

EVIDENTIARY HEARING
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

DOCKET	
08-AFC-10	
DATE	JAN 28 2010
RECD.	FEB 17 2010

In the Matter of:)
Application for Certification)
for the Lodi Energy Center)
Northern California)
Power Agency)
-----)

Docket No. 08-AFC-10

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

THURSDAY, JANUARY 28, 2010

9:30 a.m.

ORIGINAL

Reported by:
Ramona Cota, CERT*00478
Contract No. 170-07-001

COMMITTEE MEMBERS PRESENT

Karen Douglas, Chairman and Presiding Member

Jeffrey D. Byron, Associate Member

HEARING OFFICER, ADVISORS PRESENT

Kenneth Celli, Hearing Officer

Kristy Chew, Advisor to Commissioner Byron

Galen Lemei, Advisor to Commissioner Douglas

STAFF AND CONSULTANTS PRESENT

RoseMary Avalos

Brewster Birdsall

Rod Jones

Melanie Moultry, Staff Counsel

PUBLIC ADVISER

Jennifer Jennings

APPLICANT

Scott Galati, Attorney

Robert Gladden, Attorney

Galati and Beck

Ed Warner

Northern California Power Agency

Jeffrey D. Adkins

Sierra Research

ALSO PRESENT

Rupi Gill, San Joaquin Valley Air Pollution
Control District (SJVAPCD), (via telephone)

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P R O C E E D I N G S

10:00 a.m.

HEARING OFFICER CELLI: Okay, we are back on the record then. Good morning everyone, sorry for the delay. I had just finished -- actually we have no record at all, is that the case, Ramona, we have to start from the beginning?

THE REPORTER: (Nodded affirmatively.)

HEARING OFFICER CELLI: Okay. We don't have the introductions and all that.

The Committee is Chairman Douglas, Commissioner Byron. Commissioner Douglas' advisor is Galen Lemei, Commissioner Byron's advisor is Kristy Chew. I am Ken Celli, the Hearing Advisor. The staff is represented by Melanie Moultry and the project manager is Rod Jones.

Who is present for the applicant is Scott Galati and Bob Gladden, attorneys, with Ed Warner as the project manager for Lodi Energy Center.

And on the phone we have Robbie Glenn. Are you still there?

MS. AVALOS: Rupi Gill.

HEARING OFFICER CELLI: I'm sorry, Rupi Gill. Can you type that in.

1 MS. AVALOS: It is typed in.

2 MR. GILL: Yeah, I'm here.

3 HEARING OFFICER CELLI: Okay, great,
4 thank you. Thanks for hanging in there.

5 Now previously we had an evidentiary
6 hearing. This evidentiary hearing was noticed on
7 Thursday, January 7, 2010 for the limited purpose
8 of taking in evidence on Air Quality and also for
9 clarification of one condition in Cultural, today.

10 Applicant has previously marked for
11 identification Air Quality Exhibits 1, 2, 5, 6,
12 10, 11, 12, 17, 18, 19, 20, 22, 25, 30, 34, 36,
13 41, 45, 46, 47 and 48 as relevant to Air Quality.
14 We will need the applicant to state on the record
15 what those exhibits are, please.

16 MR. GALATI: Sure. Scott Galati for
17 NCPA.

18 Exhibit 1 is the Application for
19 Certification. And the portions that are relevant
20 to Air Quality are the Air Quality section and all
21 the appendices.

22 Exhibit 2 is Table Data Response 71-1.
23 It was cooling tower parameters that were provided
24 to the Energy Commission in order to support the
25 cooling tower plume modeling.

1 Exhibit 5 was a fogging frequency curve.
2 This was also submitted to the Energy Commission
3 in order for them to do their plume analysis on
4 the cooling tower.

5 Exhibit 6 was NCPA's comments on the
6 Final Determination of Compliance relevant to Air
7 Quality.

8 Exhibit 10 was NCPA's comments on the
9 staff assessment, those portions specifically
10 related to air quality.

11 Exhibit 11 was San Joaquin Valley
12 Unified Air Pollution Control District's Final
13 Determination of Compliance.

14 Exhibit 12 was NCPA's withdrawal of PSD
15 permit.

16 Exhibit 17 was NCPA's Lodi Energy Center
17 BACT determination. And specifically our limit
18 for CO with a letter that described that we were
19 taking a lower limit from CO.

20 Exhibit 18 was our supplemental air
21 quality modeling files for a Supplement D that was
22 filed that slightly modified the project.

23 Exhibit 19 was also changes to the
24 equipment in the project fence line that was
25 related to some revisions included in Supplement

1 D.

2 Exhibit 20 were comments from EPA Region
3 9 on the Lodi Energy Center Preliminary
4 Determination of Compliance.

5 Exhibit 22 was NCPA's comments on the
6 Preliminary Determination of Compliance.

7 Exhibit 25 is actually the Preliminary
8 Determination of Compliance.

9 Exhibit 29 was specific responses to
10 Data Response Set 3. We responded to inquiries at
11 the staff workshop and we numbered those 3 through
12 27. Those were related to Air Quality.

