINATION

BY MR. MAXIM:

Q Please state your name for the record.

A My name is Gary Rubenstein.

Q Could you spell your last name, please?

A R-u-b-e-n-s-t-e-i-n.

Q And which testimony are you sponsoring
at this time?

A I'm sponsoring the testimony on Air

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MR. MAXIM: At this time, I direct the Commission and Staff's attention to what's been previously marked and identified as Exhibit 61, the Moss Landing Power Plant Modernization Air Quality Testimony, which includes and incorporates by reference the following documents, and I would ask that the Committee bear with me for a moment, because there's quite a few exhibits. So to simplify the record, if there's no objections, I'll just read by exhibit number.

The exhibits that are included and incorporated by reference include Exhibit 5; Exhibit 1; Exhibit 2; Exhibit 4; Exhibit 7; Exhibit 8; Exhibit 9; Exhibit 12; Exhibit 14; Exhibit 15-A; Exhibit 17; Exhibit 20; Exhibit 21; Exhibit 24; Exhibit 25; Exhibit 26; Exhibit 31; Exhibit 33; Exhibit 32; Exhibit 34; Exhibit 35; Exhibit 36; Exhibit 37; Exhibit 38; Exhibit 44; Exhibit 45; Exhibit 46; Exhibit 49; Exhibit 51; Exhibit 53; and, finally, Exhibit 48.

BY MR. MAXIM:

Q    Mr. Rubenstein, do you have a copy of Exhibit 61 before you?

A    Yes, I do.
Q. Do you have any changes or corrections to this exhibit?

A. I have two more documents to add to the list of documents that I'm sponsoring. The first is a memorandum dated June 12th, 2000, from Mike Sewell of the Monterey Bay Unified Air Pollution Control District. This was docketed with the Commission yesterday. The subject is a revised assessment of diesel particulate health risk from construction activities at the Moss Landing Power Plant.

What this memo does is confirm prior e-mails that were sent to the Air District, and the County Planning Department and the Commission Staff, late in May. So this is not presenting any new information; it's confirming information that had previously been submitted.

HEARING OFFICER FAY: Would you like that marked?

MR. MAXIM: Yes. Yes, please.

HEARING OFFICER FAY: That would be Exhibit 69.

(Thereupon, Exhibit 60 was marked for identification.)

MR. MAXIM: Thank you.
The second document is a memorandum dated June 12th, 2000, from Nancy Matthews of Sierra Research to Matt Layton. That also was docketed yesterday. That encloses a number of Air Quality isopleths, showing pollutant concentrations associated with construction impacts in the vicinity of the Moss Landing Power Plant. And those -- those isopleths are derived from modeling analyses that were reference in earlier exhibits that are already included in the record.

MR. MAXIM: At this time I would ask that that be identified as docketed as Exhibit 70.

HEARING OFFICER FAY: So done.

(Thereupon, Exhibit 70 was marked for identification.)

MR. MAXIM: Thank you.

BY MR. MAXIM:

Q Mr. Rubenstein, with the exception of those changes and corrections, would that -- would those be the only changes and corrections to your documents?

A Yes.
Q    Thank you. And was this exhibit
prepared by you and at your direction?

A    Yes, it was.

Q    And subject to those corrections that
you just identified, are the facts set forth in
the exhibit true and correct, to the best of your
knowledge?

A    Yes, they are.

Q    And are the opinions contained in this
exhibit your own?

A    Yes, they are.

Q    Do you adopt Exhibit 61 as your sworn
testimony in this proceeding?

A    Yes, I do.

MR. MAXIM: At this time I ask the
Commission to accept into evidence Exhibit 61 and
all exhibits incorporated -- included and
incorporated by reference therein, including the
newly docketed and identified Exhibits 69 and 70.

HEARING OFFICER FAY: Is there any
objection?

Ms. Holmes, any objection?

MS. HOLMES: No objection.

HEARING OFFICER FAY: All right. So
ordered.
(Thereupon, Exhibits 61, 5, 1, 2, 4,
7, 8, 9, 72, 14, 15-A, 17, 20, 21, 24,
25, 26, 31, 33, 32, 34, 35, 36, 37, 38,
44, 45, 46, 49, 51, 53, 48, 69, and 70
were admitted into evidence.)

BY MR. MAXIM:

Q Mr. Rubenstein, would you briefly
 summarizes the issues you reviewed in this
testimony, state your conclusions as to those
issues?

A The -- my testimony covered the Air
Quality impacts of the Moss Landing modernization
project, and in particular we took a look at the
applicable laws, ordinances, regulations and
standards. We evaluated the existing air quality
in the vicinity of the Moss Landing Power Plant,
which is in general good, compared to most of the
urban areas of California. We evaluated the
environmental impacts of the project, looking both
at the emissions and the ambient pollutant
concentrations associated with both construction
and operation of the facility.

We evaluated the facility's requirements
-- compliance, rather, with applicable air quality
requirements, including those related to best
available control technology, emission offsets, ambient air quality impacts, screening, health risk assessment, as well as looking at cumulative air quality impacts. And it was our conclusion that the project does reflect the use of best available control technology, will not result in any significant air quality impacts that have not been mitigated to a level of less than significance, will provide emission offsets for all of the appropriate pollutants at a ratio of at least one to one and in accordance with the requirements of the Monterey Bay Unified Air Pollution Control District. And as a result, that, as I said, the project will not result in any significant air quality impacts.

Q    Thank you. Do you have a copy before you of the Air Quality Errata that the Staff passed around this morning?
A    Yes, I do.
Q    And have you had a chance to review that errata?
A    Yes, I have.
Q    And what are you conclusions after reviewing that errata?
A    With that errata, I believe that all of
the conditions of approval proposed for the
project are appropriate and acceptable, with the
potential exception of Condition AQ-54, which
relates to additional mitigation for construction
impacts.

Q    And could you briefly explain your
concerns surrounding AQ-54 in dealing with the
Staff's Final Staff Assessment?

A    Yes. AQ-54 is a relatively new
condition that the Commission has begun to add to
projects, and it reflects the development of some
new emission control technologies that are
applicable to heavy duty diesel construction
equipment. Historically, the Commission's review
of the impacts of construction emissions have
indicated that although those impacts are
substantially higher than the impacts during
project operation, that they are a short-term
nature, and -- excuse me -- and that a variety of
mitigation measures typically involving the use of
advanced dust control measures and the cleanest
combustion equipment available was sufficient to
address any remaining significant impacts.

In a couple of cases prior to this, most
notably Sunrise and Elk Hills, the Commission has
begun requiring project developers to consider the
use of a technology referred to as an oxidizing
soot filter. This proposal was based on the
experience, to my understanding, at one location,
which is at Avila Beach, at which four items of
equipment were equipped under a fairly structured
program with oxidizing soot filters.

On one of those pieces of equipment, the
soot filter was found to be problematic in that it
caus[ed] backpressure to increase too much. On the
other three, it appeared to operate
satisfactorily. And to my knowledge, that's the
only demonstration, field demonstration of this
technology so far.

The -- the fact that it's been required
for two other cases, Elk Hills -- or it's proposed
to be required for Elk Hills, has been required
for Sunrise -- I think can be distinguished from
the case here, because the air quality impacts
associated with construction activities at Moss
Landing are substantially lower than those found
certainly in the Elk Hills -- excuse me, certainly
in the -- yes, certainly the Elk Hills case, and I
believe in the Sunrise case, as well. Staff may
be in a better position to compare those impacts.
In addition, the isopleths that were included in Exhibit 70, the document that was faxed to the Commission Staff yesterday, indicates that impacts that could even remotely possibly be considered significant in the case of Moss Landing are limited to a geographic area that is literally tens of meters from the fence line, and do not extend to locations where we have residences.

Consequently, we believe that given the extensive mitigation measures that are already proposed to be required for the project, that condition AQ-54 is unnecessary.

Having said that -- well, let me also add that the Monterey Bay Unified Air Pollution Control District has its own CEQA guidelines, and as part of a separate process for obtaining permits for other projects at the Moss Landing site, including the retrofit of selected catalytic reduction systems to the existing boilers and demolition of some storage tanks, the Planning Department in Monterey County asked for a cumulative construction impacts analysis of the construction activities associated with both the modernization project, the tank demolition project, and the SCR retrofit project.
Our analysis of those cumulative impacts was -- was performed. It was also provided to Commission Staff, and it's included in the exhibit list that was read to you earlier. And the isopleths that I'm referring to reflect the cumulative impacts of all of those construction projects.

The Monterey District has its own CEQA guidelines that it recommends for projects located in -- within its jurisdiction. The guideline for PM10 which is the only pollutant of issue here, is that a project that has daily particular emissions of less than 82 pounds per day is considered to be not significant. And because of the extensive mitigation measures that have been proposed for all of these construction projects, our impacts are below 82 pounds per day. Consequently, neither the Monterey County Planning Department nor the Air District believe that our construction impacts are significant for that pollutant.