13 Exhibit 34 was NCPA's Data Response Set
14 2. This was the -- Requests 56B through 74 were
15 related to air quality.

16 Exhibit 36 was a letter regarding the
17 AFC for the NCPA Demonstration of Compliance with
18 District Rule 4703.

19 Exhibit 45 is a compliance statement.

20 Exhibit 46 was air quality modeling
21 files which were docketed separately.

22 Exhibit 47 was an email message from
23 Nancy Matthews from Sierra Research to Brewster
24 Birdsall and Matt Layton, CEC staff, transmitting
25 new CO emissions calculations that were related to

1 the lower CO limit.

2 Exhibit 48 was an EPA Office of
3 Enforcement and Compliance Assurance Guidance
4 letter to Regions, dated January 25, 1995, which
5 was submitted into the record because there was a
6 possible discrepancy on the enforceability of
7 particular conditions, which has now been resolved
8 by the FDOC.

9 HEARING OFFICER CELLI: Also could you
10 go back -- I'm sorry, I didn't get what 41 was.

11 MR. GALATI: I apologize, 41 is not on
12 that list. Yes, I apologize. Exhibit 41 was
13 Supplement B. This was data adequacy responses
14 which were docketed in order to receive data
15 adequacy and there were some questions on air
16 quality.

17 HEARING OFFICER CELLI: Thank you.

18 Any other or new evidence that the
19 applicant seeks to move in?

20 MR. GALATI: Yes. We have two new
21 exhibits that I have distributed copies and talked
22 to staff about. The first is -- and I would like
23 to ask that it be identified as Exhibit 50. And
24 it's the other document, the larger one, the Final
25 Determination of Compliance from the air district.

1 And specifically in that document I would like to
2 point to page 84, which contains the evidence
3 requested in previous proceedings about the
4 certification of the offsets in accordance with
5 the Public Resources Code.

6 HEARING OFFICER CELLI: Page 84.

7 MR. GALATI: Of the Final Determination
8 of Compliance.

9 HEARING OFFICER CELLI: Oh, of the FDOC.

10 MR. GALATI: Yes.

11 HEARING OFFICER CELLI: So is this
12 Exhibit 50 or is this Exhibit 50?

13 MR. GALATI: The FDOC is Exhibit 50.

14 HEARING OFFICER CELLI: Thank you.

15 MR. GALATI: And Exhibit 51 are excerpts
16 from the 2008 San Joaquin Valley Air Pollution
17 Control District's 2008 PM2.5 Plan. This document
18 is referred to both in the Staff Assessment and
19 Errata and in applicant's testimony.

20 And those are the only two.

21 HEARING OFFICER CELLI: That's
22 everything for the applicant on air quality?

23 MR. GALATI: That is correct.

24 HEARING OFFICER CELLI: Staff, any
25 objection to the receipt of Exhibits 1, 2, 5, 6,

1 10, 11, 12, 17, 18, 19, 20, 22, 25, 30, 34, 36,
2 41, 45, 46, 47, 48, 50 or 51 into evidence?

3 MS. MOULTRY: There is no objection.

4 HEARING OFFICER CELLI: Thank you.

5 Those exhibits are received into evidence.

6 (Applicant's Exhibits 1, 2, 5, 6,
7 10, 11, 12, 17, 18, 19, 20, 22, 25,
8 30, 34, 36, 41, 45, 46, 47, 48, 50
9 and 51 were received into evidence.)

10 HEARING OFFICER CELLI: Staff, any air
11 quality exhibits you wish to move into evidence?

12 MS. MOULTRY: Yes. In addition to
13 Exhibits 300, 301 and 302, staff would like to add
14 Exhibit 303, the Addendum to the Staff Assessment,
15 which contains revised air quality and cultural
16 resources testimony.

17 HEARING OFFICER CELLI: Any objection by
18 applicant to the admission of Exhibit 303 into the
19 record?

20 MR. GALATI: No objection.

21 HEARING OFFICER CELLI: Exhibit 303 will
22 be admitted as 303.

23 (Staff's Exhibits 300, 301, 302 and
24 303 were received into evidence.)

25 HEARING OFFICER CELLI: Please give us a

1 little description of what 303 contains.

2 MS. MOULTRY: Yes. Staff -- air quality
3 staff provides its testimony to reflect the San
4 Joaquin Valley Air Pollution Control District's
5 Final Determination of Compliance, which was just
6 released this week.