The Commission has consistently applied a different standard for significance, and -- and therein lies the quandary. We have one agency who's concluded that our construction impacts are not significant, another agency who believes that
our construction impacts might be significant, and
it's -- it's that latter conclusion that leads to
AQ-54 being required.

I do have to say that -- excuse me -- if
the -- with one caveat. If the -- the Committee
were to conclude, if it were to conclude that in
fact our construction impacts were significant
with respect to PM10, I think AQ-54 is
appropriately worded as a mitigation measure.

The one exception is that language in
there requires the use of an oxidizing catalyst as
an alternative control technology in the event an
oxidizing soot filter is determined to be
unsuitable. We think that that is inappropriate
in this case. The reason is that in the errata
you may have noticed that in AQ-53 the Commission
Staff has proposed to delete a requirement for an
ultra-low sulfur diesel fuel of 50 parts per
million or less. That was based on a review that
both we and the Commission Staff performed and
concluded that for this project in this location,
being built as soon as it is, it is not likely
that a fuel with that low a sulfur content will be
available. There's talk of at least one refiner
beginning to produce such a fuel, but it was
believed to be too speculative at this point to require that.

That, in turn, we think will lead to -- the lack of that fuel will lead to premature failures of an oxidizing catalyst, because the oxidizing catalysts are very sensitive to sulfur. Consequently, again, in this case, we don't believe that an oxidizing catalyst should be required. In any event, it's of limited benefit, and -- and, again, it's easily poisoned by sulfur.

In conclusion, we believe that -- excuse me -- the construction impacts associated with the Moss Landing project, and even the cumulative construction impacts, are not significant, due to the extensive mitigation measures that have already been required, and that we think in this particular case that the additional mitigation required by AQ-54 is unnecessary.

If the Commission concludes that additional mitigation is necessary, we think that AQ-54 is appropriately worded, provided that references to an oxidizing catalyst be deleted.

And that concludes my comments on the errata.

Q For clarification purposes, Mr.
Rubenstein, these soot filters are applied solely
to construction equipment, and not to the project
or plant itself; is that correct?

A    That's correct. And more specifically,
it's my understanding that AQ-54 only applies to
the construction equipment associated with the
modernization project, and not with the other
construction projects that are going on at the
site, or will be going on at the site.

Q    And these -- these construction impacts
would be temporary in nature?

A    Yes, they would.

Q    Okay. At this time I direct the
Committee and Staff's attention to previously
marked Exhibit 54, the Final Determination of
Compliance.

Mr. Rubenstein, have you had a chance to
review the proposed conditions set forth in the
Final Determination of Compliance?

A    Oh, yes.

Q    Are these conditions of certification
appropriate, in your opinion?

A    Yes, they are.

MR. MAXIM: And with that, the witness
is available for cross examination.
HEARING OFFICER FAY: Any questions, Ms. Holmes?

MS. HOLMES: I have no questions.

HEARING OFFICER FAY: Good morning, Mr. Rubenstein.

THE WITNESS: Good morning.

HEARING OFFICER FAY: Am I correct in understanding that the only violation of the standards anticipated by the project will be for PM10?

THE WITNESS: That is correct.

HEARING OFFICER FAY: Okay.

THE WITNESS: And that's a contribution to an existing violation of the State Air Quality Standard. That's not a new violation that's being caused by the project.

HEARING OFFICER FAY: But it will contribute to that --

THE WITNESS: Yes.

HEARING OFFICER FAY: -- ongoing violation.

I also wanted to ask you, on the last page of your summary of your testimony, in your conclusion, you said that the mitigation will be greater than the project's emissions increases,
thus ensuring a net benefit to regional air
quality. How did you calculate that?

THE WITNESS: That was based on the
actual emissions associated with operation of
existing Units 6 and 7, plus the fact that
emission offsets that are provided will be at
ratios in excess of one to one, as required by the
Monterey Bay Unified Air Pollution Control
District.

The emission reduction credits
associated with improved management and reduced
emissions from operation of Units 6 and 7 are --
are limited, under the District's rules. As -- as
I'm sure you're familiar with from other cases,
there's an adjustment to historical baseline
emissions that has to be made before actual
emission credits can be obtained.

That adjustment was made in this case.
The reality is that the emission reductions
associated with reduced operations of Units 6 and
7 will be much greater than what the credits
indicate. And I believe we documented those
calculations in the Air Quality section of the
AFC, initially.

HEARING OFFICER FAY: Okay. Thank you.
And regarding the soot filters, do you have experience with the oxidizing catalyst having problems with the existing grade of diesel fuel?

THE WITNESS: To the best of my knowledge, oxidizing catalysts have not been used on diesel equipment specifically because of the problems associated with both catalysts plugging and -- and their intolerance of sulfur. I'm not familiar enough with UnoCal's experience at Avila Beach, we're still trying to get more information about that, to know how many pieces of equipment they actually used an oxidizing catalyst on, and what level of success they had.

My discussions with staff of the San Luis Obispo County Air Pollution Control District, who oversaw that project, indicated that the oxidizing catalysts were mostly effective at reducing hydrocarbon and carbon monoxide emissions, which, from diesel construction equipment are inherently low, anyway. And so, frankly, I don't see much of a benefit for that.

And then there was a mild secondary benefit associated with about a 20 percent reduction in particulate emissions, which I would characterize as an incidental benefit.
So the short answer to your question is
no, I don't have any personal knowledge of -- of
the problems, and I also don't have a lot of
information to suggest any substantial benefit,
either.

HEARING OFFICER FAY: And this is
regarding oxidizing catalysts?

THE WITNESS: Oxidizing catalysts, as
distinguished from the oxidizing soot filters,
which are specifically designed to control
particulate emissions and to operate in a -- in an
environment that has more sulfur.

HEARING OFFICER FAY: And that's why you
don't think this would be a -- a constructive
fallback.

THE WITNESS: That's correct.

HEARING OFFICER FAY: Okay. I
understand.

PRESIDING MEMBER KEESE: The -- both
construction projects are going at the same time,
the one that you're permitted for locally, and
this one?

THE WITNESS: Actually, I think there's
a total of four construction projects, one
associated with the -- the new power plant, and
then three others associated with other activities at the site. There's going to be some overlap between them, and that's why we were asked to do a cumulative impacts analysis.

PRESIDING MEMBER KEESE: Well, my question is, during the -- what we're looking at here, that -- let's call it the emissions period, will the bulk of the other construction projects take place then, will they take place before, will they take place afterwards? Rough -- roughly.

THE WITNESS: The -- the new generation project has a construction period that's expected to last between October of this year and December of 2001. The other projects have construction periods that are expected to start in July or August of this year, and extend out through June of 2002.

One of the exhibits -- I'm not sure what the exhibit number is, it's a March 17th -- I'd have to check to get the reference -- the cumulative analysis we did anyhow has a -- has a schedule in it, and so there's no easy answer to your question. There's -- there are a lot of things going on at the site over different periods, but a substantial amount of overlap.
PRESIDING MEMBER KEESE: And -- and the
-- and your local application suggests that you
would, even though they were overlapping, it would
be under their cumulative --

THE WITNESS: Under their significance
level.

PRESIDING MEMBER KEESE: -- limit of 82
pounds a day, was it?

THE WITNESS: That's correct.

PRESIDING MEMBER KEESE: Thank you.

HEARING OFFICER FAY: Just another
question. You referred to the distance from the
project, or the construction area to residences.
Do you know what that distance is?

THE WITNESS: The -- what I'm looking at
is the June 12th fax, I think this was Exhibit 70,
and each of the isopleths has little cross signs
which are indicative of residences, relative to
the plant site. I don't have the exact dimensions
here. It looks like the closest residences are
within maybe 100 to 150 meters of the plant site.
But they are -- they are sparsely spaces, and are
not in locations where the -- where the highest
construction impacts are located.

HEARING OFFICER FAY: And you were
comparing the Moss project in relation to using or
requiring soot filters to the -- the Elk Hills and
the Sunrise project. Do you know what the
distance from those projects to the nearest
residences are?

THE WITNESS: No. The -- the reference
that I'm remembering is that in the transcript of
the remarkable Air Quality hearing at Elk Hills,
was that the construction impacts were I think 360
percent of the most stringent air quality
standard, and in the Final Staff Assessment, Air
Quality Table 10, the 24 hour average PM-10
impacts from construction for this project -- and
this is the cumulative impacts for all of the
construction projects -- are 210 percent of the
standard. And for the annual air quality
standard, it was 106 percent.