7 And the cultural resources testimony
8 reflects the results of the applicant's geo-
9 archeological study.

10 HEARING OFFICER CELLI: Thank you.

11 Now I sent the parties my highlighted
12 copy of Cultural earlier and I just wanted to make
13 sure that both parties are satisfied, first the
14 applicant, that this solves the problem that we
15 had left open.

16 MR. GLADDEN: Hearing Officer Celli, yes
17 it did.

18 HEARING OFFICER CELLI: This is Bob
19 Gladden, for the record. Please go ahead.

20 MR. GLADDEN: Thank you for
21 accommodating that. And as we said, there may be
22 an addition to the Cultural evidence and this is
23 it. By stipulation we agreed to the admission of
24 the cultural report -- the cultural section that
25 was done by Ms. Bastian.

1 And also, as a matter of housekeeping,
2 we are docketing presently that geo-arch study and
3 we'll refer to it as Exhibit 52, which is titled
4 the Geo Chronological Investigations of the
5 Proposed Lodi Energy Center Site, Lodi,
6 California. Dated January 27, 2010.

7 And also with that I would like to segue
8 into an appreciation for Mr. Jones' team with
9 Ms. Moultry. And special appreciation to
10 Mr. Birdsall and Ms. Bastian for being so diligent
11 and accommodating our schedule.

12 HEARING OFFICER CELLI: Thank you. Do
13 you anticipate any other exhibits or are we
14 capping applicant's exhibits at 52?

15 MR. GLADDEN: Fifty-two should be it.

16 HEARING OFFICER CELLI: Okay, very good.

17 Any objection by staff to the admission
18 of what has been identified as Exhibit 52?

19 MS. MOULTRY: No objection.

20 HEARING OFFICER CELLI: Then with that
21 we will receive Exhibit 52.

22 (Applicant's Exhibit 52 was
23 received into evidence.)

24 HEARING OFFICER CELLI: Can you give me
25 the name of that document one more time?

1 MR. GLADDEN: Geo-chronological
2 Investigations of the Proposed Lodi Energy Site,
3 Lodi, California.

4 HEARING OFFICER CELLI: Thank you.
5 Is there anything further from the
6 applicant? Yes.

7 MR. GLADDEN: I left out a word in that
8 title. Proposed Lodi Energy Center Site, Lodi,
9 California. I think I left out the word, Center.

10 HEARING OFFICER CELLI: Thank you.
11 Nothing further from applicant?

12 MR. GLADDEN: Not as to cultural
13 resources.

14 HEARING OFFICER CELLI: Okay, as to any
15 subject matter area?

16 MR. GALATI: Yes, I'm ready to put on
17 direct testimony for air quality.

18 HEARING OFFICER CELLI: Thank you,
19 please proceed.

20 MR. GALATI: Okay. I'd like to call
21 Mr. Jeff Adkins and Mr. Ed Warner and have them
22 sworn as a panel, please.

23 HEARING OFFICER CELLI: Ramona, would
24 you please.

25 Please rise.

1 A Yes I did.

2 Q How long have you been an air quality
3 consultant?

4 A I have been a consultant for about 16
5 years and worked an additional six or seven years
6 at the Bay Area Air Quality Management District.

7 Q Thank you. Mr. Adkins, I've just handed
8 you what has been marked as Exhibit 50. Do you
9 recognize that document?

10 A Yes I do.

11 Q And can you please identify it.

12 A It's the Final Determination of
13 Compliance issued by the San Joaquin Valley Air
14 Pollution Control District dated January 22, 2010.

15 Q Thank you, Mr. Adkins. And have you
16 reviewed that document, Exhibit 50?

17 A Yes I have.

18 Q And do you agree with the conclusions
19 reached by the District in that document?

20 A Yes I do.

21 Q Did you also review staff's errata,
22 Exhibit 303, specifically the portion related to
23 air quality?

24 A Yes I did.

25 Q Other than staff's conclusions regarding

1 ammonia slip do you agree with the conclusions in
2 that errata that the LEC will comply with all
3 applicable LORS?

4 A Yes I do.

5 Q I apologize, laws, ordinances,
6 regulations and standards.

7 A Yes I do.

8 Q Thank you. Other than staff's
9 conclusion regarding ammonia slip do you agree
10 with the conclusions in the staff's errata that
11 the LEC will not result in significant air quality
12 impacts?

13 A Yes I do.

14 Q And once again, other than condition AQ-
15 SC9 do you agree with the conditions of
16 certification proposed by the staff in that
17 Exhibit 303?

18 A Yes I do.

19 Q Regarding ammonia slip. Did the FDOC
20 contain a condition relating to ammonia slip?

21 A Yes it did.

22 Q And did the District agree with --
23 excuse me.

24 Did the District condition and staff's
25 AQ-SC9 condition regarding ammonia slip, are they

1 the same?

2 A No they are not.

3 Q Can you briefly describe how they are
4 different?

5 A The San Joaquin Valley Air Pollution
6 Control District has a permit condition that
7 limits ammonia slip to ten parts per million
8 averaged over a 24 hour period. Whereas the staff
9 assessment recommends a ammonia slip level of 5
10 PPM and that's over a 24 hour period. And when
11 that limit is exceeded then the applicant has 12
12 months to replace or repair the catalyst such that
13 they can get back under 5 ppm. So it's
14 effectively a 5 ppm ammonia slip limit.

15 Q Okay. Is the 5 ppm ammonia slip a
16 district best available control technology limit?

17 A No it's not.

18 Q Is there a federal law that would
19 require a 5 ppm ammonia slip?

20 A No there is not.

21 Q Is there a state law that would require
22 a 5 ppm ammonia slip?

23 A No there is not.

24 Q Is there any local district rule that
25 would require a 5 ppm ammonia slip?

1 A No there is not.

2 Q Is ammonia a precursor to the creation
3 of particulate emissions?

4 A Yes it is.

5 Q Can you describe to us how that happens?

6 A It's a complex reaction that occurs in
7 the atmosphere. It requires the presence of NOx
8 and SOx and also VOCs. There is a complicated
9 reaction where the NOx and SOx are converted to
10 nitrates and sulfates and then into acid gases,
11 nitric acid in particular. And then that reaction
12 forms with the ammonia in the atmosphere to create
13 ammonium nitrate and ammonium sulfate
14 particulates.

15 Q In the San Joaquin Valley Air Pollution
16 Control District area do you believe the area
17 already has excess ammonia in the air?

18 A Yes I do.

19 Q Why do you believe that?

20 A It is the conclusion of the air district
21 and numerous studies that they have done where
22 they are evaluating both their PM10 and PM2.5
23 compliance. It's a -- they take numerous
24 measurements they have done, very complicated
25 modeling, to determine what is the best means of

1 controlling particulates in the San Joaquin Valley
2 and concluded that ammonia is surplus in that
3 reaction.

4 Q Okay. I am going to put in front of you
5 what has previously been identified as Exhibit 51.
6 Are you familiar with that document?

7 A Yes I am.

8 Q Can you briefly tell us what that
9 document is.

10 A This is a 2008 PM2.5 plan that has been
11 approved by the San Joaquin Valley Air Pollution
12 Control District and submitted to EPA as -- it is
13 basically their plan for coming in to compliance
14 with the federal PM2.5 standards.

15 Q And does that plan support the idea that
16 the area is, for lack of a better word, ammonia
17 rich?

18 A Yes it does.

19 Q So that means there's excess ammonia in
20 the air already.

21 A That is correct.

22 Q So would putting any additional ammonia
23 in the air cause particulate matter to form?

24 A It is the conclusion of both the plan
25 and the modeling and the air district that

1 additional ammonia will have no significant effect
2 on the formation of PM2.5 or PM10 in the
3 atmosphere in the San Joaquin Valley.

4 Q Okay. Are you familiar with the Avenal
5 project?

6 A Yes I am.

7 Q Okay. And are you familiar with the
8 Palomar project?

9 A Yes I am.

10 Q And staff cites both in their staff
11 assessment, to both of those projects as support
12 for ammonia slip of 5 PPM; is that correct?

13 A That is correct.

14 Q Do you know whether those, whether that
15 issue was adjudicated in those cases or did the
16 applicant agree?

17 A In neither of those cases was the
18 ammonia slip level adjudicated. In both cases
19 either the applicant or the air district proposed
20 a 5 PPM ammonia slip limit.

21 Q Are you aware of any projects where the
22 issue actually was adjudicated here at the Energy
23 Commission?

24 A Yes I am.

25 Q Can you describe the results of those

1 cases.

2 A The Turlock Irrigation District Walnut
3 Energy Center is an example where the staff
4 proposed 5 PPM, the air district and the applicant
5 proposed 10 PPM; and it was adjudicated and
6 ultimately the decision was made at 10 PPM.

7 Similarly, East Altamont, the applicant
8 and the air district proposed 10 PPM and staff
9 proposed 5 PPM. It was adjudicated and ultimately
10 10 PPM was the result.

11 Other examples include the Los Esteros
12 project and the Cosumnes project in the Sacramento
13 Valley Air Basin.

14 Q Would it be fair to say that if the
15 Committee ruled that this was 5 PPM that this
16 would be the first case in which it was
17 adjudicated, in which the Committee ruled that 10
18 PPM should be a 5 PPM slip?

19 A That is correct. It would be the first
20 time where an applicant, neither the applicant nor
21 the air district proposed 5 PPM and 5 PPM were
22 imposed.

23 Q With a 10 PPM slip in accordance with
24 the District condition, do you believe that the
25 Lodi Energy Center would have significant impacts

1 with respect to additional particulate emissions?