And with respect to those two numbers,
the most significant dust impacts that are offsite
for our project are actually located on fenced in
PG&E property immediately to the north of the
project site, basically the substation and
associated equipment. And if you exclude that
area, because it's not generally accessible to the
public, our worst case impacts would be for the 24
hour PM10 standard, 177 percent of the standard,
remembering, again, there's a pre-existing
violation. And we would not cause a violation of
the annual PM10 standard.

And so that was my basis for
distinguishing between this case and the Elk Hills
case. And that's -- that's even before you get to
the issue of how far each of the different
projects are from the nearest residence.

HEARING OFFICER FAY: Okay. And just in
-- in sort of a qualitative sense, what explains
that difference? Is it the soil, the fact that
you're dealing with an already prepared site?
What -- it's such a big difference in PM10. Can
you help us there?

THE WITNESS: It -- it's difficult --
it's difficult to say. The -- the extent of the
mitigation measures that are proposed, in terms of
dust control, may be one factor. We had to pretty
substantially refine our analysis earlier this
year because we're dealing with four or five
different construction projects with overlapping
activities, and -- and had to deal with the -- the
county's concern about cumulative impacts. That
perhaps forced us to do a more refined analysis
and look at more mitigation measures than someone who was looking at simply constructing one power projects might've had to look at.

But I -- I can't give you a better answer without actually knowing what they did and -- and how they did their analysis.

HEARING OFFICER FAY: So these practices would all feed into the calculation of PM10 emissions. For instance, watering within so many hours of soil disturbance, et cetera. That's something that the -- that the model takes into account?

THE WITNESS: Yes. We have -- yeah. We have -- our firm has a fairly standard package of dust mitigation measures that we recommend to our clients. They're substantially the same as what the Commission Staff routinely includes as requirements, and those assumptions were built in to our analysis.

HEARING OFFICER FAY: Thank you.

All right. Is the Staff prepared to go ahead, then?

MS. HOLMES: If we could have two minutes first, then we'd be ready.

HEARING OFFICER FAY: Certainly.
MR. MAXIM:  With the conclusion of Mr. Rubenstein's testimony, I would ask that Exhibit 55, the Final Determination of Compliance, be entered into the record.

HEARING OFFICER FAY:  Let me ask if there's a representative from the Air District here.  Good. And will you be sponsoring that today?  In fact, we may be taking it before the Staff, and I'll be asking that. You're here to -- essentially to support the Final Determination of Compliance?  All right.

Let's mark that for exhibit at this time.

(Thereupon, Exhibit 55 was marked for identification.)

HEARING OFFICER FAY:  And would you like to move your other exhibits into evidence?

MR. MAXIM:  Yes, Mr. Fay.  I believe the exhibit specifically referred to was Mr. Rubenstein's testimony, marked and identified as 61, and all exhibits incorporated and referenced included therein.

HEARING OFFICER FAY:  Is there any objection to those being entered into the record at this point?
I hear none. So ordered.

Ms. Holmes, if I can interrupt you just a second. Would you prefer if we went ahead with the District at this time?

MS. HOLMES: That's fine.

HEARING OFFICER FAY: All right. Why don't we ask the District to present its Final Determination of Compliance, and I just -- I have one or two questions.

Please swear the witness.

(Thereupon, Michael Sewell was, by the Reporter, sworn to tell the truth, the whole truth, and nothing but the truth.)

MS. HOLMES: Do you want me to -- all right.

Good morning. My name is Caryn Holmes. I'm with the Legal Office of the Energy Commission, and I'm sitting in for Jeff Ogata, who couldn't be here today. Nice to meet you.

TESTIMONY OF

MICHAEL SEWELL

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

///

///

PETERS SHORTHAND REPORTING CORPORATION  (916) 362-2345
DIRECT EXAMINATION

BY MS. HOLMES:

Q    Could you please state your name for the record?
A    My name is Mike Sewell.

Q    Can you spell your last name, please?
A    S-e-w-e-l-l.

Q    And can you tell us who you work for?
A    I'm an Air Quality Engineer with the Monterey Bay Unified Air Pollution Control District.

Q    And are you familiar with the Moss Landing project that's the subject of this hearing today?
A    Yes, I am.

Q    And did you prepare the Final Determination of Compliance that I believe has been marked as Exhibit --

MS. HOLMES: I have it as 55, I think earlier you said it was 54. Perhaps we should clarify that now.

MR. MAXIM: We have it as 55.

BY MS. HOLMES:

Q    Okay. Did you prepare the Final Determination of Compliance that's been identified

PETEBS SHORTHAND REPORTING CORPORATION   (916) 362-2345
as Exhibit 55?

A Yes, I did.

Q Do you have any corrections to make to that document?

A No, I do not.

Q Are the facts in that document true and correct to the best of your knowledge?

A Yes, they are.

Q And do the judgments contained in that document represent your best professional judgment?

A Yes, they do.

Q Would you like to summarize what the FDOC process was, and what the conditions are?

A Sure.

Q Thank you.

A The District reviewed the -- the AFC based upon the requirements of our District rules and regulations. On January 7th of 2000, the District released the Preliminary Determination of Compliance for public comment. That public comment period ended on February 7th.

The District received comments from the Applicant, the Energy Commission, the California Air Resources Board, and EPA regarding that
evaluation.

On review of the comments, the District determined that the lack of an Air Quality analysis, the establishment of the back level for CO, and a differing offset allocation scheme as proposed by the Applicant, were substantive, and would require an additional public comment period.

Therefore, on March 24th, the District released for public comment an amendment to the PDOC, which addressed the Air Quality impact analysis, CO back level, and the quarterly offset allocation. This comment period ended on the 24th of April. That comment period, the District only received comments from the Environmental Protection Agency. Thereafter, the District issued the Final Determination of Compliance on May 12th, 2000.

In issuing the Final Determination of Compliance, the District verified compliance with all District requirements, considered and responded to all comments received. It is the District's assertion that compliance with the conditions contained in the Final Determination of Compliance will ensure compliance with all District requirements.
And I would be happy to answer any
questions or discuss areas of interest the
Commission may have regarding the District's
evaluation or the Final Determination of
Compliance.

HEARING OFFICER FAY: Does the Applicant
have any questions?

MR. MAXIM: No, we don't.

HEARING OFFICER FAY: Staff?

MS. HOLMES: Staff has no questions.

HEARING OFFICER FAY: Thanks for coming,
Mr. Sewell.

Just really essentially one question.

Public Resources Code 255.3D2 requires the
Commission to include in its written decision a
determination that the Air District has certified
the complete emission offsets for the proposed
facility have been identified, and will be
obtained by the Applicant prior to the
Commission's licensing of the project.

Can you certify that today?

MR. SEWELL: I cannot certify that. The
Applicant has identified the offsets. It's my
understanding that they have control over the
offsets, but I do not have any documentation that
formalizes the agreements for a portion of the
offset package identified.

HEARING OFFICER FAY: So they have been
identified?

MR. SEWELL: They have been identified
in the evaluation, yes.

HEARING OFFICER FAY: You can certify
that fact?

MR. SEWELL: That is correct.

HEARING OFFICER FAY: As to whether they
will be obtained by the time the project is
licensed, you say you do not know?

MR. SEWELL: I'm assuming they would be.
I don't have any documentation to that fact,
though.

HEARING OFFICER FAY: All right.
I'll turn back to the Applicant, then,
and ask how they are addressing this.

MR. RUBENSTEIN: Gary Rubenstein, for
the Applicant.

We have acquired completely all of the
offsets that are necessary, and we're prepared to
submit whatever documentation is necessary to
verify that.

HEARING OFFICER FAY: Okay. And in what
form would you propose documenting that? Copies
of the contracts?

MR. RUBENSTEIN: We -- we can do that.
Most of the certificates are certificates that are
actually already in the bank for the -- actually,
all of them are certificates already in the bank
of the District, so I guess we can -- I thought we
had already done this, and I will simply commit to
the Committee that we will provide copies of all
of the contracts for all of the emission reduction
credits. And we will do that before the
Commission makes its decision on licensing.

HEARING OFFICER FAY: Okay. Let's --
let's -- would it be reasonable to have that
completed by the close of the comment period on
the proposed decision? That way we -- we know
we're well in advance of the Commission action.

MR. RUBENSTEIN: Yes, we can do that.

What date is that?

HEARING OFFICER FAY: Well, I don't have
a date right now, but it will be noticed.

MR. RUBENSTEIN: Okay.

HEARING OFFICER FAY: And when the
proposed decision comes out it'll be 30 days from
that date.
MR. RUBENSTEIN: Yes. It'll certainly be done by then. We'll try to get it done within the next two weeks.

HEARING OFFICER FAY: Okay. Great. All right.