2 A No, I do not.

3 DIRECT EXAMINATION

4 BY MR. GALATI:

5 Q I'd like to turn to you, Mr. Warner.

6 Would NCPA incur additional costs to comply with
7 staff's proposed AQ-SC9?

8 A Yes they would.

9 Q Why?

10 A Operation and maintenance costs through
11 the life of a 30 year project, a 5 PPM slip would
12 result in approximately a one to two times
13 increase in the change-out of the NOx catalyst
14 because of the lower limit. And this would result
15 into an estimated cost of public funds for 2.5 to
16 3 million dollars over a 30 year period for the
17 replacement of that catalyst and also the disposal
18 of the old catalyst.

19 MR. GALATI: Actually I have no further
20 questions.

21 HEARING OFFICER CELLI: Ms. Moultry.

22 MS. MOULTRY: I have no questions for
23 these witnesses.

24 HEARING OFFICER CELLI: Applicant?

25 MR. GALATI: Exhibit 50 and 51 were

1 admitted into the record?

2 HEARING OFFICER CELLI: That's correct.

3 MR. GALATI: Okay.

4 HEARING OFFICER CELLI: So to be clear.

5 Is there, is there a dispute?

6 MR. GALATI: Yes there is a dispute. We
7 would prefer staff's condition AQ-SC9 be stricken
8 and that the district's condition requiring the
9 ammonia slip to be 10 parts per million be
10 followed.

11 HEARING OFFICER CELLI: And what is the
12 staff's position?

13 MS. MOULTRY: Actually our air quality
14 staff would like to testify regarding the
15 condition.

16 HEARING OFFICER CELLI: Okay. Before I
17 do that, any other witnesses on behalf of the
18 applicant?

19 MR. GALATI: That is it.

20 HEARING OFFICER CELLI: Okay, thank you.
21 Staff, please call your first witness.

22 MS. MOULTRY: I'd like to call Brewster
23 Birdsall.

24 HEARING OFFICER CELLI: Mr. Birdsall,
25 please be sworn.

1 Whereupon,

2 BREWSTER BIRDSALL

3 Was duly sworn.

4 DIRECT EXAMINATION

5 BY MS. MOULTRY:

6 Q Good morning, Mr. Birdsall.

7 A Good morning.

8 Q Did you prepare the air quality
9 testimony for the Lodi Energy Center staff
10 assessment and for the addendum to the staff
11 assessment?

12 A I did.

13 Q And is your testimony contained in the
14 staff assessment and the addendum to the staff
15 assessment true and complete to the best of your
16 knowledge and belief?

17 A Yes it is.

18 Q Will you please summarize the
19 requirements of condition of certification AQ-SC9,
20 which is contained in your testimony.

21 A Yes I will. AQ-SC9 is a, is a condition
22 of certification that is recommended by staff as a
23 form of mitigation for what staff determines to be
24 a potentially significant impact.

25 The applicant has provided a lot of

1 information and some, and some parts of the
2 district's PM2.5 management plan that show that
3 the air district does not closely manage ammonia
4 emissions. And I think I want to make out the
5 distinction that the applicant's witness very
6 clearly agrees with the staff's testimony that
7 ammonia is a precursor to PM2.5. And I think
8 that's the important distinction here.

9 It is not the limiting precursor. The
10 limiting precursors are the nitrogen oxides and
11 the sulfur oxides; and then those react with the
12 ammonia in the air shed to precipitate the
13 particulate matter, essentially.

14 So staff's condition therefore is coming
15 from our staff methodology, which is spelled out
16 on page 23 of the staff assessment. Which says
17 quite simply that emissions of precursors to non-
18 attainment pollutants such as PM2.5, those
19 emissions are considered significant unless
20 mitigated.

21 And the ways that we have of mitigating
22 the precursors, you are all familiar with the ways
23 that we mitigate the nitrogen oxides and the
24 sulfur oxides. That's usually in the form of
25 offsets. And for a precursor like ammonia where

1 the connection is less direct we recommend a best
2 management practice.

3 And I think it's evident in cases like
4 Palomar and Avenal, which were maybe not
5 adjudicated before the Committees but hard-fought
6 and negotiated conditions of certification. We
7 have demonstrated that combined-cycle power plants
8 like Lodi's can capably reduce ammonia in this
9 best management practice kind of way.

10 We are not requiring offsets for ammonia
11 emissions like we do for nitrogen oxides and
12 sulfur oxides but the staff approach is to
13 recommend management of the facility in a way that
14 excessive or unnecessary ammonia does not occur.

15 And staff's AQ-SC9 has the 10 PPM limit
16 on a 24 hour basis, which is consistent with the
17 district's air quality condition. Meaning that
18 AQ-SC9 is consistent with AQ-30 and the district's
19 recommendation. But it goes just a little step
20 further to say that if 5 PPM can not be achieved
21 on a regular basis that the applicant should start
22 a 12 month process of reconditioning the catalyst.