Ms. Bakker reminded me that we also need the District's concurrence that -- that that meets the requirements of the statute. So if you could bring the District into that loop so that we not only have the documents -- or some documentation that those will be available in the record, but also concurrence by the District that that fulfills the requirements of Public Resources Code 255.3D2.

MR. RUBENSTEIN: We'll work with the District to obtain that concurrence.

HEARING OFFICER FAY: Okay. And I think just a declaration would be fine. We don't need to hold the record open for any other purpose than receiving those documents.

Does that sound reasonable, Mr. Sewell?

MR. SEWELL: That would be reasonable.

HEARING OFFICER FAY: That -- this is the type of thing you'd be able to look at and tell if it was -- if it did, in fact, represent...
the ERC certificates, and -- and that -- sign some
document to that effect.

MR. SEWELL: That is correct. You're
expecting -- I'm assuming the Commission would be
expecting a letter from the District, then?

HEARING OFFICER FAY: Yes. A letter, a
declaration from the District indicating that
you've reviewed -- referencing the documents,
you've reviewed them, and that they fulfill the --
the requirements indicated in Public Resources
Code 255.3D2.

Great. All right, thank you.

MS. HOLMES: At this point Staff would
like to ask that Exhibit 55 be entered into the
record.

HEARING OFFICER FAY: Any objection?

MR. MAXIM: None.

HEARING OFFICER FAY: So ordered.

(Thereupon, Exhibit 55 was received
into evidence.)

HEARING OFFICER FAY: Thank you very
much, Mr. Sewell.

MR. SEWELL: Thank you.

HEARING OFFICER FAY: You're excused.

Is the Staff ready to go ahead, or --
MS. HOLMES: We are. Staff's Air
Quality witness is Matt Layton. I believe he
needs to be sworn.

HEARING OFFICER FAY: Please swear the
witness.

(Thereupon, Matthew Layton was, by the
Reporter, sworn to tell the truth,
the truth, and nothing but the truth.)

TESTIMONY OF

MATTHEW LAYTON
called as a witness on behalf of the Commission
Staff, having first been duly sworn, was examined
and testified as follows:

DIRECT EXAMINATION

BY MS. HOLMES:

Q Good morning, Mr. Layton.

A Good morning.

Q Do you have in front of you a copy of
the Air Quality portion of Exhibit 66?

A I do.

Q Was this Air Quality testimony prepared
by you?

A It was.

Q Do you have any changes or corrections
to this testimony?
A    I do.

MS. HOLMES: Shall we distribute those.

MR. BUELL: I have distributed, or left
a copy of the Errata with the various parties. If
anyone wants an additional copy, or doesn't have a
copy, please let me know.

MS. HOLMES: Perhaps we should just have
that marked as an exhibit, then.

HEARING OFFICER FAY: That will be
marked as Exhibit 71.

(Thereupon, Exhibit 71 was marked
for identification.)

MS. HOLMES: Thank you.

BY MS. HOLMES:

Q    And with the changes identified in
Exhibit 71, are the facts contained in your
testimony true and correct?

A    Yes, they are.

Q    And do the opinions contained in your
testimony represent your best professional
judgment?

A    Yes, they do.

MS. HOLMES: At this point I'd like to
move that Exhibit 66, or the Air Quality portion
of Exhibit 66, and Exhibit 71 be entered into
HEARING OFFICER FAY: Any objection?

MR. MAXIM: No objection.

HEARING OFFICER FAY: So ordered.

(Thereupon, the Air Quality portion of Exhibit 66, and Exhibit 71 were received into evidence.)

BY MS. HOLMES:

Q Mr. Layton, would you please summarize your testimony?

A I -- I reviewed the various submittals and analyses that the Applicant prepared. I reviewed the Preliminary Determination of Compliance and the Final Determination of Compliance in preparing my Final Staff Assessment.

The project, as defined, will build four new combustion turbines at the Moss Landing Power Plant site. Concurrently, the Applicant is also installing selective catalytic reduction on Boilers 6 and 7, which will reduce those emissions for NOx, as well, and they also are prohibited from firing fuel oil in the future. They are also carrying out some demolition activities, removing the fuel oil tanks, and installing a few other components to the modernized facility.
The Applicant used some of the emission reductions from the retrofit of 6 and 7 with SCR to offset some of the emission increases occurring at the combustion turbines. They also went out and procured in the area other banked ERCs, Emission Reduction Credits, to offset the emissions from the combustion turbines.

They also are proposing to increase the operation of 6 and 7 above historical standards, and they are using the offsets that they procure to offset those increases in emissions, as well. They're offsetting the emission increases of NOx, SOx, VOC, and PM10. They are not buying any offsets for any increases in carbon monoxide, CO, but they have modeled any impacts from CO emissions from the combustion turbines and 6 and 7, and found that there are no impacts and no need for offsets for those particular -- for that pollutant.

In conjunction with buying offsets, they have also modeled the emissions from the combustion turbine, and the retrofit 6 and 7 boilers, and there are no impacts from those emissions either before the retrofit of 6 and 7 or -- and after the retrofit of 6 and 7, with the
addition of the new combustion turbines. There is, however, a contribution from the facility to an existing PM10 violation of the State PM10 -- 24 hour PM10 standard. Given the regional nature of PM10, we believe that the offsets provided for particulate matter will mitigate that particular contribution of the project to this existing violation.

That summarizes the combustion turbine aspect of the project.

Regarding AQ-54, the construction emissions and construction impacts, I agree with Mr. Rubenstein that the -- the maximums that occur from the construction activities do occur onsite or close to the fence line. However, there are other impacts further away from the project. They're not the maximums, but the construction activities do contribute to PM10 levels in the area.

Our analysis of the ambient air quality also I -- I agree that Mr. -- I agree with Mr. Rubenstein that the ambient air quality is relatively clean in the area. It's a coastal site, there's not much industry in the area. But the levels are close to the -- at or right above
the state standard for PM10. So any contribution, even if it's a small contribution, still does contribute to this existing violation.

So we are recommending that the oxidizing soot filters be used as a feasible mitigation measure to reduce that down to a level of insignificance, because we believe it's feasible and reasonable, and we would like to see it implemented.

We had also looked at using this reduced sulfur fuel. I think, as Gary alluded, the oxidizing catalysts are more compatible with low sulfur fuel. Low sulfur fuel also offers some PM10 reductions. However, the -- this low sulfur fuel, as we call them, 50 ppm or less sulfur diesel fuel, is going to be available sometime this summer. But I understand the hesitancy of the Applicant to depend on something that may or may not occur. So we have agreed to delete that.

I would agree to delete the use of the oxidizing catalyst because of the sulfur issue. My understanding of sulfur and diesel in California, the standard is 500 parts per million or less. Most -- the average sulfur content of diesel burned throughout the state is about 130.
There could be occurrences where you could get dirtier sulfur or dirtier diesel, diesel that might approach 500 parts per million. I think that could cause some problems with an oxidizing catalyst.

The average of 130 might be appropriate with an oxidizing catalyst, but you're not always guaranteed of getting that average. The state is working to introduce lower sulfur diesel, hence this potential availability of this 50 ppm or less sulfur. But it's not there yet, and so we're willing to delete that particular requirement, the 50 ppm or less sulfur, and also we are willing to delete the requirement of the oxidizing catalyst.

But we think that the oxidizing soot filters do provide significant PM10 reduction, and that's what we're looking at here. We do not have any other violations of the criteria pollutant levels from construction, so we would like to see the oxidizing soot filters left in AQ-54 as it's written, with the deletion of oxidizing catalysts.

One more comment about the maximums. Modeling is very conservative. I think the Applicant has done a really good job in trying to model construction activities. However,
construction activities are very dynamic. When you do a model, you assume that basically the sources are coming from somewhere onsite, but, in fact, there are concentrated -- or concentrations of activity, say at one portion of the site's being focused on, and there was a lot of equipment and dust and emissions coming from that particular portion of the site. There can be concentrated pollutant coming from that particular area. The model may have not captured that in trying to kind of average all the emissions across the site.

So I think the -- the oxidizing soot filters will provide some mitigation for this PM10 emissions, and the PM10 impacts from construction.

Q Does that conclude your summary?

A It does.

MS. HOLMES: Mr. Layton is available for cross examination.

HEARING OFFICER FAY: Does the Applicant have any questions?

MR. MAXIM: Just one question.

CROSS EXAMINATION

BY MR. MAXIM:

Q Mr. Layton, the soot filters that you spoke of, those were field tested, as Mr.
Rubenstein indicated, at Avila Beach?

A They have been used at Avila Beach, yes.

Q And that's the only field test that

you're aware of?

A That's the only field test that I'm

aware of.

MR. MAXIM: Thank you. Nothing further.