23 So AQ-SC9 is not a firm hard and fast 5
24 PPM limit but rather a starting point for when the
25 facility goes over 5 PPM regularly that it will

1 begin its catalyst replacement process.

2 The applicant said that replacing the
3 catalyst creates unnecessary hazardous waste; I am
4 not certain of that because it is not my
5 expertise. But the project description does say
6 that the catalyst is recycled, not disposed of.
7 Or it is recycled and partially disposed of,
8 depending on how spent the catalyst is.

9 Q So, Mr. Birdsall, your condition is
10 designed to allow the applicant flexibility to
11 comply?

12 A Well yes, it is designed to allow
13 flexibility. And I don't think that it is a hard
14 and fast bright line limit of 5 PPM like some
15 other power plants have agreed to. It is
16 essentially a starting point for when the catalyst
17 replacement should occur.

18 Q And once again, the replacement can
19 occur within a 12 month period?

20 A Right. The condition AQ-SC9 allows this
21 12 month period for replacing or reconditioning of
22 the catalyst. And I think that that flexibility
23 is warranted because, like I say, ammonia is, it's
24 a precursor, therefore it falls under our purview
25 of seeking mitigation. But it is not the limiting

1 precursor here in the Central Valley as all
2 parties agree.

3 Q Why have you requested a condition that
4 differs from the air district's requirement?

5 A Well, I think that comes down to the
6 question of how our significant thresholds are
7 set. And I guess one question to the air district
8 would be, if that ammonia is not a concern, or if
9 ammonia can be emitted without restraint, then why
10 would there be a 10 PPM limit in the permit to
11 begin with.

12 I won't go there because it is not in
13 the direction of my argument. My argument is that
14 our thresholds of significance and our methodology
15 for CEQA impacts is to reduce or offset all
16 precursor pollutants, period.

17 Q Do you believe that compliance with the
18 condition of AQ-SC9 is feasible?

19 A Yes, I think compliance with AQ-SC9 is
20 feasible. The 24 hour rolling average gives the
21 power plant a lot of flexibility on how it
22 operates throughout the day. It could have higher
23 emissions of ammonia for short times, especially
24 during rapid start-up. Even though that this is a
25 facility that would be capable of relatively rapid

1 start-ups a 24 hour averaging period gives the
2 power plant quite a bit of flexibility on managing
3 its ammonia emissions.

4 MS. MOULTRY: Thank you. I have no
5 further questions.

6 HEARING OFFICER CELLI: Cross?

7 MR. GALATI: Thank you.

8 CROSS EXAMINATION

9 BY MR. GALATI:

10 Q Mr. Birdsall, did you perform any
11 calculation or modeling to quantify the amount of
12 particulates that would be formed by the
13 additional ammonia slip?

14 A No, I did not.

15 Q Are you familiar with -- did you review
16 the Final Determination of Compliance response to
17 comments?

18 A Yes I have. And I think where you're
19 going with this --

20 Q Well, I'd appreciate if you let me get
21 there.

22 A Excuse me.

23 Q If you look at Appendix K page xii.

24 A I don't have that in front of me at the
25 moment.

1 Q I have a copy.

2 A Appendix K page xii.

3 Q At the top of the page. Isn't it true
4 that the district actually responded by saying a
5 high ammonia slip from the turbine will not lead
6 to increased PM10 formation in the atmosphere?

7 A As I say the district, and I think all
8 parties here, are in agreement that ammonia is
9 abundant in the Central Valley, when speaking on
10 broad terms, and this is spelled out in the
11 district's plan.

12 Now the district's plan does provide
13 some nuances that in winter time it's more --
14 ammonia is more of an urban problem and that
15 generally throughout the year the ammonia is more
16 concentrated in the Bakersfield area. But I think
17 we all agree that the air district does not manage
18 ammonia emissions and does not seek for
19 controlling or setting best available control
20 technology standards for ammonia. This position
21 that I have is more of CEQA significance.

22 Q I agree, I understand that they are not
23 managing it. But this actually is in direct
24 contradiction to your testimony. This says that
25 it won't form. Your issue with CEQA impacts is

1 that there is additional particulate emissions
2 that form. Not how to manage it but that there
3 are some that form. And you believe from the CEQA
4 perspective that any formation is an impact that
5 needs to be mitigated. That's correct, right?

6 A Our significant threshold is very simple
7 and it is that precursor pollutants -- and I think
8 we all agree that ammonia is a precursor
9 pollutant. Precursor pollutants shall be
10 mitigated. And when we say mitigation in CEQA we
11 look for the feasible control technologies or we
12 look for offsets or we look for other approaches.
13 But that's the framework that I'm coming from.

14 Q But the impact is what the precursor
15 actually causes. So if the precursor is emitted
16 and no particulate is created, how can you say
17 that there is an impact from the emission of the
18 precursor?