PRESIDING MEMBER KEESE: Mr. Layton, I'm

-- I'm glad that we don't have to discuss very

much these oxidizing catalysts. You know, I am

aware that a significant amount of the diesel

being sold in California -- that's manufactured in

California now is -- probably does meet the 50

standard. But your point that you can't rely on

it being that is also true.

As I -- as I recall the federal

standards that are being proposed for sulfur, and

then for engines to operate on the sulfur, we're

talking about giving parties a significant number

of years for compliance. And -- and that, I

think, is probably where I would tend to come

from, that -- that as we make these improvements,

perhaps if the -- the economic costs of advancing

the timeline well beyond what -- a normal expected

timeline makes it not that important to do.
So I'll -- with that -- with that said, would you -- and assuming that frame of reference, tell me about the oxidizing soot filter. Are we ahead of our time, or do you think that if it's a standard, that -- that it will be on every piece of equipment shortly?

MR. LAYTON: I don't think it'll be on every piece of equipment shortly. I think it has appropriate applications, but there's a huge fleet out there of equipment that will probably not be retrofit with oxidizing soot filters. The cost could be prohibitive.

But for a concentrated activity like a construction site, I think there are appropriate applications. You have a captive fleet, so to speak, and you can use a limited number of maintenance personnel trained to install these things and maintain them properly. Trying to get them broadly distributed into the whole -- the general population, I think would be a much more difficult undertaking.

PRESIDING MEMBER KEESE: But -- so you're suggesting it's appropriate to a construction fleet.

MR. LAYTON: I think -- yes, I think
there are some advantages to using it at a captive site, so to speak, because you can concentrate on determining, number one, if they work correctly, fixing them if they don't, or not using them if they don't work correctly. I think there are some concerns that these things are not appropriate for all -- for all applications, but, again, the construction site provides an opportunity to figure that out, where if you just require -- if you were trying to, say, retrofit all diesel equipment, general population had a blanket requirement, I think you would cause a lot of problems.

PRESIDING MEMBER KEESE: Do you have an estimate of the cost per piece of equipment for doing this?

MR. LAYTON: These -- these catalysts can be expensive, up to $10,000 apiece -- these oxidizing soot filters, excuse me. They are -- can be temporary in nature. They can be installed and then be taken off later, and used on a different piece of equipment. I think there will be some owners of equipment that do not want the oxidizing soot filter permanently installed on their equipment. They will take it off after the
construction. So they -- they are not -- they're not disposable items. You would use it, and either keep it and realize the benefit of the oxidizing soot filter, or get to use it on the next piece of equipment at the next project site, construction site.

PRESIDING MEMBER KEESE: Thank you.

HEARING OFFICER FAY: Mr. Layton, is the -- is really the sole reason for your agreeing with the Applicant's criticism of the oxidizing catalyst that -- that you think the low sulfur fuel will not be available in the timeframe for construction of this project?

MR. LAYTON: Yes.

HEARING OFFICER FAY: So if the fuel was available, do you think that is a reasonable fallback, the use of -- or the requirement to use an oxidizing catalyst? Fallback from a situation where the soot filter could not be applied.

MR. LAYTON: I -- I am concerned about PM10 from construction activities. The oxidizing catalyst does produce PM10. The use of low sulfur diesel, the 50 ppm sulfur diesel, also will reduce particulate matter.

So if low sulfur diesel was available, I
would still require then the oxidizing catalyst.
Because I think any reductions of PM10 emissions
would be appropriate and useful to mitigating the
impacts.

HEARING OFFICER FAY: And how would you
determine, as the Chairman indicated, there's -- I
guess there's a sort of a long timeline on phasing
this low sulfur fuel in. How will you determine
when it is available, commercially available?

MR. LAYTON: Well, from what we
understand it's not necessarily available in the
Bay Area. We believe Equilon, which I guess is
the Shell/Mobil merged company, will have it this
summer at their Martinez facility. I don't think
the transportation costs from Martinez are
unreasonable. But since it's not available yet,
as far as I know it is not available in the Bay
Area, I don't think transporting low sulfur diesel
from southern California is appropriate or cost
effective.

HEARING OFFICER FAY: So at some point,
perhaps as you're reviewing some future project,
you will determine how many retail outlets carry
this, and how close it is to a project, and that
would influence your analysis of the
appropriateness of the oxidizing catalyst?

MR. LAYTON: Yes.

HEARING OFFICER FAY: All right. Thank you.

Any redirect?

MS. HOLMES: None.

HEARING OFFICER FAY: All right. Thank you very much, Mr. Layton. We appreciate your testimony.

MR. LAYTON: Thank you.

MR. MAXIM: With the Staff's permission, and the Committee's permission, We would like an opportunity to recall our Air Quality witness to address some of the concerns brought about by Staff's testimony.

HEARING OFFICER FAY: Any objection to that?

MS. HOLMES: None.

HEARING OFFICER FAY: Why don't you go ahead.

MR. MAXIM: I will note that Mr. Rubenstein was previously sworn, and the witness is still under oath.
TESTIMONY OF

GARY RUBENSTEIN

recalled as a witness on behalf of the Applicant,
having previously been duly sworn, was examined
and testified further, as follows:

DIRECT EXAMINATION

BY MR. MAXIM:

Q    Mr. Rubenstein, were you present during
the -- Mr. Layton's examination?

A    Yes, I was.

Q    And did you have a time to reflect upon
that examination?

A    Yes, I did.

Q    And do you have any comments or concerns
concerning the -- his testimony?

A    Yes, just very briefly.

Commissioner Keese, you had asked Matt
about the relationship between this mitigation
measure and the fuels and control technologies
that are being proposed by the U.S. EPA for all
heavy-duty diesel equipment by, I believe, 2007.
In fact, this -- this combination of oxidizing
catalysts and oxidizing soot filters, and the
ultra-low sulfur diesel fuel are the key elements
of the EPA proposal. And -- and I view this
measure, in particular, as being on the leading edge of that.

Frankly, my first choice of all of these for field use would be the ultra-low sulfur diesel fuel. That doesn't require any modifications to the engine and provides for real intermediate benefits. As we had indicated at the Air Quality workshop for this project, if that fuel was available we were prepared to accept a requirement that it be used. And both we and the Staff worked diligently to see whether it was available, and regrettably it is not.

The oxidizing soot filter is beyond the stage of being a laboratory experiment, but I would still categorize it as field experimental, which is to say there are indications that it's worked. It involves some difficult commercial aspects because it requires an entity that is managing a construction project, such as Duke, to install equipment, emission control equipment on -- on a piece of operating equipment that they don't own. And so there are some fairly substantial commercial issues that would have to be addressed in this kind of a field experiment.

My -- my concerns about the feasibility
of the technology once it's properly designed and
installed are probably not as great, but it's
getting to that point of making sure that you've
got a good match between the oxidizing soot filter
and the equipment, that you have knowledgeable
people in the field who know how to operate and
maintain it is probably the bigger key.

Lastly, the oxidizing soot filters, and
I think the Commission Staff will agree, really
only operate effectively on equipment that's used
and maintained at a sustained load for a regular
period of time. That's -- that's one of the key
problems with introducing this technology in a
heavy-duty truck fleet, is that the oxidizing soot
filters can only adsorb particulates for a certain
length of time, and they need to be regenerated.
And the regeneration occurs by obtaining heat from
the engine exhaust. If that heat isn't available
because the engine isn't operated at load, the
soot filters will not regenerate.

That's, as you can imagine, a very
complicated process for a truck to make sure that
everything works right, and that's why EPA is
providing such a long lead time for truck
manufacturers to do that. Clearly, the -- the
evidence I've -- I've heard tell of at Avila Beach indicates that, at least on three pieces of equipment that they identified, it worked well. And I think that holds a lot of promise for the technology. One questions whether the specific requirement in AQ-54 is sort of too big a next step, if you will, this early in the stage.

So I just wanted to add that perspective about the technology. It is clearly the kind of technology that people are looking at using for controlling particulate emissions from trucks. It has a -- certainly a lot of potential. I think there are just a lot of issues associated with field implementation this early on. And, again, given the specific facts of what the impacts are from this project, we're questioning the appropriateness of imposing that mitigation measure at this point.

Q    And does that conclude your comments on Staff's testimony?

A    Yes, it does.

MR. RUBENSTEIN: With that, the witness is open for questions by Staff and Committee.

HEARING OFFICER FAY: Any cross?

MS. HOLMES: I have no questions.
PRESIDING MEMBER KEESE: Mr. Layton, could I ask you a question.

MR. LAYTON: Yes.

PRESIDING MEMBER KEESE: Are you aware of this -- this equipment being required in any other construction, other than power plants, by the Energy Commission?

MR. LAYTON: I'm -- no.

PRESIDING MEMBER KEESE: I'm -- I'm thinking of an example. I happen to live down the street in an apartment building that is surrounded by two million square feet of state construction.

(Laughter.)

PRESIDING MEMBER KEESE: Would you suspect that they were using this technology on those pieces of equipment?

MR. LAYTON: I would suspect they are not using this technology.

PRESIDING MEMBER KEESE: So -- so we're -- we are ahead of the curve, a little bit. I mean, we're -- the curve has started.

MR. LAYTON: Staff is aware that we are planning to require something that is new. We have worded the condition to allow some latitude. We would like to see what is called a suitability
report. We would like to work with the Applicant and equipment owners to determine which equipment can use this -- this control technology, and where not appropriate, not use it.

We do not want to damage equipment. We do not want to limit the ability of the equipment to operate properly. I think that would be unsafe. But where appropriate, we would like to see the oxidizing soot filters used. And so the suitability report, and then subsequent reports.

If the equipment is installed and doesn't work, then there are -- there is recourse to have it removed. Without -- without having to come to the Commission. They can discuss this after the fact. So we're not trying to delay construction, either.

PRESIDING MEMBER KEESE: Okay. Is -- and you're -- you're aware, or -- or we're aware that this condition has been placed on at least one other siting project, and is being considered for another. Is that what I understood?

MR. LAYTON: It was adopted in the Sunrise decision, and I believe the same condition is up for adoption, was proposed for the Elk Hills. I'm not sure what the status of Elk Hills is. And we also did actually require oxidizing
catalysts for the High Desert Project, as well.

PRESIDING MEMBER KEESE: Thank you.

That's --

HEARING OFFICER FAY: Mr. Rubenstein, I have some questions.

You mentioned that the three main points of the EPA diesel mitigation approach is the low sulfur fuel, the oxidizing soot filter, and the oxidation catalyst. And you didn't get to the oxidation catalyst. Does it have some unusual features or wrinkles that need to be worked out, or is that strictly limited to the unavailability of this ultra-low sulfur fuel?

MR. RUBENSTEIN: It is -- in terms of technical feasibility, it is, I think, strictly limited to the availability of the ultra-low sulfur diesel fuel. The other side of the coin, and I don't expect to see oxidizing catalysts used in the truck fleet to a great extent, is because they're designed to control the wrong problem. They're designed to control hydrocarbon and CO emissions, and diesel engines are inherently low in emissions of those pollutants. They provide an incidental benefit in terms of particulate control.
And so I would expect to see those used only in cases where a truck manufacturer is able to get very close to the particulate standard, and needs a little help getting below the standard. In cases where a substantial amount of control is required, I would expect that the soot filters, or some technology like that, is what would be used.

So in the long term, I see the -- the oxidizing catalyst for diesel engines of being fairly limited, in terms of its utility.

HEARING OFFICER FAY: So is this not really parallel to the gasoline engine catalysts?

MR. RUBENSTEIN: It's -- it's an attempt to apply the same type of technology. Gasoline engines historically and inherently have higher levels of hydrocarbon and carbon monoxide emissions because of the -- the differences in the -- the nature of the combustion of the fuel, the fact that you can't burn the fuel at a very high compression ratio. Diesel engines have much higher compression ratios, they have inherently extremely low uncontrolled hydrocarbon emissions, and extremely low carbon monoxide emissions.

An example of that is -- is when the automotive emissions standards in the late 1970s
first required the use of catalytic converters on
cars to meet those very low standards. Diesel
engines were able to meet exactly the same
standards without any catalytic converters.

HEARING OFFICER FAY: Thank you. Can
you give us some recommendation on how you think
the Commission should determine if the ultra-low
sulfur fuel is available? And how would you
define availability?

MR. RUBENSTEIN: I guess I would -- I
would define availability as indicating that there
is at least one refiner within the region that
supplies fuel to the particular site -- nd that's
to get at the Northern California/Southern
California issue that Matt referred to -- that
offered this fuel for sale through its regular
wholesale network, at a price that was within a
certain percentage of the price of competitive
diesel fuel. Or, alternatively, that this fuel
was available from at least two refiners, at which
point I don't think a price criteria would be
relevant, because then you would have competition
that should take care of any price inequities.

So the key elements are that it has to
be readily available through the refiners, just a
wholesale distribution network. I don't expect to
see this fuel in a retail basis for some time.
And these construction projects would normally buy
from jobbers rather than from the local gas
station.

Second, there either has to be at least
one refiner available with some caveat on the
price difference, or that it would have to be
available from at least two refiners, so that
there's some assurance of competition.

HEARING OFFICER FAY: Thank you. That's
very helpful.

All right. Anything further, then?

MS. BAKKER: I just wanted to clarify
what the ultra-low diesel criterion was, because I
didn't recall that it was 50 parts per million
that EPA was talking about.

MR. RUBENSTEIN: I believe it's -- it's
either 50 parts per million, or perhaps -- or
perhaps lower. But it's on that order of
magnitude. The --

MS. BAKKER: I -- I thought it was lower
than that. But --

PRESIDING MEMBER KEESE: EPA is talking

--
MS. BAKKER: -- just for clarification,
then, that the response that you gave to Mr. Fay
was related to 50 parts per million. That -- that
the availability of a fuel at 50 parts per million
was the response you were giving, rather than
ultra-low emission.

MR. RUBENSTEIN: Actually, my --


MR. RUBENSTEIN: -- my response to Mr. Fay about how to define availability would apply
to -- to any level that you were going to set,
whether it was 50 or --

MS. BAKKER: Well, his -- the reason I
brought that up is he used the term ultra-low.
You have used the term relative to EPA's standard,
and I just wanted to clarify that the -- or that
Staff's figure was 50 parts per million. And that
-- that's the potential condition we've got here,
and that's -- I just wanted to clarify that we
were talking about 50 parts per million.

HEARING OFFICER FAY: Is -- is this a
difference, or is the ultra-low sulfur a generic
term that includes --

PRESIDING MEMBER KESEE: Mr. Fay, I -- I
believe that the federal proposal, the EPA
proposal is 15 parts per million, where --

MS. BAKKER: That's what I thought, too.

PRESIDING MEMBER KEESE: -- where other entities, including, I believe, California, to date, have -- have been thinking in terms of 50.

MS. BAKKER: Right.

PRESIDING MEMBER KEESE: So there's a -- it's a --

MS. BAKKER: Huge --

PRESIDING MEMBER KEESE: -- it's a good clarifying point that --

MR. RUBENSTEIN: Yes. I apologize for the confusion.

HEARING OFFICER FAY: So this -- in all likelihood, this will be a continuing process to -- to reach first the 50, and then lower levels.

MR. RUBENSTEIN: That's right.

HEARING OFFICER FAY: All right. Thank you.

Anything further, any more questions for Mr. Rubenstein? Thank you very much for that clarification.

All right. Mr. Layton, Mr. Rubenstein, thank you for your testimony. You're both excused.
And I ask the Applicant if they're ready to move on to offering your testimony on Land Use.

MR. ELLISON: Applicant's witness on Land Use issues is Mr. Kirk Marckwald.

Mr. Buell has suggested that we take a brief recess before we take up the Land Use issues, with the Committee's permission. That's okay with us.

HEARING OFFICER FAY: Certainly. How much time do you need? Give us an idea. Fifteen minutes?

MR. ELLISON: That's fine.

HEARING OFFICER FAY: All right. Let's take a 15 minute break.

(Off the record.)

HEARING OFFICER FAY: All right. We'll ask the Applicant if they're ready to proceed with testimony on Land Use.

MR. ELLISON: We are, Mr. Fay. And in the Land Use area, the Energy Commission received a letter from the Coastal Commission this morning, which will be the subject of testimony by both Applicant and Staff. That letter is being distributed to the Committee by Mr. Buell. I would like that identified as the next exhibit in...
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order, which I believe is 72.

HEARING OFFICER FAY: I'm sorry, you

wanted that identified?

MR. ELLISON: Please.

HEARING OFFICER FAY: Exhibit 72 would

be the June 13th, 2000, letter from the Coastal

Commission to Chairman Keese.

(Thereupon, Exhibit 72 was marked

for identification.)

MR. ELLISON: The Applicant's witness on

Land Use is Mr. Kirk Marckwald. Mr. Marckwald

needs to be sworn.

HEARING OFFICER FAY: Please swear the

witness.

(Thereupon, Kirk Marckwald was, by the

Reporter, sworn to tell the truth, the

whole truth, and nothing but the truth.)

TESTIMONY OF

KIRK MARCKWALD

called as a witness on behalf of the Applicant,

being first duly sworn, was examined and testified

as follows:

DIRECT EXAMINATION

BY MR. ELLISON:

Q Mr. Marckwald, could you state and spell
your name for the record?