19 A We're talking about managing precursor
20 pollutants. Now if this was some other hazardous
21 air pollutant like benzene or formaldehyde, I
22 don't call that a precursor to particulate matter
23 formation so I don't look for best management
24 practices. That's handled under -- those kinds of
25 pollutants are handled under public health as we

1 all know. I think this pollutant falls into the
2 in-between area where it is a precursor so it
3 shows up in my air quality section.

4 Q Didn't the district say here in their
5 response that even lowering the ammonia emission
6 will not reduce particulate formation.

7 A I can let you read from the response,
8 and the response --

9 HEARING OFFICER CELLI: Excuse me. What
10 page are you reading from, Mr. Galati?

11 MR. GALATI: I'm actually reading from
12 what is called Appendix K, page xii.

13 HEARING OFFICER CELLI: Thank you.

14 MR. GALATI: The top of the page.

15 MR. BIRDSALL: It's in the record that
16 the district has a position on how it approaches
17 ammonia and it says -- it says what it says in the
18 record.

19 The important thing from my point of
20 view is that I am operating in a different
21 framework and managing the ammonia emissions from
22 the power plant is feasible. So I believe it
23 should be and I recommend that such management be
24 included as a condition of certification.

25 BY MR. GALATI:

1 Q Okay. I just, I'm trying to understand
2 here whether you believe there is a significant
3 impact under CEQA or whether you believe it should
4 be managed because it can be managed?

5 A I believe that this is a significant
6 impact under CEQA.

7 Q And I don't understand how that can be
8 unless you believe differently than the district
9 that actually particulates will be formed.

10 A Particulates will be formed from any
11 ammonia in the Central Valley and the plant would
12 emit ammonia. I am not going to pretend that I
13 can quantify this because it is complex. It is a
14 seasonal and location-specific issue.

15 The staff approach, however, and this is
16 consistent with our approach on cases for many,
17 many months now and years, that we would seek
18 mitigation of precursor pollutants.

19 Q Further on page Appendix K page xii.
20 The district describes in the next paragraph
21 generally why they believe a higher ammonia slip
22 will make it easier to obtain the lower NOx
23 emissions. Would you agree with that?

24 A I'm reading through the district's
25 response right now. And the conclusion is simply

1 that the district accepts a 10 PPM ammonia slip as
2 an important trade-off. And it's true, ammonia is
3 used to reduce the nitrogen oxide.

4 I think that our experience with
5 licensing other combined cycle power plants shows
6 that it is possible to achieve the aggressive NOx
7 limits and achieve a 5 PPM ammonia limit,
8 especially when the 5 PPM is measured on a 24 hour
9 basis. It provides a lot of flexibility
10 throughout the day for the plant to fine tune its
11 injection rate.

12 Q Let's go to a different area. And just,
13 again, just to be clear, just for argument let's
14 assume there are particulate formation. The
15 applicant is providing offsets for particulate
16 matter, aren't they?

17 A Yes. We are, we are requiring and the
18 air district is requiring offset of direct
19 particulate matter emission. That means the
20 particulate matter that comes right out of the
21 stack.

22 Q Right. And the district for its own
23 rule purposes, not for CEQA, requires a distance
24 ratio whereby the offsets are increased based on
25 the distance from the plant, correct?

1 A Right. I think that the quantity of
2 offsets is appropriate given the distance to the,
3 the distance to the original reduction and the
4 requirements in the district rules. And that's
5 all spelled out separately in AQ-SC7. That's our
6 mitigation for direct criteria pollutant
7 emissions. AQ-SC7 and AQ-SC9 go together though
8 because ammonia, we believe, should be managed as
9 well as the direct criteria pollutants.

10 Q In other cases you have allowed CEQA
11 mitigation for, let's say, cooling tower PM10
12 emissions, to be provided because of the excess
13 offset with the distance ratio taken into account.
14 That's correct, right?

15 A That would be for direct particulate
16 matter. That line of thinking would not apply
17 here because we are not quantifying the ambient
18 particulate matter that occurs out of the
19 reaction.

20 Q Okay. That was my question. Why would
21 not the excess emissions offsets due to the
22 distance ratio not be counted towards mitigation
23 in this matter, from something that you can't
24 quantify and the district says won't happen?

25 A They very well may be useful in avoiding

1 this kind of an impact. But rather than go
2 further and further into that realm where we
3 haven't and the district hasn't quantified what
4 kind of offsets would be appropriate, we simply
5 look for a best management practice.

6 And I think that, I think that we are
7 not all that far apart. I mean, clearly the
8 district by setting a 10 PPM limit, the district
9 agrees that ammonia can be managed and there is a
10 basis to not simply allow ammonia to go unchecked.

11 Q Well there is a 10 PPM slip limit.

12 Okay. Thank you, Mr. Birdsall.

13 A Thanks.

14 HEARING OFFICER CELLI: Redirect?

15 MS. MOULTRY: No. No redirect.

16 HEARING OFFICER CELLI: Thank you,
17 Mr. Birdsall.

18 Anything further from staff?

19 MS. MOULTRY: No.

20 HEARING OFFICER CELLI: We want to hear
21 from the San Joaquin Air Pollution Control
22 District. Are there any other witnesses by the
23 applicant or on redirect?

24 MR. GALATI: No witnesses, no additional
25 testimony from the applicant.

1 HEARING OFFICER CELLI: I wonder if we
2 could now hear from Rupi Gill. Can you hear me?

3 MR. GILL: Yes sir.

4 HEARING OFFICER CELLI: We would love to
5 hear your comments on the testimony that you have
6 just heard.

7 MR. GILL: I think I'm in -- whatever we
8 issued in the FDOC, it's pretty final.

9 And on the ammonia issues, the district
10 believes that 10 PPM is the limit. That is
11 considering that for us NOx is very important.

12 HEARING OFFICER CELLI: Any other
13 comments in general about the Lodi Energy Center,
14 Mr. Gill?

15 MR. GILL: No comments.

16 HEARING OFFICER CELLI: Well thank you
17 very much for calling in.

18 Is there anything further from the
19 applicant?

20 MR. GALATI: I would just propose that
21 even though we had a bit of a dispute here I don't
22 believe that there needs to be briefs. If the
23 Committee would like to hear a 30 second synopsis
24 as a close I would be more than happy to do so.

25 HEARING OFFICER CELLI: Please proceed.

1 MR. GALATI: The question is not whether
2 the applicant can -- The question is not whether
3 the applicant can do something but really the
4 relevant question is whether they must.

5 And there is a discrepancy here between
6 whether there is an impact or not an impact. I
7 propose to you that there is not an impact for
8 what you see here.

9 In addition the district doesn't believe
10 that this needs to be managed. The primary reason
11 for a higher ammonia slip is a very low NOx limit.

12 And in addition we believe that some of
13 the excess emission offsets could be counted
14 towards mitigation.

15 So again I'd just ask you to keep in
16 mind that this is a public project. Two and a
17 half million dollars is two and a half million
18 dollars. And if there is no reason to do it we
19 shouldn't. Staff has the burden to prove that a
20 condition is necessary; I think that they have not
21 done so.

22 HEARING OFFICER CELLI: Thank you.

23 And staff, please reply.

24 MS. MOULTRY: I do not have anything to
25 add to Mr. Birdsall's testimony.

1 HEARING OFFICER CELLI: At this time
2 this is argument and we would like to hear from
3 staff as to their justifications for a 5 PPM
4 limit.

5 MS. MOULTRY: I believe that
6 Mr. Birdsall provided his justifications. He
7 believes that regulation of PPM is required. The
8 air district also obviously believes that
9 regulation is required, otherwise it wouldn't
10 require a limit at all.

11 HEARING OFFICER CELLI: Anything
12 further?

13 MS. MOULTRY: No.

14 HEARING OFFICER CELLI: Thank you.

15 At this time, unless the parties
16 instruct me otherwise, I would open it up for
17 public comment. I see that the Public Adviser is
18 here today. Welcome.

19 MS. JENNINGS: Thank you.

20 HEARING OFFICER CELLI: Do we have any
21 public who are present here today?

22 MS. JENNINGS: We have no blue cards.

23 HEARING OFFICER CELLI: Okay, so there
24 are no members of the public who are present who
25 wish to make a comment.

1 And for the record, I was just speaking
2 with the Public Adviser.

3 Now I am going to go to the telephone to
4 see if there is anyone on the telephone who would
5 like to make a, any members of the public on the
6 telephone who would like to make a public comment
7 at this time.

8 (No response.)

9 HEARING OFFICER CELLI: Hearing none I
10 am going to hand the hearing back to Chairman
11 Douglas to adjourn.

12 PRESIDING MEMBER DOUGLAS: Thank you,
13 everybody. This has been a helpful and productive
14 step in the process. Thanks to staff and the
15 applicant for moving this along. We set a fairly
16 aggressive time line, we are on that time line,
17 and the Committee notes and appreciates that very
18 much. With that we are adjourned.

19 MR. GALATI: Thank you.

20 MR. JONES: Excuse me, Hearing Officer
21 Celli. We should address the cultural resources.

22 HEARING OFFICER CELLI: Thank you.

23 Let's go back on the record.

24 We are still on the record. Ramona, we
25 are still on the record.

CERTIFICATE OF REPORTER

I, RAMONA COTA, an Electronic Reporter and Transcriber, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Evidentiary Hearing; that I thereafter transcribed it 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 11th day of February, 2010.



RAMONA COTA, CERT*00478