A  Yes. My name is Kirk Marckwald, M-a-r-
c-k-w-a-l-d.

Q  Where are you employed, and in what
capacity?

A  I'm employed at California Environmental
Associates, a Consulting Firm in California, and I
am the Principal and founder of the firm.

Q  And what is your relationship to the
Moss Landing Power Plant modernization project?

A  I am sponsoring the Land Use chapter of
the AFC.

MR. ELLISON: Okay. Mr. Marckwald's
Land Use testimony is identified in this record as
the Land Use portion of Exhibit 60. It
incorporates prior filings, including the Land Use
portion of the AFC, Exhibit 5, as well as Exhibits
11, 16, 48.

BY MR. ELLISON:

Q  Mr. Marckwald, do you have a copy of
Exhibit 60 before you?

A  I do.

Q  Do you have any changes or corrections
to your testimony?

A  I do not, but my testimony does refer to
some land conditions which I believe that we'll
talk about later on, but no -- no changes to the
testimony.

Q    And was Exhibit 60 prepared by you or at
your direction?

A    Yes, it was.

Q    Are the facts set forth in this exhibit
true and correct, to the best of your knowledge?

A    They are.

Q    And are the opinions contained in this
exhibit your own?

A    They are.

Q    Do you adopt Exhibit 60, the Land Use
portion of Exhibit 60 as your sworn testimony in
this proceeding?

A    I do.

MR. ELLISON:  I'd like to move admission
of Exhibit 60 and all of the exhibits incorporated
by reference therein.

HEARING OFFICER FAY:  Any objection?

MS. HOLMES:  None.

HEARING OFFICER FAY:  So ordered.

(Thereupon, Exhibit 60, and the Land Use
portions of Exhibits 5, 11, 16, and 48
were admitted into evidence.)
BY MR. ELLISON:

Q Mr. Marckwald, could you briefly summarize the Land Use issues that you reviewed in your testimony, and state your conclusions as to those issues?

A Yes. We had reviewed all the applicable federal, state and local laws, ordinances, regulations and standards. These are further identified in my testimony as Table 1. And it is my conclusion that the project would be compatible with all existing and planned land uses, for the following reasons.

The site is an existing coastal dependent industrial site. Both the local Coastal Plan that has been certified by the California Coastal Commission, as well as the California Coastal Act, encourage facility expansion within existing sites; that the project would not disrupt or divide the nature of the community, nor restrict existing or planned land uses. With mitigations, the project would not cause any significant impacts to nearby land uses. And, finally, the project would not cause any cumulative land use impacts.

Q Mr. Marckwald, have you reviewed the
proposed conditions of certification set forth in
the Final Staff Assessment with regard to Land
Use?

A    I have.
Q    And leaving aside for the moment the
Coastal Commission letter, Exhibit 72, are those
conditions of certification in the Final Staff
Assessment acceptable?

A    They are.
Q    Okay. Now, with respect to Exhibit 72,
the Coastal Commission letter, have you had an
opportunity to review that?

A    I have.
Q    The Coastal Commission letter suggests
some changes to the Staff's proposed conditions of
certification, does it not?

A    It does.
Q    And can you comment on the acceptability
of the changes proposed by the Coastal Commission?

A    With some minor modifications, the
proposed changes would be acceptable.
Q    Okay. In a moment I'm going to ask you
to describe specifically the minor modifications.
But may I first direct your attention to the last
sentence on the first page of the letter, which
states, "With these changes, the Coastal Commission believes the proposed project will be carried out consistent with the public access policies of the Coastal Act." Do you see that?

A I do see that.

Q And do you concur with that conclusion?

A I do concur with that conclusion.

Q Okay. Now, could you describe -- let me back up. Have you discussed the proposed changes that the Coastal Commission recommends with the Staff, the Energy Commission Staff?

A I have discussed it with the Energy Commission Staff, and I've also discussed it with the Coastal Commission Staff.

Q Okay. And I take it that you have some slight amendments to the Coastal Commission's proposed changes?

A I do.

Q Could you describe specifically what those changes are for the record, please?

A Yes, I will. The first change to the Coastal Commission's proposed changes in their June 13th letter, would be on Land 2, the second underlying sentence starting at the beginning of it, "In the event that the parties cannot mutually
agree on the" -- insert --

HEARING OFFICER FAY: Excuse me, Mr. Marckwald. Is that page 4 of the letter?

THE WITNESS: Yes. Thank you.

HEARING OFFICER FAY: All right.

THE WITNESS: It's page 4, Condition Land 2, subparagraph 1, the second to the last sentence in the Coastal Commission's proposed changes.

So the first introduction to that sentence would remain the same, and I will read it. "In the event that the parties cannot mutually agree on the" -- insert, "scope of work, or its principal investigator", delete "report recommendations". So that would read, "In the event that the parties cannot mutually agree on the scope of work, or its principal investigator, the CPM", and then continuing as they have proposed it.

The second change is also in Land 2, subparagraph 2, and it's an insertion. After the Coastal Commission's proposed language, and I'll pick up with their language. "The equivalent of one seasonal aide position" -- insert "parentheses, 12 hours per week on an average
annual basis, close parens, for" -- and then
continuing to the end.

And the final proposal at the bottom of
subparagraph 2 is acceptable.

Now, turning to the verification for
Land 2, which is on page 5. Their first proposed
change, it would be acceptable if it read, "within
60 days". And the final change --

HEARING OFFICER FAY: Excuse me. So the
-- how would the --

THE WITNESS: Excuse me -- within -- the
verification, the first bullet point under
verification would read, "Within 60 days after the
start of construction, continuing to the end."

HEARING OFFICER FAY: Thank you.

THE WITNESS: And the final change would
be to insert into the third bullet, under
verification of Land 2, you know, on the third
line, picking up on the second word, "the project
owner shall deliver the $250,000 endowment," --
insert "as well as interest at the rate of eight
percent accrued on the endowment, since the start
of project construction, to the Energy
Commission."

And follows on in the next sentence,
"The Energy Commission will transfer the $250,000" -- insert, "endowment, along with any interest accrued." And then continuing along to the appropriate identity -- appropriate entity.

And with those changes, we will have picked up the thought in Bullet 4, under verification, and I would move to strike the fourth bullet.

I've had a chance to discuss these changes with the Energy Commission Staff, and I believe we are in agreement that these modifications essentially are consistent with the original -- the land condition, and clarifies some minor points, and would be acceptable to the Applicant.

BY MR. ELLISON:

Q Mr. Marckwald, have you also discussed these changes with Coastal Commission Staff?

A I have, and I pointed out what our level of concerns were and why we thought it was important to be more specific around the hours of service and the duties and -- and interest rates, and my impression was that the Coastal Commission Staff person was generally comfortable with those changes.
MR. ELLISON: Okay. That completes Mr. Marckwald's testimony.

HEARING OFFICER FAY: Any questions from Staff?

MS. HOLMES: No questions.

HEARING OFFICER FAY: Mr. Marckwald, on page 3 of your testimony, the nearest cluster of residences located more than one-half mile southwest of the plant. How -- how do you characterize that, is that just a group of houses, or is it a subdivision, or what is that?

MR. MARCKWALD: Mr. Fay, could you --

HEARING OFFICER FAY: I believe it's --

MR. MARCKWALD: My numbering is not on my page.

HEARING OFFICER FAY: Oh, I have page 3, under the heading Land Uses in the Surrounding Area, in the summary of your testimony.

MR. MARCKWALD: Yes. And -- and your question?

HEARING OFFICER FAY: Just that cluster of residences. How would you characterize that, is that a subdivision, or just a few houses?

MR. MARCKWALD: There are -- I wouldn't describe it as a subdivision. It's sort of more
of a -- almost like a strip development of -- just
along the road there, of -- I think there are -- I
would not -- I could look precisely at a map, but
I think it's somewhere in the neighborhood of 10
to 12, 15 houses.

HEARING OFFICER FAY: Okay. Thank you.

And then I had a question on the first
page of Attachment A, your testimony. Your note
regarding Trans 11, condition Trans 11 in the FSA.

As far as you know, has that -- has that
been picked up, your recommendation? Has the
Staff submitted a -- a revision that reflects
that?

MR. MARCKWALD: I'd like to confer with
my Counsel on this, because I think that it's
beyond my individual testimony.

HEARING OFFICER FAY: I just -- I'm
looking for some precise language that the parties
have agreed to, and if any exists.

MR. ELLISON: I believe we have
reconciled the concern about the relationship with
the Land Use conditions to the Transportation
conditions, yes.

HEARING OFFICER FAY: Okay. Good.

Thank you.
That's all I have, then. Thank you, Mr. Marckwald.

MR. MARCKWALD: You're welcome.

HEARING OFFICER FAY: Staff?

MS. HOLMES: Staff's witness on Land Use is Eric Knight. I believe he needs to be sworn.

HEARING OFFICER FAY: Please swear the witness.

(Thereupon, Eric Knight was, by the Reporter, sworn to tell the truth, the whole truth, and nothing but the truth.)

TESTIMONY OF

ERIC KNIGHT called as a witness on behalf of the Commission Staff, having first been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MS. HOLMES:

Q Mr. Knight, do you have a copy of the Land Use portion of what has been identified as Exhibit 66, in front of you?

A Is that my testimony?

Q Yes, that's your testimony.

A Yes. Yes, I do.

Q Was this testimony prepared by you?
A    Yes, it was.
Q    Do you have any changes or corrections
to your testimony?
A    Yes, I do. Conditions of certification,
Land 4 and 5, I've got some minor changes. Those
are --
Q    Why don't you read those into the
record.
A    -- page 111, page 111.
Land 4, the verification, I'd like that
to read, "at least 30 days prior to the start of
construction", and strike "the project", and
insert, "any permanent parking".
Q    So it would read, "at least 30 days
prior to the start of construction of any
permanent parking"?
A    Uh-huh. Yes. And then the second
change, under the verification of Land 5, should
read, "at least 30 days prior to the" -- strike
"the start of construction of the project", and
insert, "the installation of any temporary
signage."
That's -- that's all.
Q    Those are you -- all the changes that
you have?
Given those changes, are the facts contained in your testimony true and correct to the best of your knowledge?

A  Yes, they are.

Q  And do the opinions contained in your testimony represent your best professional judgment?

A  Yes, they do.

MS. HOLMES:  At this point I'd like to move that the Land Use portion of Exhibit 66 be entered into the record.

HEARING OFFICER FAY:  Any objection?

MR. ELLISON:  No objection.

HEARING OFFICER FAY:  So ordered.

(Thereupon, the Land Use portion of Exhibit 66 was received into evidence.)

BY MS. HOLMES:

Q  Mr. Knight, would you please give a brief summary of your testimony.

A  Sure. The purpose of Staff's Land Use analysis is to determine if a project would comply with all applicable local land use laws, ordinances, and regulations, and determine if the project will be compatible with existing and planned land uses in the area.
I concluded that the project would comply with all applicable land use laws, ordinances, and regulations. The project is consistent with the current North County -- North County General Plan and zoning definition of the site, which are both general industrial -- or, heavy industrial, excuse me.

With mitigation, the project would be consistent with the goals and policies of Monterey County local coastal program -- or would -- would be consistent with the goals and policies of the Monterey County General Plan and local coastal program. Excuse me.

In general, the Monterey County local coastal program encourages onsite expansion of existing coastal dependent industrial facilities, such as the existing Moss Landing Power Plant, consistent with maintaining the environmental quality and character of the Moss Landing community, and its natural resources. The project would be consistent with this planning objective.

The project would be compatible with existing and planned land uses because, one, the project is compatible with the heavy industrial character of the site. The project is compatible
with the industrial character of the immediate
surrounding land uses, and the project would not
disrupt or divide the physical arrangement of
established communities, since it would occur
entirely on the site of the existing Moss Landing
Power Plant.

The project -- for the same reason, the
project would not preclude or unduly restrict
existing or planned land uses. And with
mitigation, operation of the project would not
cause any significant adverse noise, dust, public
health hazard or nuisance, traffic or visual
impacts on nearby land uses. Nor would the
project contribute to -- contribute substantially
to any cumulative land use impacts.

At the -- at the time of the PSA, when
it was published, there were two outstanding land
use issues, which have been resolved at this
point. The first one was the Monterey County
zoning ordinance restricts height of structures to
35 feet, but there is an exception to that height
restriction, and I had asked the Applicant to
provide information to the Energy Commission and
Monterey County demonstrating that the project
would comply with that exception -- or that
exception would be applicable to this project.

And they've done that.

On April 17th of this year, the Applicant docketed information that showed that the project wouldn't exceed the allowable cubicle contents of the site, and so the -- the structures up to 145 feet will be allowed. I had spoken with the zoning administrator of the county, who indicated that that would be the exception they would apply, if that project were under their jurisdiction.

Then the other, I think more important issue that was unresolved at the time was as a part of the AFC, Duke Energy didn't include a provision for public access to coastal resources. There is a provision in the Warren-Alquist Act -- I should know this by heart by now -- Section 25529, which requires projects within the coastal zone to dedicate an area for public access and use.

There's also a provision in the local coastal program for providing easements to proposed trails that are within the vicinity of a proposed project in the coastal zone. So on March 24th, 2000, Staff held a workshop with Duke
Energy, Monterey County, and representatives of
the Coastal Commission, to create a plan for
developing public access to coastal resources in
-- in the vicinity of the Moss Landing Power Plant
project. And at that workshop, the Applicant
agreed to provide the following for public access
in the vicinity of the project.

One, they would dedicate an easement and
funding for the planning, design, and construction
of a boardwalk to and along Moss Landing Beach.
The second item was they would provide funding for
an environmental assessment of the coastal --
coastal access in the context of an Elkhorn Slough
circle trail, and would provide funding for the
ongoing maintenance of that trail.

The third item was dedication of an
easement within Duke's ownership westerly of
Highway One for this -- for the proposed trail on
the Monterey County local coastal program trails
map.

And those -- those public access
programs are captured in Staff's conditions of
certification, Land 1, 2, and 3.

Q Mr. Knight, have you had a change to
review Exhibit 72, which is the letter to Chairman
Keese from the Coastal Commission?

A Yes, I have.

Q And have you had a chance to discuss the changes that were proposed by the Applicant's witness to the conditions in the letter?

A Yes, I have.

Q And do you agree that those changes are appropriate?

A I do.

Q And have you had a chance to discuss those changes with Coastal Commission Staff?

A I have.

Q And what did they tell you?

A They said that they would not object to the changes.

MS. HOLMES: Thank you. I think those the questions that I had, so Mr. Knight is available for cross examination.

HEARING OFFICER FAY: Does the Applicant have any questions of the witness?

MR. ELLISON: No, we don't.

HEARING OFFICER FAY: Mr. Knight, does your final evaluation or recommendation, is it affected by the outcome of the -- the mitigation for Biological Resources and Soil and Water
Resources that have been worked on, and I understand it's been achieved recently?

MR. KNIGHT: Yes, that's correct.

HEARING OFFICER FAY: So you're familiar with that?

MR. KNIGHT: I've -- I've spoken with Staff's experts on both biology and --

HEARING OFFICER FAY: Does it --

MR. KNIGHT: -- and Water.

HEARING OFFICER FAY: Does it affect your final bottom line recommendation?

MR. KNIGHT: Yeah, at the -- at the time of the PSA I believe my conclusion was that the project was consistent with the planning objective of encouraging onsite expansion, but that it be done in a manner that maintains the environmental quality and character of the Moss Landing community, and that was the outstanding issue of Biological and Water impacts. So at that time I couldn't come to a final conclusion that the project was -- would comply with all applicable LORS.

But at this time, based on the discussions with Staff, I believe I can make that recommendation. As they pertain to the -- the
LORS that I have laid out in the Land Use section. The policies and goals of both the general plan, the -- the local coastal program.

HEARING OFFICER FAY: I think that's all I have, then.

Thank you very much.

That, I believe, concludes our testimony on Land Use and Air Quality. Anything further, Mr. Ellison?

MR. ELLISON: Yes, we do have one minor thing. Mr. Marckwald has had the opportunity to count the cluster of houses and has a more precise answer, if you'll indulge us for one moment.

HEARING OFFICER FAY: Thanks.

MR. MARCKWALD: I'm not -- I believe that it's closer to 30, by my eyeball of the aerial photograph. We can provide you a more precise number, if you would like to --

HEARING OFFICER FAY: I think that's fine.

MR. MARCKWALD: Okay.

HEARING OFFICER FAY: This is -- if you feel it's an adequate photograph that you've relied on for your evaluation.

MR. MARCKWALD: I do.
HEARING OFFICER FAY: Thank you very much for that clarification.

Anything further, then, before we adjourn?

I hear no indication, so we will see everybody on Tuesday, at 9:00 a.m., down at the power plant in Moss Landing. And we're adjourned. (Thereupon, the Evidentiary Hearing was concluded at 11:10 a.m.)
CERTIFICATE OF REPORTER

I, DEBI BAKER, an Electronic Reporter, do hereby certify that I am a disinterested person herein' that I recorded the foregoing California Energy Commission Evidentiary 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 Evidentiary Hearing, nor in any way interested in the outcome of said Hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this 23rd day of June, 2000.

DEBI BAKER

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